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Information Communication and Technology Skills by Undergraduate Students: A Survey Study of College of Health Technology in Ufuoma, Ughelli

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Abstract
The paper discussed issues related to Information Communication and Technology Skills(ICTs) by Undergraduate Students at the College of Health Technology in Ufuoma, Ughelli A Survey Study. Three research questions were formulated. The descriptive survey research design was adopted for this study. A sample of 200 students was selected from Health Technology Ufuoma, Delta State and used for the study. A two parts questionnaire was used in eliciting information from the sample. The stated research questions were analyzed with the use of the simple percentage method. Based on the analysis, the following findings emerged, that; there was difference in computer use skill levels among students; that there was gender difference on the frequency with which students make use of computers; that there was no difference between the attitude of male and female students towards the use of computers; It was further recommended that the need for the acquisition of ICT skills should be emphasized among students through seminars and orientation programmes; that adequate provision of computers should be provided for students of higher education, especially female students in order to bridge the gap between the skills of male and female students
Keywords: *ICT, Gender, Health Technology, Attitude, Computer and Delta State*

1.1 Introduction

The role of communication and information technologies (ICT) in the education system of the 21st century cannot be overemphasized. The life path of global economic integration is vital to the participation of institutions in the world economy. Swift changes in technology do has not made things a bit easier, but the faster the better. The evolution of information and communication technologies (ICT) in Nigeria's education system must continue, and the potential implications of economic development, labour force growth and social and cultural awareness are enormous. Nigeria's investment in ICT infrastructure in the education system could not be correlated to almost identical investments in telecommunications, but education is influenced by the global impact of ICTs such as ICT and continues to play a role as education, training and research. Information and Communication Technologies (ICTs) have revolutionized library operations and services in many libraries in the world. Currently, its acquisition by libraries has

moved from the early stage where selected library operations were being automated to the present stage of automating almost all the spheres of library routines and services. Prominent among the information and communication technologies is the computer. It is an all-encompassing mechanism. It is an electronic device with the capability of accepting, processing, storing and retrieving data based on predefined instructions. It then means that librarians are required to acquire computer literacy skills to cope with the expectations of their varied users. Adverts for librarian positions in this 21st century emphasize much on computer literacy as an added advantage.

The world is fast changing with the use computer at the center stage. The potentials of the information age cannot be realized without expanding the scope of information and computer literacy. The people, particularly library staff who are also educators should be sensitized enough to be able to use all-in-one computers, computer network, i.e. the internet, use basic applications such as word processing, spread sheet, electronic mail and possibly more advanced ones such as PowerPoint presentations, production of web pages, construction of websites, use of digital multimedia equipment and programs. The purpose of these is for the use of information resources that can be found on the internet. These, no doubt are the motivating factors for the modern society to become comfortable with basic computer literacy skills. Accordingly, the purpose of this paper was to determine if there is a gender difference in the ICT use skills of college of health technology students by looking at how they have access to computers, the frequency with which they use computers or any modern devices.

1.2 Research Questions

The following research questions have been raised to be answered in the paper:

i. What is the gender difference in computer use skill levels among students of College of Health Technology in Ufuoma, Ughelli?
ii. What is the gender difference on the frequency at which students make use of ICT skills?
iii. What is the difference between the attitude of male and female students towards the use of ICT skills?

2.1 Literature Review

Computer has been found to be one of the greatest inventions of mankind which has changed the landscape of human and organization activities around the world from which libraries are not exempted. In collaboration to that, Dhanavandan, Esmail, Mohammed and Nagarajan (2012) observed that computer technology has drastically changed every facet of human endeavours including libraries, in such a way that many libraries are now deeply engaged in digitization of almost all their resources to provide fast, interactive, and dynamic information services to users. A reflection of this is that information can therefore be disseminated speedily around the globe due to advancement in the channel of communication. Library resources are being converted from print to digital and web resources, which are being used extensively and subsequently resulted in tremendous growth of information dissemination and service delivery in the library. The use of computer and its facilities in performing library functions makes service delivery to the users faster and more efficient.

Computer literacy is the ability and knowledge to use the computer effectively. Computer literacy is a necessity in modern library practice in the 21st century. Computer literacy skill is defined as technical skills and level of proficiency in the general computer knowledge, documents and documentation, online searching (databases and search engines), and communications. Leland (2010) in America Committee of Computer

Competency (CCC), drafted computer literacy competencies (minimum knowledge) that are considered necessary for a successful library operation such as: using word processing programs effectively, use of library databases and catalogues to locate print materials; finding information on the internet and evaluate its reliability and usefulness, being able to write e-mail effectively and appreciating the ethical issues of computing. Therefore, basic computer literacy is the learning of specific hardware and software applications as a prerequisite for engaging with new "digital" silicon or other electronic literacy.

The use of Computers in carrying out various activities and in information search is the order of the day and librarians need to be computer literate to cue into the in-thing. Explaining what computer literacy entails, Indeed Editorial Team (2022) simply described computer literacy as having a basic understanding of how the computer works and learning the basics like typing, browsing the internet. Contributing further, Allison (2015) enumerated some of the basic computer skills required in workplace as: using the computer and managing files, word processing, spread sheet, data bases, presentations, internet and e-mails. This is very important because in the ICT environment, basic computer literacy is indispensable in becoming ICT literate. The current trend of globalization forces one to either join the global village or be left out. Therefore, for survival and continuation in this ICT age, the need for one to be skills and knowledge of computer operations, knowledge of using the network and internet tools for information sharing as information is being considered a priceless commodity for social, cultural and economic development.

Giving further explanation of the term computer literacy, Safahieh and Asemi (2018) delineated the following aspects of computer literacy, as: understanding what a computer is; its limitations; what is computable, what is programme (not necessarily how to program). Others are understanding the concepts of stored data, causes of computer error, the implication of using a programme incorrectly (garbage in, garbage out), computer security as well as keyboarding, plugging in and turning the computer on, using and understanding interface elements e.g. windows, menus, icons, buttons etc. The ability of one to adapt and learn a new way of carrying out job related computer operation is referred to as higher computer literacy.

3.1Research Methodology

This study will employ the descriptive survey research design. A descriptive research design provides the basis for the existing situation or present condition through a systematic collection of facts and accurate information. The population of this study consists of students in College of Health Technology, Ufuoma, Delta State. The population size is 2570 students in the institution. Selection of samples for the study was drawn using the stratified random sampling. By this method, the sample was divided into two strata or sub populations, that is, male and female, (Egbule and Okobia 1998).

The sample for this study is drawn from the population size of 2570. The researcher used 10% of the population. Therefore, due to the large size used 200 as sample. The purposive sampling technique was further used during the administration of the instrument. The instrument used to collect data is the questionnaire. The questionnaire was on gender differences in computer use skill. It was divided into two main parts. Part A contains the personal data of the respondents; Part B, divided into five different sections, holds information on the different areas which the study sought to provide answers to in line with the research questions. The data collected from the retrieved questionnaires will be analyzed using simple percentage and tables in the interpretation of results in the study.

4.1 Result

Table 1: Response Rate of the Questionnaire

	No of Respondents	Percentage (%)
No. of retrieved questionnaire	200	95.2%
No. of un-returned questionnaire	10	4.8%
Total	210	100

The result from Table 1 showed that the number of the retrieved or returned questionnaire were 100 (90.9%) of the total questionnaire distributed. This implies that there was a 95.2% returns rate for the questionnaire.

Table 2: Gender Distribution of Respondents

GENDER	No of Respondents	Percentage (%)
Male	100	50%
Female	100	50%
Total	200	100

The result from Table 2 showed that 100 (50%) of the respondents were male while 100 (50%) were female. This implies that the percentage of female respondents were equal to the male respondents.

Table 3: Percentage Analysis of the Age Distribution of Respondents

Age	No of Respondents	% Distribution
[illegible]	50	25%
21 – 25	76	38%
26-30 years	34	17%
31 and above	40	20%
Total	200	100

The analysis from Table .3 above shows that 25% of the respondents had their ages between 16 – 20 years; 38% of the respondents were in the age bracket of 21 – 25 years; 17% were in the ages of 26-30 years while those were within the age bracket of 31 and above were 20% of the respondents. Thus, respondents who were within the age bracket of 21 – 25 years constitute most of the respondents.

Table 4: Level of ICT Use Skills

SN	SKILLS	Male Response	Female Response
i	Requisite search engine skills	90 (45%)	70 (35%)
ii	Appropriate skills in switching on and shutting down a computer system	92 (46%)	74 (37%)
iii	Knowledge of the structure of database	54 (27%)	36 (18%)
iv	Adequate skill in the use of formats such as PDF, JPEG, MPEG etc.	86 (43%)	62 (31%)
v	Adequate skills in searching/surfing the internet	94 (47%)	78 (39%)
vi	Adequate skill in formulating search queries	86 (43%)	62 (31%)
vii	Adequate skill in the use of electronic library tools e.g. CDROM, Subject Gateways etc.	80 (40%)	58 (29%)
viii	Adequate skill in opening and saving a document	82 (41%)	64 (32%)
ix	Appropriate skill in typesetting, editing and printing of document	64 (37%)	42 (21%)
x	Appropriate skill in drawing graphs and editing of pictures	56 (28%)	26 (13%)

The result in Table 4 shows that 90 of the male respondents indicated having requisite search engine skills while on 70 female had the requisite skill. The analysis also shows that 92 (46%) and 70 (37%) of the male and female respondents indicated having appropriate skills in switching on and shutting down a computer system. The table also shows that there was difference between male and female respondents on the level of computer use skills in the following areas: knowledge of the structure of database (54 (27%) and 36 (18%) respectively), adequate skills in the use of formats such as PDF, JPEG, MPEG etc. Adequate skills in searching/ surfing the internet, adequate skills in formulating search queries (86 (43%) or 62 (31%) respectively); adequate skills in the use of electronic library tools e.g. CDROM, Subject Gateways etc, (80 (40%) and 58 (29%) respectively); adequate skills in opening and saving a document (82 (41%) or 64 (32%) respectively); appropriate skills in typesetting, editing and printing of document (64 (37%) and 42 (21%) respectively) and finally, appropriate skill in drawing graphs and editing of pictures (56 (28%) and 26 (13%) respectively for male and female students).

The conclusion drawn from the above analysis is that there is difference in computer use skill levels among students at College of Health Technology, Ufuoma. The analysis implies that male students possess a higher level of computer use skill than female.

Table 5: Gender Difference on the Frequency of Computer Usage

SN	Skills	Male Response			Female Response		
		Regularly	Occasionally	Never	Regularly	Occasionally	Never
i	MS Office Word	76 (38%)	18 (9%)	6 (3%)	46 (23%)	34 (17%)	20 (10%)
ii	MS PowerPoint	48 (24%)	30 (15%)	22 (11%)	28 (14%)	38 (19%)	34 (17%)
iii	MS Office Excel	50 (25%)	36 (18%)	14 (7%)	32 (16%)	36 (18%)	32 (1%)
iv	MS Office Paint	60 (30%)	30 (15%)	10 (5%)	36 (18%)	24 (12%)	40 (20%)
v	Corel Draw	66 (33%)	20 (10%)	14 (7%)	26 (13%)	36 (18%)	38 (19%)
vi	Windows Media Player	60 (30%)	22 (11%)	18 (9%)	46 (23%)	40 (20%)	14 (7%)
vii	Internet browsing	84 (42%)	14 (7%)	2 (1%)	50 (25%)	28 (14%)	22 (11%)
viii	Adobe Reader	38 (19%)	38 (19%)	24 (12%)	26 (13%)	30 (15%)	44 (22%)
ix	Nero Essentials	16 (8%)	22 (11%)	62 (31%)	6 (3%)	34 (17%)	60 (30%)
x	e-mail	80 (40%)	20 (10%)	0 (0%)	82 (41%)	18 (9%)	0 (0%)
xi	Chat	70 (3%)	20 (10%)	10 (5%)	84 (42%)	16 (7%)	0 (0%)
xii	games	60 (30%)	22 (11%)	18 (9%)	58 (29%)	30 (15%)	12 (6%)
xiii	CD/DVD-ROM	26 (13%)	34 (17%)	40 (20%)	20 (10%)	30 (15%)	50 (25%)
xiv	Electronic Book	16 (8%)	18 (9%)	66 (33%)	10 (5%)	16 (8%)	74 (37%)
xv	Electronic Journals	26 (13%)	34 (17%)	40 (20%)	12 (6%)	28 (14%)	60 (30%)
xvi	E-ictionary	24 (12%)	16 (8%)	60 (30%)	20 (10%)	20 (10%)	60 (30%)

The result in Table 5 shows there is difference between male and female students on the frequency of computer usage. The areas of difference where male students use computer more than female students are in the areas of MS Office Word, MS PowerPoint, MS Office Excel, MS Office Paint, Corel Draw, Windows Media Player, Internet browsing, Adobe Reader and games. This implies that male students make use of the above computer peripherals than female students. However, female students had a higher frequency of computer usage for Chat and e-mail messages. The analysis thus far implies that there is gender difference on the frequency with which students make use of computers.

Table 6: Gender Difference on the attitude of male and female students towards the use of computers

SN	Attitude of male and female students	Male		Female	
		Agreed	Disagreed	Agreed	Disagreed
i	Computers and technology have made students more productive	96 (48%)	4 (2%)	92 (46%)	8 (4%)
ii	Gathering data for class assignments is simplified by using computers.	**87** (40%)	**13** (10%)	**82** (41%)	**18** (9%)
iii	I am comfortable when using computers for assignments	82 (41%)	18 (9%)	76 (38%)	24 (12%)
iv	I prefer getting information from a printed page instead of a computer screen.	84 (42%)	16 (8%)	78 (39%)	22 (11%)
v	The frustrations created by computers are more trouble than they are worth.	38 (19%)	62 (31%)	60 (30%)	40 (20%)
vi	Because computers and other technologies have all but eliminated the need to write on the job, writing is no longer a critical skill.	22 (11%)	78 (39%)	38 (19%)	62 (31%)
vii	Technology frees people from tedious work allowing them to concentrate on more difficult tasks.	70 (35%)	30 (15%)	74 (37%)	26 (13%)
viii	Using the PC would improve my performance	90 (45%)	10 (5%)	86 (43%)	14 (7%)

The analysis in table 4 above on the attitude of male and female students towards the use of computers shows there is no difference between the two genders. The only difference is seen on the area where female students indicated that frustrations created by computers are more trouble than they are worth. Hence, the conclusion drawn here indicates that there is no difference between the attitude of male and female students towards the use of computers.

5.1 Discussion of Findings

This study focused on gender differences in computer use skill of College Technology students, Ufuoma, Delta State. The discussion of result was centred on the major issues addressed in the study. Based on this, the following discussions emerged. The first finding posits that there was difference in computer use skill levels among students at College of Health Technology, Ufuoma. The finding portrays that though both sexes have been exposed to the use of computers, there is still gender gap on use computer usage skill. This finding is in line with Baba, Agbetui and Oluwatayo cited in Alakpodia, (2014) there study proved that the influence of ICT on research in Nigeria's education system cannot be underestimated; assent that the use of ICTs performs an indispensable role in effectiveness and efficiency of education. In

Furthermore, in support of the above finding, Ramayah and Osman (2005) revealed that male users had more computer usage skills than their female students' counterpart. And on the part of Ansari and Zuberi (2010), they found gender difference in the use of computer between male and female students. According to them, male students had more computer skill knowledge than their female counterparts

The second finding revealed that there was gender difference on the frequency with which students make use of computers. This finding supports that of Rajab & Baqain (2005); Munusamy & Ismail (2009). In their study they posited that a significant difference was found between males and females in the length of time they used computers. Gefen and Straub (2007) in support of this finding found that there were differences in perception of male and female in terms of frequency of computer usage

The third finding showed that there was no difference between the attitude of male and female students towards the use of computers. This finding is in line with that of Alakpodia, (2014) who reported that gender has no significant effect on any of the dimension of computer attitude. However, the finding disagrees with that of Ono &Zavoday (2003) who stated that some gender differences have been found in attitude towards computer technology intensity of internet use.

Conclusions and Recommendations

Knowledge, skills and confidence with computer technology are now assets for those entering the competitive employment market. This has thrown a great challenge to the libraries and librarians to brace up to these expectations for effective and efficient library functions / services. Hence, the exposure of the library staff to the various computer technologies and the necessary skills expected for their job efficiency. In fact, effective use of computers and information technology in this new era goes beyond buying computers, launching computer labs and connecting libraries to the internet and expecting that things will automatically improve. Based on the results presented as well as the findings made, the following conclusions were drawn. Computer use skill levels among students differ between male and female students ofCollege of Health Technology, Ufuoma. The frequency in use of computer differs between male and female students. Male students had a higher frequency of computer usage than female students. No difference exists between the attitude of male and female students towards the use of computers

In consideration of the results from the study, the researcher has made the following recommendations:

i. College libraries should be adequately funded so as to enable them acquire relevant computers for students use in the library.
ii. Academic libraries should be provided with adequate electricity to enable students use computers without any hindrance.
iii. Adequate provision of computers should be provided students of higher education, especially female students to bridge the gap between the skills of male and female students

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