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Gender Disparity in Usage of Electronic Resources: A Practical Study of Valley View University (VVU) Library, Ghana

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Abstract

This study focuses on the awareness, access, purpose and frequency of use of electronic resources and the challenges confronting male and female users in accessing electronic resources in the library of Valley View University, Ghana. The descriptive survey method was the design adopted for this study. Questionnaires were the main instrument for data collection. The population of the students was 336 which comprised 188 males and 148 female students from the School of Business - Accounting option. Statistical Package for Social Sciences (SPSS 16 Version) was used to analyse the data. The study disclosed that the gap between male and female students on the use of e-resources at VVU is quite negligible. The study recommended that there should be regular flow of power in the library and improvement in the speed of internet services. The management should increase internet bandwidth so that there will be faster internet connectivity in the library to avoid students queuing and wasting time when accessing the electronic resources. The management should also create awareness of the electronic resources through mailing list, leaflets, circulars, radio broadcasting, blogs, social media, meetings, workshops, and orientations for users among others.

Keywords: access; challenges; frequency; electronic resources; gender; purpose; university

INTRODUCTION

One of the main purposes of academic libraries is to offer relevant information resources which meet the needs of entire users. Electronic resources have therefore become the key players in the academic library's collection in the fulfillment of their responsibility in teaching, learning, research, and services to the academic community. The problem of gender gap in the digital divide and the effects of modern technologies on gender, specifically, on the political, social, educational, and economical fields of women lives are of major importance which need to be addressed (Utulu, 2006). Waldman (2003), buttressed this assertion that the issue of gender is a significant factor so far as the use of electronic resources in academic libraries is concern. Similarly, McGinty and Moore (2008) indicated in their study that gender issues have been in the forefront of impassioned public discussion regarding higher education.

Ani (2008), disclosed that the transition from print medium to electronic resources is an indication that electronic resources are taking over the place of print materials due to the fast development of electronic information. As a result, it has also offered users with new ways and methods of searching and retrieving of information from databases. Gakibayo, Ikoja-Odongo and Okello-Obura (2013) in Uganda, stressed that academic libraries are integral part of the university system and have a major role to play in supporting the key objectives of the parent university in the areas of teaching, learning and research. For instance, the availability of electronic resources in the academic libraries enhances learning and research activities by faculty, students and non-teaching staff.

Naidu (2007), noted that the emergence of information technology and electronic resources in academic libraries has facilitated the rate of publication by researchers due

to the availability of information on the desktop. The struggle for adequate space in academic libraries all over the world has empowered librarians to embrace the introduction of electronic resources in university libraries to save space for other library resources including Valley View University, Ghana.

The main aim of every academic library is to fulfil its core objectives in terms of teaching, learning and research activities of the parent university. The adoption of information technology into library services has revolutionized all activities in the academic library setting. The services of academic libraries today are not limited to only print-based materials but include electronic resources. Despite the numerous advantages that electronic resources have over the print resources, a study carried out by Ansari and Zuberi (2010) in Asia on the use of e-resources at the University of Karachi revealed that majority of the users do not have training on how to access electronic resources.

A similar study in Africa by Bankole (2012) on the use of electronic databases by scientists at Olabisi Onabanjo University- Nigeria, also disclosed that quite many of the users do not use the library's free online databases such as AGORA and HINARI because they are unaware of the resources, while Dadzie (2005) in a study on "electronic resources: access and usage at Ashes University College Campus in Ghana" found a very low usage of eresources.

The Management of Valley View University allocates a substantial percentage of their budgets in every academic year to purchase and subscribe to electronic resources to support teaching, learning, and research. Preliminary investigation by the researchers appeared that the electronic resources in the library are underutilized. Again, there is no study on the use of electronic resources by gender in a fast-growing premier private university like Valley View University. It is to this end that this study sets out to find out disparity of gender in the usage of electronic resources in the Walton Whaley Library of Valley View University.

The research seeks to:

- i. Find out the awareness of electronic resources usage among gender.
- ii. Find out the level of accessibility of electronic resources among gender
- iii. Examine the purpose of electronic resources usage among gender.
- iv. Determine the frequency of using electronic resources among gender.
- v. Find out the challenges users faced when accessing electronic resources

The study is guided by the following research questions.

- i. What is the level of awareness of electronic resources usage among gender?
- ii. What is the intensity of access of electronic resources among gender?
- iii. What are the purposes of using electronic resources among gender?
- iv. What is the frequency of using electronic resources among gender?
- v. What are the challenges users face when accessing electronic resources?

LITERATURE REVIEW

Awareness of Electronic Resources

Fidishun (2007), posits that women are not aware of what the public library has to offer regarding technological resources as they could be, and that additional marketing or training for patrons on how to use these resources would be helpful. A similar study conducted by Kwapong (2009), indicated a wide gender gap in awareness of internet resources in the deprived regions in Accra than the endowed regions. The author stressed

further in the study that gender breakdown disclosed that awareness of internet resources is relatively high amongst men than women in the most endowed region, in Accra, then, the deprived regions (Kwapong, 2009).

Kinengyere (2006), carried out a study to examine four academic and research institutions in Uganda. The results indicated that available resources were not utilized by both male and female users of the library because they were not aware of the resources, they did not know how to access them, or they did not know the importance of the resources. The study highlighted that availability of information does not necessary mean usage. In addition, Gbaje (2010) reported that there was a major lack of awareness of open access journals among male and female in Ahmadu Bello University Zaria, Nigeria.

In contrast to the findings of Kinengyere (2006), Salaam and Okorie (2010) in their survey on the awareness level of the National Virtual Library of Nigeria in some selected Universities in South-West Nigeria, discovered that both male and female library users were much aware of electronic resources available in the virtual library. Similarly, Parameshwar and Patil (2009), reported in their study that both men and women were significantly aware of online journals as well as other internet sources. Moreover, A study by Bar-Llan, Peritz & Wolman (2003), on electronic resources in seven Israeli universities revealed that there was a high degree of awareness and acceptance of electronic resources among male and female users. However, the study found that disparities in awareness existed between disciplines and ages.

Accessibility of Electronic Resources by Gender

According to Okorie and Agboola (2012), the key benefits of e-resources to academic libraries today is the growth of accessibility of information sources that are up-to- date

and significant to research, learning and studying. A study carried out by Manda and Mulkangara (2007), indicated that gender has a link with the use of electronic information resources, and that male postgraduate students were more likely to use e-resources than female students. The study stressed further that even when there was control for attitude towards the use of electronic resources or training in the use of electronic resources, the relationship between gender and electronic resources were maintained. A similar study by Tella and Mutula (2008), on gender difference in computer literacy revealed that students with higher computer background were mostly males and were more inclined to access and made good use of library resources than their female counterpart.

A study carried out in Nigeria by Egberongbe (2011), established that electronic resources such as bibliographic databases, electronic newspapers and electronic magazines were not used very much as expected because students did not have access to them. Furthermore, Oduwole and Akpati (2003), conducted a study on the accessibility and retrieval of electronic information at the University of Agriculture Library, Abeokuta, Nigeria. The results indicated that all members in the University environment were at par. Thus, they had access to internet connectivity; they found the resources easy to use, and they were satisfied with their search outputs. A similar study carried out by Jagboro (2003), and Oduwole (2004), reported that students who had access to electronic resources had nothing to do with gender. Instead, those who visited private cybercafés had access to open access resources.

Purpose of Using Electronic Resources by Gender

A study conducted by Obaje and Camble (2008), in the University of Jos Library revealed that electronic resources were mostly utilized for the purposes of literature searches during project writing, dissertation and thesis writing as well as for personal research by male and female postgraduate and final-year students.

Reiner and Smith (2008), Badu and Markwei (2005) indicated in their various studies that students used electronic resources mainly for research purpose and completion of their assignments. In a similar study by Fidishun (2007), on how women use public libraries and the technology in the library, it was revealed that the primary purpose of women visiting the library was to borrow books. While her respondents were ardent users of printed books, they also utilized the technology available at the library. Fidishun (2007), stressed further that the women were more likely to relate books to libraries, while men are more likely to combine computers as well as books with libraries.

Kumar and Kumar (2008) highlighted reasons for using electronic information sources by library users. The percentage of participants who disclosed that electronic sources support their study was 70%, whiles that of teaching was 59%. One-third of participants claimed that they used electronic resources for project work. 80% of medical science patrons accessed electronic information sources for study, followed by engineering (67%) and management studies (55%).

Madhusudhan (2008), revealed that 69% of engineering students used electronic journals for research and 24% used electronic resources to update knowledge. Rehman and Ramzy (2004), conducted a study on awareness and use of electronic information resources among health academics. Their findings indicated that both men and female users used electronic resources comprehensively for research purposes, preparation of lecture notes and for obtaining up-to- date information.

Frequency of Using Electronic Resources by Gender

Samson (2014), conducted a study on library electronic resources usage by student status at the University of Montana – Missoula. The study also revealed that both male and female students on campus used electronic resources at similar rates. But, female students who were off campus used electronic resources more frequently than their male counterparts.

Winker (2005), did a study on the internet usage. It was established that apart from other factors, time was considered as an essential variable in terms of internet usage. While men used the internet more frequently and for long hours, women were in the categories of moderate users. Ozoemelem (2009), on the use of electronic resources by postgraduate students of the department of library and Information Science, University of Abraka, stated that there is high frequency of usage of electronic resources by both male and female postgraduate students. The gender gap in electronic resources usage was quite negligible.

Bimber (2000), opined that the gender gap in internet usage is larger where more intensive Web use is concerned. Women are significantly less likely to be frequent users, equally likely to be in frequent users, and more likely to be middle users. In a study by Ikolo (2010), on gender difference based on use of electronic resources reported that the gender digital divide is obvious in the low number of female users of ICTs compared to that of men. Bar-Ilan and Finka (2005), buttressed in their study that more than 80% of their respondents frequently used and preferred electronic resources. Nallathamb and Kanakaraj (2012), in their study concluded that majority of the participants in the engineering colleges used electronic resources daily.

Madhusudhan (2008), carried out a study on the use of electronic resources by teachers, students and research scholars of universities and research organizations. Seventy-eight percent (78%) of the respondents indicated that the use of the UGC - Infonet e-journals has elevated their research activities and they wanted up-to-date articles and electronic documents to facilitate their studies.

A study carried out by Natarajan et al. (2010), ascertained that frequency of electronic resources usage in Annamalai University was not encouraging among males and females despite its wide range and availability. They enumerated some limitations as; insufficient time, lack of awareness, poor subject coverage, and difficulty in downloading. A survey conducted by Monopoli, Nicholas, Georgiou and Korfiati (2002), on the use of electronic journals services at the library and information service of the University of Patras in Greece revealed that majority of males used the services on daily, weekly or monthly basis than their female counterpart.

Challenges of Using Electronic Resources

Ford, Miller and Moss (2001), in their study indicated that females tended to experience more difficulty when searching for information online, and feel less competent and uncomfortable when using the internet than men. Enochsson (2005), reported that the socio-cultural background of gender still leaves women with more computer anxiety and feelings of lower self-efficiency. In a similar study by Heimrath and Goulding (2001), it was discovered that female students at Sheffield University felt that the internet was too big and unstructured. Thus, searching for information on the internet was difficult, not enjoyable and will use it only when necessary, whereas the male students were happy to search the internet for authentic information in their various disciplines.

Anasi (2006), carried out a study on the pattern of the internet use by undergraduate students entitled "Internet Use Pattern of Undergraduate Students at the University of Lagos, Nigeria". The findings indicated that the level of internet use was low among both male and female students as they were lacking the search strategies to find information. Ingutia-Oyieke and Dick, (2010), conducted a study in the private University of Eastern Africa, Baraton (UEAB). In their study, they pointed out that physical barriers such as ICT infrastructure and the use of electronic resources were their major challenges. Similar studies conducted by Madhusudhan (2008), Mulla and Chandrashekhara, (2006), on the use of electronic resources the teransition from print to electronic resources but lamented the lack of subscriptions in their field of studies and lack of user orientation or training.

Esmail and Nagarajan (2012), expressed in their study that although, majority of users were satisfied with e-resources available in the library, their major problems about the use of electronic resources were on downloading and lack of knowledge to access them. Oduwole and Akpati (2003, enumerated some challenges associated with the use of electronic resources. These challenges included inadequate number of terminals available and erratic power supply. Natarajan et al. (2010), also listed some challenges that hinder the use of electronic resources as insufficient time, lack of awareness, poor subject coverage, and difficulty in downloading. According to Okiki and Asiru (2011), slow internet connectivity and incessant power outage are some of the challenges that affect the use of electronic resources. In a Similar study by Ojokoh and Asaolu (2005), they affirmed that slow internet connectivity and regular power failure in Nigeria are the problems that affect the use of electronic resources.

METHODOLOGY

The descriptive survey method was the design adopted for this study. It was to assess the usage of electronic resources by gender. Questionnaires were the main instrument for data collection. The population of the students was 336 which comprised one hundred and Eighty-Eight (188) males and One Hundred and Forty-Eight (148) females from the School of Business - Accounting option.

Table	1:	Po	pulation	oft	he	Study

Gender	Breakdown	
Male	188	
Female	148	
Total	336	

Source: Field work, 2017

Table 2: Breakdown of Population	1	
Gender	Breakdown	
Male =188/100×50 =94	94	
Female =148/100×50 =74	74	
Total	168	

Source: Fieldwork, 2017.

Tables (1&2) show how population was selected and the percentage used to arrive at the sample size. According to Nwana (1981) if a population is in many hundreds, one needs a sample size of 20%. But if a population is in few thousands, one needs a sample size of 10%. Based on the Nwana's recommendation, a sampling fraction of 50% was used to select both male and female. Therefore, One Hundred and Sixty-Eight (168) was used as a sample size.

Simple convenience sampling technique was used to select the respondents for the study. One Hundred and Sixty-Eight (168) copies of questionnaire were distributed and out of

this number, 159 were retrieved from the respondents, representing 94.6% response rate. The Statistical Package for Social Sciences (SPSS 16.0 version) was used in data analysis.

FINDINGS AND DISCUSSIONS

Responses	Frequency	Percentages (%)	
Male	92	57.9	
Female	67	42.1	
Total	159	100	

Table 3: Gender of Respondents

Source: Fieldwork, 2017

From Table 3, out of 159 respondents captured for the study, 92 (57.9%) were males while 67 (42.1%) were females.

Table 4: Awareness Level of Electronic Resources by Gender

		Male		Female
Responses	Frequency	Percentages (%)	Frequency	Percentages (%)
Aware	89	96.7	65	97
Not aware	3	3.3	2	3.0
Total	92	100	67	100

Source: Fieldwork, 2017

Table 4 represents the respondents' awareness level of electronic resources in the library. From Table 4, 89 (96.7%) male respondents indicated that they were aware of electronic resources and 65 (97%) female respondents said they were aware of the E-resources in the library.

Responses				
		Male		Female
	Frequency	Percentage (%)	Frequency	Percentages (%)
Yes	83	90.2	63	94.0
No	9	9.8	4	6.0
Total	92	100	67	100

Table 5: Accessibility of Electronic Resources by Gender

Source: Fieldwork, 2017

From Table 5 which is a representation of the respondents' access to electronic resources in the library, 90.2% of the male respondents indicated that they have access. Majority (94%) of the female respondents also indicated that e-resources were accessible.

Table 6: Purpose of using Electronic Resources by Gender

Responses		Male		Female
	Frequency	Frequency	Frequency	Percentages (%)
Writing Project	17	18.5	16	23.9
To do assignments	34	36.9	30	44.8
To do research	41	44.6	21	31.3
Total	92	100	67	100

Source: Fieldwork, 2017

Table 6 sought to find out the purpose for using electronic journals. It shows that out of the 92 males, 41 (44.6%) used E- resources to do their research, followed by 34 respondents, representing 36.9%, who used these resources to do assignments. The remaining 17 (18.5%) said they used e-resources for their project work. On the part of the female respondents, 30 (26%) used it to complete their assignments. It can be deduced

from the table that both male and female students used the resources for the same purpose.

Use of Library	M	lale		Female
	Frequency	Percentage (%)	Frequency	Percentage (%)
Daily	50	54.3	47	70.1
Once in a week	15	16.3	5	7.5
Two weeks	17	18.5	7	10.4
Once in a month	10	10.9	8	12.0
Total	92	100	67	100

Table 7: Frequency use of Electronic Resources by Gender

Source: Fieldwork, 2017

Table 7 indicates that 50 (54.3%) and 47 (70.1%) of the male and female respondents respectively, indicated that they used e-resources daily. While 16.3% of the male respondents used e-resources weekly, 7.5% of their female counterparts used them weekly. The Table further shows that 10 males said that they used e-resources once in a month. This was not quite different from the female respondents as 8 (12%) used these resources once in a month.

Table 8: Hours Spent by	Gender in Accessing E-Resources
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Hours Spent		Male		Female
	Frequency	Percentage (%)	Frequency	Percentage (%)
Less than 1 hour	20	21.7	7	10.4
1-2 hours	33	35.9	10	15.0
3 – 4 hours	14	15.2	36	53.7

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5- 6 hours	10	10.9	11	16.4	
More than 7 hours	15	16.3	3	4.5	
Total	92	100	67	100	

Source: Fieldwork, 2017

To find out the duration of using e-resources, respondents were asked to indicate the number of hours they spend on e-resources. Table 8 indicates that the male respondents who spent 1-2 hours recorded the highest number, 33 (35.9%). This was followed by those who spent less than 1hour, 21.7%. Almost the same number of respondents spent 3-4 hours and more than 7 hours on e-resources. In a sharp contrast, majority of the female respondents indicated that they used 3-4 hours on e-resources while few female students spent more than 7 hours on e-resources. Moreover, females who spent 1-2 hours and 5-6 hours were almost the same.

Table 9: Challenges of Electronic Resources Usage by Gender

Responses	Male		Female	
	Freq.	Frequency	Frequency	Percentage (%)
nadequate computers	13	14.1	10	14.9
Difficult to login	6	6.5	3	4.5
Inreliable power supply	40	43.5	36	53.7
ow bandwidth	7	7.6	5	7.5
Slow internet System	26	28.3	13	19.4
	92	100	67	100

Source: Fieldwork, 2017

The issue of challenges faced when accessing e-resources is presented on Table 9. 40 (43.5%) and 36 (53.7%) for male and female respondents respectively indicated that

unreliable power supply was a common challenge. The next major concern to both sides was slow internet system.

DISCUSSIONS OF FINDINGS

Arguably, gender equality has become one of the topical issues recently. So many organizations and individuals have been advocating for gender equality in education. The present study clearly shows that there is a great gab between male and female students at the Business School- Accounting option of Valley View University (VVU). This study disagrees with the study of Adomi (2000), who indicated that there were more females than males in Library schools in Nigeria.

The patronage of resources in academic libraries is to a large extent determined by the awareness of such resources by users. Majority of the respondents from both gender was aware that e-resources were available in the library as depicted by Table 4. The study contrasts with the study of Kinengyere (2006), whose study on four academic and research institutions in Uganda revealed that available resources were not utilized because users were not aware of the resources.

The response to the issue of access is commendable. An overwhelming majority from both sides have revealed that e-resources were accessible. This study is therefore being in line with the work of Bar-Ilan and Finka (2005) who reported that users at the Hebrew University have shifted to the use of electronic journals because the resources are accessible to them though the print format was still available.

The study also sought to find out the hours users usually spend in consulting e-resources. This study, however shows that there are no great differences in the hours both genders spend. This finding disagrees with the study of Winker (2005) on internet usage which established that men use the internet for longer hours while women are in the categories of moderate users.

Another interesting finding from the study is in the frequency use of e-resources by both genders. It is quite clear that majority of both sides consult such resources daily. This result concurs with the findings of Ozoemelem (2009), on the use of electronic resources by postgraduate students of the department of library and Information Science, University of Abraka, who stated that there is high frequency of usage of electronic resources by both male and female postgraduate students and so the gender gap in electronic resources usage was quite negligible.

The purpose of using e-resources was also a major aim of this study. There are several reasons that may account for the use of e-resources. However, it can be deduced from Table 6 that both male and female use e-resources for the same purpose. Thus, most students would want to supplement their lecture notes with e-resources to complete their assignments. This finding agrees with Badu and Markwei (2005), whose study indicated that students used electronic resources for their research and assignment.

The findings also revealed that views on the challenges of using e-resources are split. However, the main challenge that runs through both is the unreliable power supply. The present study confirms the work of Okiki & Asiru (2011), and Ojokoh & Asaolu (2005), that slow internet connectivity and unreliable power supply are the problems that affect the use of electronic resources.

CONCLUSIONS

The findings of the study disclosed that electronic resources are available at the university library and majority of male and female users are aware of them. The study also reported that users use electronic resources for research purposes, and to complete assignments. The major problem hindering their usage is unreliable power supply and slow speed of internet connectivity. The study has also shown that to a large extent, both males and females use e-resources for the same purposes and face the same challenges in accessing them. The study further shows that the gap between male and female on the use of e-resources at VVU is quite negligible.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made to the library and the university Management:

The study revealed that the gap between male and female students is significant. Therefore, during admission period, more female students should be admitted. This can be done by taking affirmative action towards this. Moreover, the Management of the library should improve upon power supply in the library to ensure regular flow of power to enable users have access to the electronic resources always.

This can be done by acquiring a standby generator so that in times of light out, this can be used to supply power. Management should increase internet bandwidth in the library so that there will be faster internet connectivity in the library to avoid students queuing and wasting time when accessing the electronic resources. Although, the study revealed that students are aware of the availability of e-resources, more awareness must be created by the library. This can be done by organizing workshops, conferences and orientations for users.

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