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Prevalence of Gender Discrepancy in Internet Use in Nigeria: Implication for Women Empowerment

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Abstract

Very often some restrictions are imposed on who, what, why and how people engage in some professions, skills and activities thus, denying some individuals opportunities to be empowered towards self actualization and maximal contribution to the societal development. One important agent of empowerment is information, provided with dispatch through the Internet. In essence, the research sought to determine the prevalence of gender discrepancies in Internet use with a view to indicating its implication to women empowerment. In the survey, cluster and proportionate sampling techniques were employed to select five of the eighteen Internet centers in the three local government areas in Imo State, Nigeria. Three hundred self designed questionnaires were distributed to the sampled users. Obtained data were collated and analysed using frequency tables, percentages and graphs The result shows that female are almost at par with the male in the use of Internet though the female consist mainly of youths, students, low educational qualification (secondary education& diploma) except those with PhD. Female visit the Internet less frequently but stay longer hours browsing . Contrary to the former, opinion was that female should use the Internet less than male due to the inherent and expressed technological bias against them, traditionally impose domestic pressure and some cultural barriers. If such norm is accepted, the female will be denied the major source of real time information needed for empowerment

Introduction

The Internet is all about globalization of information beating space and time aimed at enhancing sustainable development which was before now the prerogative of developed countries. Though the Internet world statistics usage (2007) shows a low Africa representation (3.4%) of the world Internet users, it has helped to reduce the information/digital divide, thereby contributing in the overall development of many nations including Africa. Despite the low Internet usage in Africa, it is necessary that every group in the continent is represented as each contributes to attaine its all round development.

Very often specific professions, skills, activities, etc. are considered the right of some groups in some countries. In our society today, roles are attached to gender. Sex is considered to be a biological characteristic while gender is social constructed role ascribed to males and females which could influence their roles. Johansson (2000) & Walkerdine (1997) indicated that the use of gender is a reflection of differences in culture and it is based on hierarchical structure within the culture of what is suitable for boys and girls respectively. The roles according to Dholakis, Dholakis, and Kshetri, (2003) are learned; change over time and very widely within and between cultures. To Kamber (1996) cultural structure which discriminates against women is not separated from science and technology. Internet technology use may not be far removed from cultural discrimination. Internet technology is traditionally of male domain thus female should be aid to develop models of Internet to discourage pessimistic traditional gender inhibition (Enochsson, 2001).

The role of women especially in national development before now is placed at the background but evidence has shown that given the opportunity women can excel in roles culturally reserved for the men. Achievement of the later is a product of well informed and exposed individual. One major source of global exposure today is the Internet. It is necessary that the participation in one of the tools or facilities for exposure (the Internet) which enhances sustainable development is assured.

The importance of Internet to women is noted by Singh (2001) to include a tool for activity as opposed to men who used it as a play environment and a technology to master and exploit. Jackson, Ervin,., Gardner, & Schmitt. (2001) found that women use them for e-mail more than the men who use it for search. Weise (2000) indicates that women also use it for education.

According to Miller (1996) people at their middle age access the Internet for information. Nielsen (1999) informed that men and women in US and Canada use the Internet for online shopping all geared towards development thus, lack of its use certainly denies any member of the society such opportunity. To ensure that women benefit from such opportunity which invariably will aid their contribution to national development, it becomes necessary to determine their participation in the use of Internet.

Literature on the characteristics of Internet users indicated various disparities ranging from age, sex, educational qualification and occupation.

There has been proven differences in Internet usage based on the age. Internet World Stats usage (2007) revealed that 19.8% of 0-14year age group in Australia uses the Internet out of which 2.1million are male and 1.9million are female. The highest Internet users (67.2%) belong to the age bracket of 15-64 year with male and female representation of 7.08million and 6.6million respectively. The age group of 65years and above was the least representation of Internet users (12.9%) with more female (1.4million) than male (1.1million), an indication that Internet usage is dominated by youths and middle aged people. In support of that Miller (1996) reported that the use of Internet is dominated by youths of between 18 – 29 years, though the age group of 30 – 40 years are likely to use it as much as the youths. This was confirmed by the findings of Mead, Sit, Rogers, Rousseau & Jamieson (2000), Bureau of Statistics (2005/06) and that of Amaeshi, Anyanwu, & Oparaku (2006) who discovered that Internet use is predominant among the age group of 18 – 30 years and use reduces with age. Apart from the general age difference, it is likely that variation may occur among genders within the age groups. Weiser (2000) discovered in his study that there is gender difference in age of Internet users, a confirmation of the earlier cited differences in Australia. Nielsen (1999) in his study informed that the ratio of men and women who use the Internet in US and Canada was 53% and 45% respectively. Bruce (2000) also confirmed statistically significant gender gaps on the use of the Internet. Dholakia et al (2003) stated that in some countries, the proportion of women using Internet has increased. Between 1999 and 2000, they discovered that the proportion of women who use the Internet jumped from 33% to 42% in Mexico, from 25% to 43% in Brazil. The percentage representation of female Internet use in Asia is low (22%) even when they constitute 50% of labour force. It is also low in Africa with only 12% and 38% of Internet users in Senegal and Zambia being

represented by women respectively. By the extension of the later, they noted that the proportion of women Internet users in developing countries is much smaller than that of men.

There have been evidences too that the level of education is a factor in Internet usage. Among the evidence is the research by the National Election study (1998) in America which shows that more people with college degree (70%) had access to the Internet than 20% of those with high school diploma or less education. In the study by the Australian Bureau of Statistics (2005/06), it was found that 90% of Internet users are of bachelor degree and above certificate followed by 83% who have advanced diploma or diploma. Contrary to what is obtained in America and Australia, Amaeshi *et al* (2006) found that more of the undergraduates (56.25%) use the Internet than any other academic level. However, their finding didn't have any representation for the PhD holders. The later discovered in their study also that majority (41.25%) of their respondents use the Internet when there is need for it. Only very few people (6.25%) use it on daily basis. Gender-wise, Stanley, and Niemi (2003) noted that there has always been a difference between male and female use of some media. To them, women watch more total hours of television than do men but few hours of regular television. They also consume less news than men. In confirmation, Bimber (2000) discovered in her study that women are less likely than men to be frequent users (i.e. daily) of the Internet. For those using the Internet less than once a week but at least once a week, more women (40%) than men (28%) was shown in her study. Hence, Bimber (200) concluded that men are more intense users of the Internet than women.

Many factors debar women from using the Internet especially in developing country. The views of Gavin, Duffield, Brosnan, Joiner, Maras & Scott (2007) informed that gender divide in Internet use is a function of Internet identification which is bound with the image of Internet users which is masculine in nature . The likely availability of disparity in the Internet use based on gender was presented by Silthole (2007) who noted that some specific activities are the prerogative of different genders. One of such activity according to Dholakis et al (2003) is the adoption of modern information and communication technology including the Internet. Internet is of public location and some gender barriers prevent women from going to such public location. Where they lack fund to connect to the technology in their private homes, they are deprived of the facility. AgnethaBroos (2005)

found negative attitudes of women towards computers and Internet as well as computer anxiety as part of female barrier to Internet use.

By way of justification of the later, Janssen, Reinen and Plomp (1997); Fletcher-Flinn and Suddendorf (1996); and Sutton (1991), asserted that technology is more appropriately male than female in that culturally technology is associated with the masculine. Hence Green, Owen & Pan (1993) informed that technology is gender by design, Bimber (2000) mentioned the claim which goes that online content favours male interests and styles. Canary and Dindia (1998) informed that differences in cognition and communication relevant to Internet use vary between male and female. Aptitude and skills which Shashaan, (1997), and Sutton (1991) reiterated are needed for Internet uses differ between male and female. Conversely, Enochsson (2005) found no difference in Internet use and interest between girls and boys though boys discuss Internet knowledge more than girls.

Bimber (2000) therefore summarized that the low use of Internet by female is caused by bias toward the interests and styles of men which is a consequence of gender inequality in the professions and industries producing the technology of the internet, and the commercial success of male oriented pornography on the Internet.

The situations as shown in literature, i.e. young people, masculine group and undergraduate dominating the use of Internet, male using the Internet more than women due to some dogmatic cultural barriers, if prevalent in our society, the gender equity in national development is challenged. Cognizance of the fact that development today is information based and the Internet provides ground braking information beating space and time, it is imperative that the characteristics of Internet users be determined vise visa male and female with a view to identify the reason for unequal use if it exists.

Objective of the Study

The research was designed to determine gender discrepancies in Internet use with a view to isolating its implication to female contribution towards sustainable national development. Specifically the work was poised to:

1. Find out the characteristics of female and male who use the Internet;
2. Identify the differences in the frequency of Internet use between the male and female;
3. Determine the variables militating against female use of Internet; and

4. Indicate the implication of the findings to women contribution towards sustainable national development.

Statement of the Problem

Before now, gender has a role to play in expectations from individuals and his/her contributions towards the development of a society. Feminine gender is always synonymous with playing a background role and not to be seen. However, developments lately present women as demonstrating excellence in responsibilities which many men would have failed thus, repositioning the outlook of women in the society. Such excellent performance of duties requires equipping oneself with the wherewithal. One of such is obtaining information via the information super highway – the Internet. However preliminary observation shows that men are quick to using the Internet in the State of Imo in Nigeria There is the need for its confirmation empirically. This is necessary as repositioning women for sustainable national development requires the knowledge of their use of Internet visa-vis the men with a view to identifying the impediments to such use. The paper therefore sought to determine the characteristics of Internet users in Imo State in so as to establish the inhibiting factors to female use of the Internet.

Methods

The survey was carried out in three Local Government Areas (LGA) namely: Owerri North, Owerri South and Owerri Municipal in Owerri Capital territory of Imo State, Nigeria. Cluster and proportionate sampling method was employed to select five (5) out of the eighteen (18) Internet centers in these LGA. Three (3) centers were selected from Owerri Municipal out of ten (10) centers. The other two LGAs were represented by one (1) center each from the four available.

Quantitative data needed for the research was obtained with self designed questionnaire which was randomly distributed to the users of the five (5) centers for five consecutive days. The essence was to ensure that users will have access to the questionnaire irrespective of the day they use the Internet. Of the three hundred (300) questionnaires distributed, 219 (73%) were returned.

Results were collated and analyzed with graphs, frequency tables, and percentage. A benchmark of 50% was taken for opinions rated on percentage.

Results

The results obtained were organized based on the main objectives of this work namely the characteristics of the Internet users, differences in the frequency of use between the male and the female, and the impediments to female use of Internet.

Characteristics of Internet Users

Analysis of the response shows that 108 (49.31%) of the 219 respondents were female while the rest were male. The factor is represented in Figure 1.

Of the 49.31% female users, 64.86% of them have their age ranging from 15 -30 years, 24.32% belong to the age bracket of 31 – 40 years and only 8.1% are above 41 years. It is evident from Fig.2 that majority of the female who use the Internet are within the age group of 15 – 30 years. Furthermore, Internet use decreases with age.

On educational qualification, 78.94% of Internet users with SSC are female while 76.19% of users who possess NCE/OND are female. Female with Bachelor, Masters and PhD degrees represent 33.33%, 22.22% and 75% of the Internet users respectively. The distribution is shown in Fig. 3. The results revealed that majority of the females who use the Internet belong to the lower educational level.

Occupationally, 56.52% of females using the Internet are students, 33.33% are teachers, and 28.56% are civil servants, while 33.33% are public servants and housewives respectively. 66.66% are self employed.

Differences in the Frequency of Internet Use

Responses on the frequency of Internet use produced a sharp difference between that of male and female. Fig. 4 shows that the Internet visiting time for female users are less frequent reflecting more on monthly basis and when there is need for it. This is contrary to the high response from the male use on daily and weekly visits.

Another important variable related to frequency is the duration of use. The result showed that all the respondents who browse for 10 minutes belong to female folk while 70.32% of those who surf for 1 hour were of this group. Below 50% of the women browse for either 30 minutes or above 1 hour.

Impediments to female use of the Internet

Respondents were required to indicate in their opinion the gender that makes the most use of the Internet. A 66% of the respondents opined that males use the Internet more than females.

Responses on the impediments to female use of Internet are shown in Table 1. Using the 50% benchmark for results on percentage platform, the Table shows that respondents were in affirmation that the following variables are likely to inhibit female use of Internet in our society: the speculation that men are more technologically oriented than women, (70.5%) ; domestic r which takes its toll on females' time (80.77%); some culture biases that affect female role in the society (85.66%); they believe that males have less computer anxiety than females (60.52%); and the opinion that males are more research oriented than females (59.52%). Other variables have responses below the 50% benchmark hence were considered insignificant variables.

Discussion of Findings

The very minimal percentage difference between the males and females showed that females are matching up with males in the use of Internet. However, the female users being concentrated in the age range of 15 – 30 years and majority of them being students with only secondary school certificates demonstrate that the number of female users is concentrated on the youth. The result is synonymous with the Australiain Internet use Statistics shown in the Internet World Stats and confirmed by Miller (1996), Mead, Sit, Rogers, Rousseau & Jamieson (2000), Bureau of Statistics (2005/06) & Amaeshi, Anyanwu, & Oparaku, (2006), that the Internet use presently is dominated by the youths .The reason for that scenario could either be environmental , cultural or inherent .

It is also glaring that majority of the female users are secondary school and NCE/HND holders except for the PhD group. The former are likely to be young people who are likely to live above the cultural stigma as a result of upbringing as well as other environmental or sociological factors. The PhD group may likely have to overcome some of the sociological and environmental inhibitors which prevented others from utilizing the public Internet facilities through exposure or they may have realize the importance of Internet in the all round development of the individual.

The results on the occupation of female using the Internet still revealed that majority of them were students. Thus confirming the finding of Amaeshi, Anyanwu, & Oparaku, (2006) that Internet use in Imo state is dominated by undergraduates and lending weight to the fact that most of the females who use the Internet are young people. The high percentage of the self employed could be attributed to the Internet constituting part of their business outlet.

The evidence that females visit the Internet less frequently than the male had been established by Bimber (2000) that women were less likely to be daily users than men though they stay longer hours when they visit. The result could be attributed to some domestic exigencies which take its toll on their time. The implication is that some of the developmental benefits which could be derived from regular Internet use will elude these members of the society. Occasional visit and limited browsing time could be the consequence of domestic pressure which culture and societal expectation has made the feminine gender to succumb to.

Views that males are more technologically oriented and have less technology anxiety than females as a variable in female use of Internet further affirmed the opinion in our society that naturally some professions, and skills are reserved for the male folk.(Shashaan1997, Sutton 1991, Enochsson,2001, Silthole 2007) Thus, confirming the historical high enrolment of male student in the School of Engineering and Engineering Technology against the female in The Federal University of Technology Owerri , Nigeria.(FUTO). (FUTO @ 25, 2006). Domestic pressure and cultural variables are the result of societal expectation which has gender undertone. The female folks are expected to take care of all the domestic activities as well as limiting their visits to where males and not females are expected to be found.

Conclusion and Implication of the Study

The use of Internet in our present day society is as common as eating the basic staple food. Its importance in the information driven society cannot be over emphasized. For the feminine gender to take its pride of place in sustainable national development, she must take seriously all the necessary variables needed to achieve that, one of which is Internet information sourcing. To that effect, determination of discrepancies in its use between male and female is important in decision making towards women empowerment for development. On that platform, it was discovered that:

1. The female folks are almost at par with males in Internet use, but most of the female users belong to very young age group most of which posses a secondary school certificate and National Certificate of Education or its equivalent. However, females with PhD degrees have very good representation;
2. Females visit the Internet less frequently but stay longer when they do;
3. Contrary to the result that females are almost at equal footing with the male in Internet use, opinion was that males are likely to use the Internet more than the females. The opinion was based on the variables that females are less technologically oriented, have more domestic pressure and have some cultural barrier to use of such technology contrary to their male counterparts.

The implication of the finding is that if the female should allow the society to imposed such baseless and unfounded restrictions on them thereby leaving Internet use to only the youth and secondary school students, the productive female group could deny themselves of the social, economic, political as well as commercial benefits of the Net . In an event of that, they may fail to take their pride of place in sustainable national development. Furthermore, the research of this nature has unveiled some of the baseless variables such as cultural bias, technology phobia, and domestic pressure which may hinder prospective female Internet user from such move. Hence, it is necessary that such issues be studied in other to bring their reality or fallacy to book.

Recommendation

Actions cannot be condemned until the underlying reasons are revealed. Therefore, the low use of the Internet by the productive and working class members of our society has been shown to have some underlying reason. It is therefore recommended that:

- Further research be carried out to determine the sociological and environmental factors which inhibit maximal use the information superhighway by the women;
- Such issues could also be discussed in gender equity forum and in a legislative seating;
- Formal and informal education setting could also be used to discourage such unfounded ideas.

References

Agnethabroos, M. A. (2005) Gender and Information and communication technologies (ICT) Anxiety: male self– assurance and Female Hesitation *CyberPsychology & Behavior 8* (1), 21-31.

Amaeshi, B. O., Anyanwu, E. U.; Oparaku, D. C. (2006) Characteristics of Internet Users in Nigeria: the case of Owerri Metropolis, Imo State. *The Research Librarian 1(1), 1-6.*

Asiegbu L.C Ed. (2006) *FUTO @ 25.* Owerri , Nigeria: House of Gold Press

Australian Bureau of Statistics (ABS) *Household use of Information (2001 – 2002, 2004/05 – 2005/06* [http://www.afc.gov.au/gtp/wnmnetuser] Accessed: 20/11/07.

Australian Bureau of Statistics (ABS) *Selected Characteristics of Internet Users anysite, 2001 – 2002, 2004/05-2005/06.* [http://www.afc.gov.au/gtp/wnmnetuser] Accessed: 20/11/07.

Bimber, B, (2000) Measuring the gender gap on the Internet. *Social Science Quarterly* 81(3) [files///volumes/Nelson/InfoSociety/Bimber.html. Accessed: 30/05/06].

Canary, D. J. and Dindis, K. eds. (1998) Sex differences and Similarities in Communication. In Mahwah, N. J.; Lawrence Erlbaum. Census Bureau 1999, Educational Attainment Tables for Match 1998. [http://www.census.gov.Washington, D.C.: U.S. Bureau of the Census.

Dholakis, R. R.; Dholakis, N. and Kshetri, N. (2003). The *Internet Encyclopedia*. Hossen Bidgoli (edt) New York: Wiley.

Enochsson, A. (2005). A gender perspective in Internet use – consequence for information seeking on the net. *Information Research* 10 (4), 237. (http://information R.net/ar/104/paper237.html. Accessed: 02/04/08)

Fletcher-Flinn, C. M. & Suddendorf (1996) Computer attitudes, gender and expository behavior: a developmental study. *Journal of Educational Computing Research* 15 (4), 369 – 92.

Gavin J., Duffield J., Brosnan M., Joiner R., Maras P. & Scott (2007) Drawing the Net: Internet : Internet Identification, Internet usage and the image of the Internet users. *Cyber Psychology & Behavior* 10 (3), 478-481.

Green, E.; Owen J. and Pain D. (eds) (1993) *Gender by design? Information technology and office systems.* London: Tylor and Francis.

Internet world Stats: Usage and population statistics (2007) *Internet usage statistics: the Internet Big Picture.* www.Internetworldstats.com.

Internet world Stats: Usage and population statistics (2000-2007) *Australian Internet usage Stats and Telecommunication Market Report.* {www.Internetworldstat.com/sp/au.htm accessed 02/04/08}

Jackson, L.A., Ervin, K.S., Gardner, P.D. & Schmitt, N. (2001). Gender and the Internet: women communicating and men searching. Sex Roles*: A Journal of Research*, 44 (5-6), 363-379

JanssenReinen, I. & Plomp, J. (1997) Information Technology and gender equality: a contradiction in terminis? *Computers in Education* 28(2), 65-78.

Johansson, B. (2000). Kom och ät! Jag ska bara dö först... [*'Time to eat' 'Okay! I'll just die first!..' - The computer in children's everyday life]*. Unpublished doctoral dissertation, Gothenburg University, Gothenburg, Sweden

Kember, S. (1996). Feminism, technology and social representations. In J. Curran, D. Morley, & V. Walkerdine (Eds.) *Cultural studies and communications*. London: Arnold

Mead, S. E., Sit, R. A., Rogers, W. A., Rousseau, G.K. & Jamieson, B. A. (2000) Influences of general computer experience and age on library database search performance. *Behavior and Information Technology* 19, 107 – 123.

Miller, T. E. (1996) Segmenting the Internet – Internet users by age, survey by Find/SVP American Demographics (http://findarticles.com/p/articles/m1_m4021/15_n7 v18/91_18440641.

National Election Study (1998) American National Election Study 1998 Pre and Post – Election Survey conducted by the centre for Political Studies of the Institute for Social Research, the University of Michigan Ann Arbor, Inter University Consortium for Political and Social Research.

Nielsen, A. C. (1999) The CommerceNet/Mielsen Internet Demographic survey, April 1999". *CommerceNet 1999.* http://www.commercenet/research/gideon/start.html

Shashaani, L. (1997). Gender Differences in Computer Attitudes and use among college students. *Journal of Educational Computing Research* 16(1), 37 – 51.

Silthole, J. (2007) The Challenges faced by African libraries and Information Centres in documenting and preserving indigenous knowledge. *IFLA Journal* 33(2), 117 – 123.

Singh, S. (2001) Gender and the use of the Internet at home. *New Media and Society* 3(4), 395 – 416.

Stanley, H.W., and. Niemi, R. G *(2003). Vital Statistics on American Politics, 1997-1998.* Washington, D.C.: Congressional Quarterly Press.

Walkerdine, V. (1997). *Daddy's girl - young girls and popular culture.* London: Macmillan.

Weise, E. B. (2000) Gender differences in Internet use patterns & Internet Application Reference: A two sample comparison. *Cyber psychology & Behavior* 3 (2), 167 – 178.

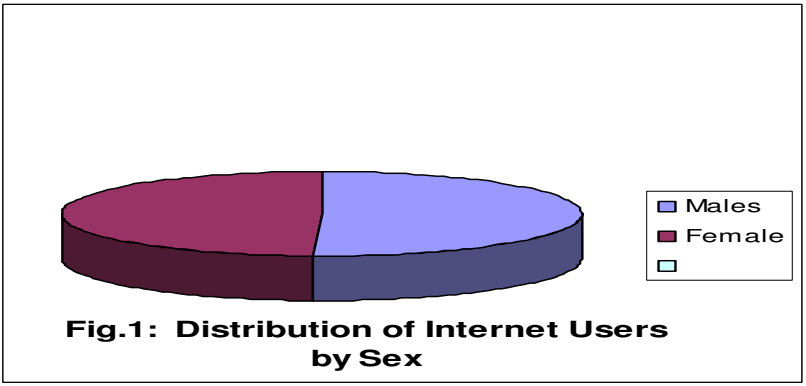
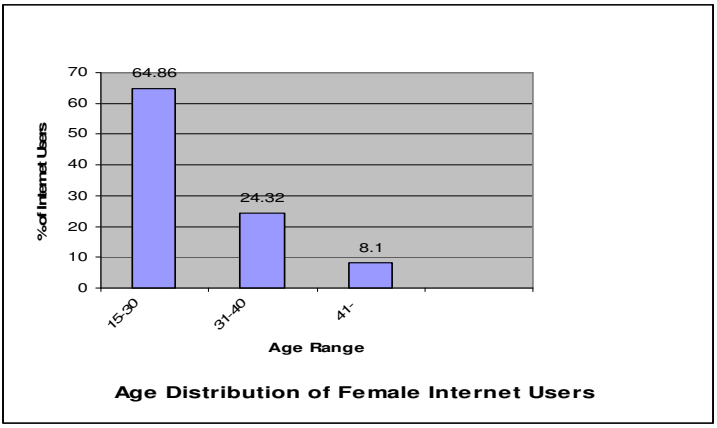
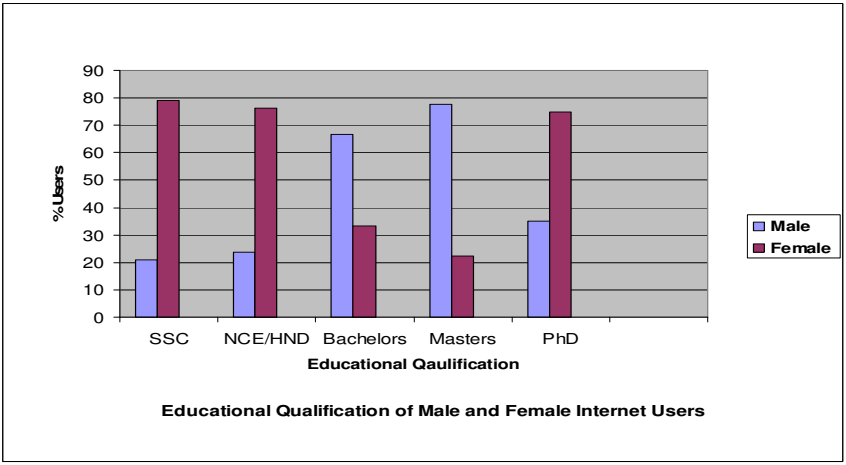


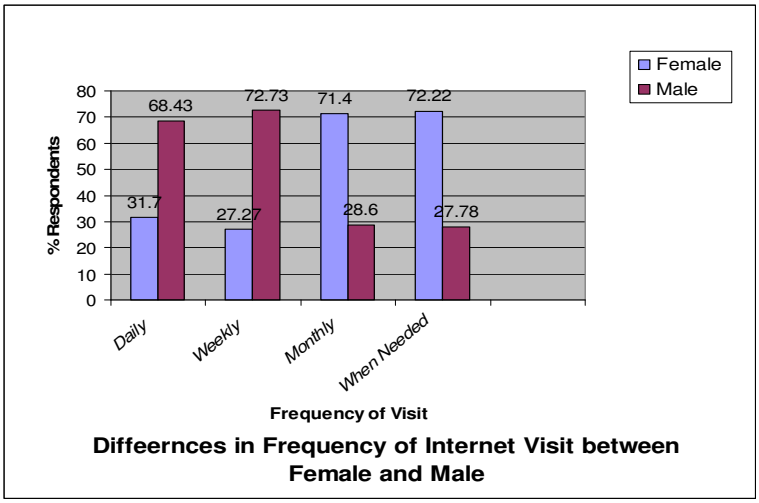
Fig.1: Distribution of Internet Users by Sex



Age Distribution of Female Internet Users



Educational Qualification of Male and Female Internet Users



Diffeernces in Frequency of Internet Visit between Female and Male

Table 1: Responses on the Variables that Influence Female Use of the Internet

S/N	Variables	Percentage Responses	
		Yes	**No**
1.	Men are more technologically inclined than women	**70.5**	**29.5**
2.	Women do not understand most of the issues related to Internet technology.	**36.61**	**63.39**
3.	Women are not interested in technology and its application	**42.02**	**57.98**
4.	Internet website has inadequate coverage on women area of Interest than men.	**23.94**	**76.06**
5.	Domestic pressure does not allow women use of Internet	**80.77**	**19.23**
6.	Some cultural factors do not allow women to mix up with men in places like Internet centre	**85.66**	**14.34**
7.	Men are more educated than women and therefore are more knowledgeable in the use of Internet	**22.11**	**77.89**
8.	Online contact favours male interests & styles than female	**30.05**	**69.95**
9.	Males have less computer anxiety than females towards Internet use.	**60.52**	**39.48**
10.	Men earn more income than women & therefore spend more using Internet.	**30.05**	**69.95**
11.	Males are more research oriented and therefore require Internet search more than women.	**59.52**	**40.48**
12.	Males are inclined to e-commerce which requires the use of Internet than women	**41.46**	**58.54**