Gender Differentiation In Internet Usage: A Case Study Of Great Zimbabwe University Students (Zimbabwe)
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ABSTRACT:
The purpose of the study was to find out if there was gender differentiation in Internet usage by students at Great Zimbabwe University. A stratified random sampling method was employed to select respondents (N=129) from the student population across faculties. The descriptive survey research design was used. A 15 – item questionnaire was administered to collect data from the participants. The chi-square was used to analyze collected data. The study revealed that the majority (N = 108) of the participants had access to the Internet. Accessibility to the Internet was found to be gender neutral. Gender differences on patterns of Internet usage were statistically significant on news, sport and pornography sites. There was however, no significant gender differentiation on Internet visits to sites such as research communication, gospel, health, gaming, films and job searching. Further research to establish the reasons for the diverse interest on various sites need to be carried out.

Introduction:
Access to the internet is becoming ubiquitous in institutions of higher learning (Mitra, Willyard, Platt and Parsons 2006: Keith, 2006). Its usage includes activities such as e-mail, browsing the world wide web, file transfer protocols (FTP), cybersex and graphic interactive games. Literature shows that students use the websites that are relevant to their special interests and needs (Mitra, Willyard, Platt and Parsons, 2006). Patterns of internet usage show that students use the facility for different reasons.

The common ones are mainly messaging (communication), information retrieval, downloading (Thomson, 2000). Emmanouilides and Hammond (2000) who have studied the Internet usage for years (since 1995 to present) have observed that communication was the most popular use and most recently information seeking and services have emerged as popular sites as well.

Gender differentiation has been reported in internet use (Muira, 1987: Birchmeir, Klausiner and Sharman, 2000). According to Gackenbach and Ellerman (1988) the internet has been male dominated since its inception. It also emerged from Zovodny’s (2003) study that females are less intensive internet users than males. Further, a study by End, Kraan, Cole, Cambel, Birchmeter, Klausiner and Sherman (2000) confirms that university male and female students differ significantly in the levels and patterns of their internet usage. Consistent with End et al’s findings, Mitra, Willyard, Pratt and Parsons’ (2006) study showed that more males than females used the internet recreationally (playing games online, gambling, accessing news, seeking information use) while females preferred to use the internet to talk to family members and friends (Goodson, McCormick and Evans, 2002: Jackson et al 2001, Odell et al 2000).

A related study by Show and Grant (2002) revealed that male students prefer using the web for information gathering and entertainment while woman prefer to use it for communication. These findings are consistent with the widespread assumption that men prefer to use the web for information gathering and entertainment and women prefer to use the Internet for communication (Show and Grant, 2002). A study by Thomson (2000) found a positive relationship between gender and messaging, with females more likely to use the internet for messaging than males. Bimber’s (2000) study yielded interesting results. Male students were found to use the Internet more frequently for pornography that the females.
Other literature, however seem to contradict these findings. Quite a number of investigations have shown that there are no significant gender differences in internet usage (Jennings and Onwegbuzie, 2001). The contrasting studies demonstrated that internet usage is gender neutral. In fact, any differences may be due to methodological differences and perhaps such studies may have been carried out long ago when females had internet anxiety. Presently, the landscape has since changed considerably with the Internet usage gap between males and females being minimal or having closed.

Both female and male students find that the Internet enhances their research, expands their ability outside the classroom in acquiring more skills, enhances their insight on class materials, makes learning easier and fun, and improves students’ collaborative as well as leadership skills in learning and discussions (Rajagopal and Bojin, 2006).

A study by Tapscott (1970) did not detect any differences between how boys and girls use the Internet when he studied the Net-generations or N- Geners (these are people who were born after 1977). A related study carried out in the USA indicates no gender differences in Internet usage (Nita, 2002).

Most institutions of higher learning, Great Zimbabwe University (GZU) included, have an internet presence. GZU provides students with the opportunity to access the (World Wide Web) www, e-mail and related internet activities. The internet is provided free of charge. The aim of this research, therefore, is to find whether there is gender differentiation in internet usage among GZU students’ preferred sites and pattern of use. The following research questions guided the study:

Do GZU students have any access to the Internet?
Is the use of the Internet by GZU students visible?
Are there significant gender differentiations in the patterns of Internet usage?
Do gender differences influence GZU students' choice of Internet sites?

The hypothesis of this study was that: Gender Internet usage is neutral in the following sites: research, pornography, music, health, communication, entertainment and sports. The significance of the study was that the findings of the study could potentially inform stakeholders about Internet accessibility and patterns of use by both male and female GZU students.

In this study internet use was defined as time voluntarily spent on any of the following activities: browsing the World Wide Web, sending and receiving e-mail, participating in newsgroups (Usenet), interactive games, using File Transfer Protocol (FTP) to collect software, cybersex and a general category of other activities. (Anderson, 2006)

Methodology
The study investigated differentiation in internet usage by GZU students. For this study the survey method was preferred most because it is a systematic data collection method that can be used in collecting the original data from a large sample.

The participants for this study were 64 females and 65 males (N = 129) selected from the five faculties of the university using the stratified random sampling technique. The participants’ internet usage and pattern of use were surveyed using an Internet usage pencil-and-paper questionnaire. Participants completed a questionnaire that assessed demographics and internet use. Demographic information included age, faculty, gender and computer literacy/illiteracy. Participants responded to an 18 item pencil-and-paper questionnaire that solicited responses on the preferred Internet sites. The instrument had three sections: A, B and C. Section A required participants’ demographic data, B solicited for Internet sites preferred, while C required the respondent to provide any additional information on Internet usage and also the length of time it took them on their favourite site. The responses were measured on a 3-point scale from not at all, through often to very often.

The questionnaire was pilot tested with the focus group of 15 students who were not part of the sample of the study. The questionnaire was then tested and re-tested after two weeks to determine
More students, enrolled in the Arts programmes, did not access the Internet. By contrast all students studying Commerce or Natural Sciences had access to Internet. Ninety nine percent of the students in Education accessed the Internet.

Table 1 Number of Students by Gender and Programme

<table>
<thead>
<tr>
<th>Programme</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>6</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Education</td>
<td>9</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Commerce</td>
<td>25</td>
<td>24</td>
<td>49</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>15</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>64</td>
<td>129</td>
</tr>
</tbody>
</table>

Table 2 Accessibility to internet by gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>Computer literate</th>
<th>Not computer literate</th>
<th>Total</th>
<th>$\chi^2$=1.52 df=1 $P&gt;0.05$ (Not Sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>51</td>
<td>13</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57</td>
<td>8</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>21</td>
<td>129</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 Accessibility to internet programme

<table>
<thead>
<tr>
<th>Programme</th>
<th>Computer literate</th>
<th>Not computer literate</th>
<th>Total</th>
<th>$\chi^2$=44.25 df=4 $P&gt;0.05$ (Sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>9</td>
<td>11</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>18</td>
<td>2</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td>49</td>
<td>0</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>12</td>
<td>0</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>13</td>
<td>129</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 Time spent on the internet by gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>Time spent on the internet (hr)</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$P&gt;0.05$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0-1 1-2 2-3</td>
<td>1.075</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>36 24 5</td>
<td>1.075</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Findings
The collected data was analysed using the chi-square test of significance using the SPSS package.

Generally, there was an even representation of male and female students. There were fewer female students in Natural Sciences programme which there were fewer male students in the Arts programme.

Most students at Great Zimbabwe University accessed the Internet facility. There were no significant differences between male and female students in access to Internet.

its reliability coefficient. It had a high reliability coefficient of .86. The refined questionnaire was administered to the sample through Faculty Administrators of the five faculties. The Faculty Administrators distributed the questionnaires and collected the instruments after they had been completed. The return rate of 71% was considered high.

Findings
The collected data was analysed using the chi-square test of significance using the SPSS package.
There were no significant differences in the number of times male and female students visited the following sites: research, music, gospel, games, communication, health, film and jobs. Research site was the most frequently visited and film the least. Male students visited sports, pornographic and news sites more frequently than female students. The news site was the most popular and pornographic site the least popular.

**Discussion**

The aim of the study was to find out if there was gender differentiation in internet usage among university students. It appears from this study that the university has an Internet presence, hence, students with the ability can access the www. The finding that the majority of the students accessed the Internet is therefore not confounding.

The present study confirmed significant gender differences in internet visits to sport, pornography and new sites. More male students visited pornographic sites compared with their female counterparts. This is consistent with previous research findings by Bimber (2000), Greenberg, Brown, Buerkel-rothfuss (1933), Lo, Neilan, Suna and Chiang (1999), Wilson & Abelson (1973) that revealed that pornography is produced and used primarily by men (Mehta and Plaza, 1997 and Lin, 1999). A plausible explanation why females do not prefer pornography is that they are often presented in situations that are humiliating, demanding and subjugating (Dobson, 1997: Easterbrook, 1970. The other reason could be that pornography is illegal according to the Zimbabwean law. Females are known to shun from risky behaviours. Conversely, more male than female students showed some preferences for pornography as it motivates, orchestrates, justifies and guides sexual abuse and violence against women (Russo, 1998).

More male students than their female counterparts frequently visited the sport site. These findings are in line with results from several other studies (Jennings and Onwegbuzie, 2001: Gackenbach and Ellerman, 1998). Possibly this could be due to the fact that sport is male dominated. Sport such as soccer, rugby, cricket, tennis and hockey are associated with masculine characteristics. It is surprising that despite tremendous efforts by the university to engender sport there are traditional sports that are still gender insensitive, perhaps because they are violence oriented and rigorous as a result most females withdraw their participation.

The news site was more popular with males than females. Internet gaps between female and male students as regards the visit to the news site is not inconceivable given that females are as interested in news as males are. Nonetheless, they are interested in communication. However, the findings of this study contradict Show and Grant (2002)’s findings that show that females are more interested in communication than males.
The study did not however, confirm gender differences in Internet access, time spent and visits to research, music, health gospel, gaming, job, communication and film sites. Accessibility to Internet was found to be gender neutral, thus, dismissing claims by some studies that females suffer from technological anxiety and therefore used the Internet less intensely than males (Krendl, Broihier & Fleethood, 1989; Qureshi & Hoppel, 1995). These results support Tapscott’s (1997) claim that Net-Geners do not show any gender differences in Internet usage.

Lack of gender gap on Internet accessibility could perhaps be attributed to the fact that the majority of students perceive it as a vital source of up-to-date and in-depth academic information essential for assignment and as a result even females that might have Internet phobia have no choice but to browse it frequently. Furthermore, some lecturers interact with students through the internet. In this study no significant gender differences were observed in the amount of time spent on the Internet and this disputes (Gackenbach & Ellerman's (1998) earlier claim that males spent longer sessions on line than females, and that females lack intrinsic motivation to perceive the Internet as fun. Or study revealed no significant gender differences on time spent on the Internet, presumably due to inadequate Internet points in the library, time allowed for surfing is not seamless. For GZU students surfing time is determined and strictly controlled by the library staff so as to accord access to as many users as possible.

It emerged from the findings of this study that the research site was most preferred by both females and males. However, this was inconsistent with Emmanouikides and Hammond (2000) whose study showed that communication was the most preferred. It is perhaps not surprising that visits to the research site by the participants were gender neutral. Presumably, due to scarcity of books in the university library, both female and male students resort to using the Internet for purposes of researches with equal intensity, hence the absence of the expected gender gap. Teaching programmes have the same demands for both females and males. They are expected to do the same assignments using more or less the same major sources. It is, therefore, conceivable for students at a university with inadequate books such as the participants’ to rely on the Internet for research.

Both male and female students visited music sites with similar frequency. Similarly, gender neutrality was reported on students’ surfing of gaming. This finding is, however, not in keeping with earlier findings by Mitra et al, (2006), whose results showed that female users rarely played games, while the males spent about half an hour per day on average on gaming related activities. Lack of gender gap could have been due to limited sporting activities in the university as a result most students regardless of sex visited gaming sites for entertainment.

The gender difference in the frequency with which the gospel site was visited was not statistically significant. Possibly lack of gender gap as regards the gospel site could be due to the ecumenical approach the university uses. The lack of interest on health issues by students is quite disturbing. Given that these students are in the Zimbabwe’s highest HIV and AIDS prevalent region one would have thought that students would naturally have a keen interest in knowledge on the phenomenon.

**Conclusion**

The majority of the students accessed the Internet but their interests were as diverse as the number of sites accessed. On a larger scale, there was absence of gender differentiation on most Internet sites except new, sport and pornography. It is relieving that these students are not yet at risk of Internet pornography and gambling. The study established gender equity and gender differentiation in internet usage but did not identify reasons for sites’ preferences. It is recommended to establish why students prefer certain sites to others.
References


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