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Influence of Socio-Demographic Variables on the use of Information and Communication Technology by Lecturers in Library Schools in South-East and South-South Zones of Nigeria Dr. Magnus C. Unegbu

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Abstract

The general purpose of the study is to determine the influence of socio-demographic variables on the use of Information and Communication Technology (ICT) by lecturers in library schools in South- East and South- South zones of Nigeria. The survey research design was used for the study using questionnaire as the instrument for data collection. Three research questions were framed for the study. The study covers the entire population of 162 lecturers in library schools in South - East and South – South zones of Nigeria. 145 copies of the questionnaire were completed and returned for analysis representing 89.5%. The result of finding shows that age does not influence lecturers' use of ICT. That both male and female lecturers use ICT. The study recommends that seminars and workshops on ICT should be organized for lecturers. This will help to expose them to the potentials which ICT offers in the field of academic and through this way arouse their interest more towards the use of ICT.

Introduction

Information and communication Technology (ICT) is a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information. It also incorporates a range of technologies used to support communication and information such as satellite and wireless telecommunications, broadcasting network and the Internet.

Adesanya (2002) sees ICT as a system for producing, storing, sending and retrieving digital files. This reveals that all aspects of information handling are affected from the origin of information handling are affected from the origin of information to its storage, processing, retrieval and dissemination of information that is conveyed by speech, textual materials, pictures or tables of numbers which can be dealt with easily because ICT makes it possible to handle information in

Influence of Socio-Demographic Magnus C. Unegbu, Nkechi Amaechi, Ifeoma Njoku, Immaculata Opara different forms. According to Edom (2007) ICT is the electronic tool or technological resources that are used to gather, process, store, preserve, access, retrieve and disseminate information when required with minimum delay. ICT affords lecturers a unique opportunity to improve their careers.

Today, with the use of ICT, vital information could be stored in digital form and retrieved at any convenient time using ICT facilities such as CD-ROM, microfilm, microfiche and diskettes. Nwaigwe (2005) asserts that various ICT resources which include telephone, teleprinters, fax machine, microfiche and microfilm, magnetic tape, the Internet, e-mail, mobile cellular phone and computers are used for collecting, processing, storing, transforming and disseminating information at credible speed. The University libraries are expected to provide relevant information that will satisfy the lecturers and other users of the library.

The socio-demographic variables of lecturers considered in this study are, age, gender and academic rank. Age is one variable that correlates with comfort with computers and use of electronic resources. Younger generations have been brought up with computers, many do not even remember a time when computers were not around. Older and younger may not have had as much exposure to computers, resulting in increased computer anxiety (Powell, 1996). Gender is another relevant factor in examining use of electronic databases. Sack, Bellisimo and Mergendoller (1994) in their study found that individual attitudes towards computers and their computer use tended to vary by gender. Dyck and Smither (1994) found that when the effects of computer experience were controlled, there were no gender effects. Zayim, Yildirin and Saka (2006) in a study of technology adoption among medical faculty in a Turkish University found that lecturers whose ranks were lower than Professor had higher self-efficacy beliefs and were more likely to be early adopters of ICT.

In the light of the above background this study therefore, seeks to determine the influence of socio-demographic variables on the use of ICT by lecturers in library schools in South-East and South-South zones of Nigeria.

Research Questions

This research is based on the following questions.

- i. What is the influence of age on lecturers use of ICT in library schools in South-East and South-South zones of Nigeria?
- ii. What is the influence of gender on lectures' use of ICT in Library schools in South-East and South-South zones of Nigeria?
- iii. What is the influence of academic rank on lecturers' use of ICT in Library schools in South-East and South-South zones of Nigeria?

Literature Review

Scamell and Stead (1989) in their work in age and use of information found no disparity between various age ranges, and the information sourcing behavior of respondents. However, in a study targeted entirely at a different group of specialists, there was disparity between the different age brackets in the area of information utilization. Igbaria and Parasuraman (1991) also report an inverse relationship between computer attitudes and age.

Kjerulff, Mills and Lanigan (1992) study nurses in a medical school on technology anxiety as a potential mediating factor in response to medical technology found that older nurses tended to be more technology anxious than younger nurses. Dyck and Smither (1994) found this true for younger

Influence of Socio-Demographic Magnus C. Unegbu, Nkechi Amaechi, Ifeoma Njoku, Immaculata Opara and older subjects recruited from senior citizens courses and continuing education courses. Therefore, given similar computer experience, age does not seem to make a difference in people's comfort levels with computers. Age has generally been considered as an important factor in information use. The urge to seek and utilize information may increase or decline with age. It provides a standard for comparison in terms of sequential life achievement for the individual. Younger professional according to Dung (1994) are more information conscious. They seek information in an effort to improve on their skill and reach the peak of their career. The zeal for information is initially high in the young professional as expectations are not met, but rises again as the individual adjust to words environment (Herberg, 1996). On the hand, Tiamiyu, Ajayi and Olakotun (2002) found that age did not significantly associate with information anxiety.

In a study carried out by Koohang (1986) on a study of attitude towards computers: anxiety, confidence liking and perception of usefulness found that neither age nor gender was strongly correlated to computer anxiety, computer confidence or liking, but that computer experience was. While the gender gap relating to computer use seems to be shrinking, several studies have found that there is a gender gap when considering use of ICT, and that gender is a major predictor of ICT and attitude. However, they matriculate with a diversity of computer and web-searching skills and experience. Valentine (1993) observes that the fsastest way that would lead to satisfactory results when doing research, going for electronic information first the gender issues.

Edem (1995) in his studies gender factor in publication output of librarians in Nigeria found that males were found to be more productive in academic publications using ICT, females however, were more productive in work related research and publication than their male colleagues in Nigerian universities. Personal variables such as gender and age, as reported by Wilson (1997) may constitute barriers to the search and utilization of information. Lecturers deal primarily with teaching, learning and research activities the need for relevant improve on their teaching and research activities is necessary. Such variables as gender should not be seen to constitute impediments to the use of ICT resources. More so, their literacy level, status and specialty, all conspire to hold them guilty if they fail to embrace ICT resources relevant to their needs. Afolabi, Adedapo and Adeyanju (2005) report a correlation between gender and level of computer anxiety. Their results showed that there is no significant difference between males and females in their use of ICT. This shows that both male and female lecturers have equal and same opportunity in their use of ICT for their academic and private functions.

Hakin and Taggart (2001) stress that it is imperative for women in developing countries to understand and use ICT, in order to avoid being marginalized from the mainstream of their societies; and that gender issues should be considered early in the process of introducing ICT in developing countries, so that gender concerns can be incorporated from the beginning and not as a corrective after thought. Tiamiyu, Ajayi and Olatokun (2002) in their studies found no significant relationship between gender and attitudes towards ICT. Drup (2003) found that males had more positive attitudes towards the use of computers than females. Factors that have been cited as affecting female enrolment in ICT courses and their use of computers include socialization and cultural practices, importance of role models, access to computers, experience with computers, and attitude towards computers.

According to Gruneberg (1980), people with higher ability are more likely to be dissatisfied with tasks which do not allow for application of their skills. He is of the view that highly educated people have more tendencies to expect more out of life than their less endowed counterparts. Allen (1999)

Influence of Socio-Demographic Magnus C. Unegbu, Nkechi Amaechi, Ifeoma Njoku, Immaculata Opara reported that users' educational levels influence access to ICT and use of information in the library. This seems to agree with the findings of Njonmeta and Ehikamenor (1998) that academic rank influence information seeking habits in the ICT library and use.

Larose (1999) in his study on ICTs in university teaching and teacher education journey in a major Quebec University's reality found that associate professors reported a significantly higher level of anxiety about computer environments than full professors. Man is a creature of intellectual curiosity and the academic rank of an individual, may dictate the extent to which he searches and utilizes information. In contrast, Adeya and Oyelaran-Oyeyinka (2002) in their comparative study of internet use in African Universities by lecturers in Nigerian and Kenyan Universities, found out that lecturers whose ranks were lower than professors had self-efficacy beliefs on the ICT.

Research Methods

The descriptive survey design was adopted using the questionnaire as the instrument for data collection. The questionnaire is titled Socio-Demographic Variables on the Use of ICT by Lecturers Questionnaire (SDVUICTQ). The population of the study is 162 (one hundred and sixty two lecturers). This comprised all the lecturers in library schools in South-East and South-South zones of Nigeria. The breakdown is shown as follows;

	Institutions	No of Lecturers
1	Abia State University Uturu (ABSU)	8
2	Alvan Ikoku University of Education Owerri (AIUE)	7
3	Ambrose Ali University, Ekpoma (AAU)	10
4	Delta State University, Abraka (DELSU)	17
5	Enugu State University of Science and Technology (ESUT)	12
6	Federal Polytechnic Nekede (FPN)	11
7	Federal Polytechnic Oko (FPO)	14
8	Federal College of Education Technical Omoku (FCETO)	6
9	Federal College of Education Technical Umunze (FCETU)	8
10	Imo State University Owerri (IMSU)	9
11	Micheal Okpara University of Agriculture Umudike (MOUAU)	8
12	Nnamdi Azikiwe University Awka (NAU)	10
13	University of Calabar, Calabar (UNICAL)	14
14	University of Uyo, Uyo (UNIUYO)	13
15	University of Nigeria Nsukka (UNN)	15
	Total	162

Source: Administrative Records of the Institutions Studied, 2015

Analysis and Findings

No sample size was drawn from the population. This is because the population of the study is small and accessible. The census method was used to ensure that opinions of all the lecturers in library schools in South-East and South-South zones of Nigeria were captured for the study.

A total of 162 copies of the questionnaire were distributed to the lecturers in library schools in South-East and South-South zones of Nigeria. Out of these 145 copies of the questionnaire were duly completed and returned for analysis giving a response rate of 89.5%.

Research Question 1

What is the influence of age on lecturers' use of ICT in library schools in South-East and South-South zones of Nigeria?

Table 1: Responses on the influence of age of lecturers on their use of ICT

Age of No lecturers on respon-							Res	ponse	es					
their use of ICT		respon- dents	S	A	A	A		Total Score on agreement)	SD		Total score on disagreemen	
			F	%	F	%	F	%	F	%	F	%	F	%
a	Distance affects my use of ICT because of	145	42	29.0	25	17.2	<i>L</i> 9	46.2	55	37.9	23	15.9	78	53.8
b	My eye sight does not affect my use of ICT because of my	145	33	22.8	62	42.8	95	65.5	35	24.1	15	10.3	50	34.5
С	My waist affects my use of ICT because of	145	22	15.2	35	24.1	57	39.3	49	33.8	39	26.9	88	60.7
d	I avoid using ICT because of my health condition	145	36	24.8	22	15.2	58	40	54	37.2	33	22.8	<i>L</i> 8	09
e	My age makes me understand the use of ICT	145	45	31.0	52	35.9	26	6.99	36	24.8	12	8.27	48	33.1

As shown on Table 1, the respondents who indicated that distance affect their ICT had a frequency grand total response of 67(46.2%) for agreement. For disagreement it recorded a grand total response of 78(53.8%).

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Again on table1, the respondents indicated that their eye sight do not affect their use of ICT because of their age. This is confirmed by the fact that the agreement grand total had 95(65.5%) while disagreement had a total of 50(34.5%).

The grand total agreement respondents who indicated that their waist affects their use of ICT because of their age had 57(39.3%) and disagreement recorded a grand total response of 88(60.7%).

For the respondents who avoid using ICT because of their health condition had a grand total agreement of 58(40%) and the total disagreement was 87(60%).

Table 1 also shows that the respondents understand the use of ICT because of their age. This is evident from the fact that the grand total agreement had 97(6.9%) as disagreement had a total of 48(33.1%). From the table, it can be seen that age does not influence the use of ICT by lecturers, thus implying that intervention programmes aimed at facilitating ICT adoption and use in library schools in Nigeria higher institutions in South-East and South-South zones of Nigeria do not necessary have to be targeted at lecturers in specific age brackets.

Research Question 2

What is the influence of gender on lecturers' use of ICT in library schools in South-East and South-South zones of Nigeria?

Table 2: Responses on influence of gender of lecturers on their use of ICT

	Age of	No		Responses											
le	lecturers on respon		SA		A		Total		D	SD			Total score		
t	heir use of	dents					Score on						on		
	ICT						agree	ement					disagreement		
			F	%	F	%	F	%	F	%	F	%	F	%	
a	My gender makes me appreciate the use of ICT	145	62	42.8	34	23.4	96	66.2	32	15.9	12	8.28	49	33.8	
b	My gender gives me the courage to use of ICT	145	24	16.6	58	40	82	9.95	40	27.6	23	15.9	63	43.4	
С	My gender gives me opportunity to seek resources in ICT	145	42	29.0	34	23.4	92	52.4	36	24.8	33	22.6	69	47.6	

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d	I avoid using ICT because of my behavioural culture and religious	145	36	24.8	33	22.8	69	47.6	44	30.3	32	22.1	76	54.5
e	My gender gives me opportunity to secure space in the ICT library	145	44	30.3	23	15.9	<i>L</i> 9	46.2	25	35.9	56	11.9	78	53.8

As indicated on Table 2, those who stated that their gender makes them appreciate the use of ICT had agreement grand total of 96(66.2). for disagreement, it recorded a grand total response of 49(33.8%).

For those who are easily courageous using ICT because of their gender had a total agreement of 82(56.6%) while disagreement grand total had 63(43.4%).

Respondents who stated that their gender gives them opportunity to seek resources in ICT had agreement grand total of 76(52.4%) and disagreement had a grand total response of 69(47.6%). Table 2 also shows the respondents who avoid using ICT because of their behavioural culture and religious traditions had agreement grand total of 69(47.6%) as grand total disagreement response on this construct was 76(54.5%).

Again Table 2 shows that the agreement grand total of those that indicated that their gender gives them opportunity to secure spaces in the ICT library had 67(46.2%). For disagreement grand total they had 78(53.8%). Evidence from the table indicates that gender is not a determinant factor on the use of ICT by lecturers.

Table 3 Responses on the influence of academic rank of lecturers on their use of ICT

A	cademic Rank	No	Responses											
of lecturers on re		respon-	SA		A		Total		D		SD		Total score	
their use of ICT		dents						Score on					on	
							agree	ement					disagre	eement
			F	%	F	%	F	%	F	%	F	%	F	%
a	My academic rank motivates me into using ICT	145	22	37,9	47	32.4	102	70.3	28	19.3	15	10.3	43	29.7

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b	I am easily excited using ICT because of my academic rank	145	24	33.8	58	40	107	73.8	18	12.4	20	13.8	38	26.2
С	I feel anxious using ICT because of my academic rank	145	32	24.1	15	10.3	50	34.5	<i>L</i> 9	46.2	28	1.93	<u>\$6</u>	65.5
d	My academic rank does not affect my use of ICT	145	<i>L</i> 9	46.2	54	37.2	121	83.4	14	9.66	10	06:90	24	16.6
e	My rank demands that I use ICT for academic work	145	47	32.4	13	8.97	09	41.4	55	37.9	33	22.8	85	58.6

On Table 3, those who indicated that their academic ranks motivate them into using ICT had agreement grand total response of 102(70.3%). For disagreement, it recorded a grand total response of 43(29.7%).

For those that are easily excited using ICT because of their academic rank had grand total agreement response of 107(73.8%). This construct had grand total disagreement response of 38(26.2%).

Again Table 3 also reveals that the respondents who indicated that they feel anxious using ICT because of their academic ranks had grand total agreement of 50(34.5%) as grand total disagreement response on this construct was 95(65.5%).

Those who stated that their academic ranks does not affect their use of ICT scored grand total agreement response of 121(83.4%) and grand total response on disagreement on this construct had 24(16.6%).

On table 3 those who indicated that their academic rank motivates them into using ICT had agreement grand total response of 102(70.3%). For disagreement, it recorded a grand total response of 43(29.7%).

For those that are easily excited using ICT because of their academic ranks had grand total agreement response of 107(73.8%). This construct had grand total disagreement response of 38(26.2%).

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Again Table 3 also reveals that the respondents who indicated that they feel anxious using ICT because of their academic ranks had grand total agreement of 50(43.5%) as grand total disagreement response on this construct was 95(65.5%).

Those who stated that their academic ranks do not affect their use of ICT scored grand total agreement response of 121(83.4%) and grand total response on disagreement on this construct had 24(16.6%).

Again Table 3 shows that the agreement grand total of those who stated that their ranks demand that they use ICT for their academic work had a grand total agreement of 60(41.6%). The grand total response of disagreement had 85(58%). Evidence from the analysis shows that academic rank of lecturers is not a determinant factor that influences lecturers' use of ICT. This might be due to the fact that ICT use by lecturers in library schools was still a recent phenomenon as at the time of the study.

Summary of Findings

Evidence from Table 1 showed that both the older and younger lecturers use ICT irrespective of their age. This result is in agreement with Scamell and Stead (1986) who in their work found no disparity between various age ranges and the information sourcing and Dyck and Smither (1994) who reported that age does not seem to make a difference in people's comfort levels with computers. The study also supports Tiamiyu, Ajayi and Olatokun (2002) who found no significant different between age and information anxiety. The findings contradict that of Igbaria and Parasurama (1991) and Kjeruff, Pillar, Mills and Lanigan (1992) who reported an inverse relationship between computer and age.

Based on data on Table 2 the findings are in lines with earlier studies by Koohang (1986) that there is no significant difference between gender of lecturers and their use of ICT. This is supported by Afolabi, Adedapo and Adeyanju (2005) who also reported a correlation between gender and level of computer anxiety. The result of this empirical study clearly showed that there is no significant difference between males and females in their use of ICT. The significance of the result is in agreement with the responses as indicated on Table 2 that both male and female lecturers do not avoid using ICT because of their behavioural culture and religious. Table 2 also showed that both males and females appreciate the use of ICT. This may be for their teaching, learning and research activities.

The result contradicts Edem (1995) that males were found to be more productive using ICT than females counterparts in academic publications. This result also contradicts Drup (2003) who found that males used ICT more than females. To him the factors that affect females' use of ICT include cultural practices and socialization.

To ascertain this, Table 3 revealed that the respondents who stated that their academic ranks motivate them in using ICT had 73.8%. Table 3 also revealed that academic rank does not affect lecturers in their use of ICT. Lecturers are easily excited and do not feel anxious using ICT because of their academic ranks. This result however contradicts Larose (1999) who found that Associate Professors were more anxious about ICT than full Professors.

Thus academic rank is not significant factors that influence lecturers' use of ICT. It also contrary to the findings of Adeya and Elaran-Oyeinka(2002) who found that faculty members in higher ranks tended to have less interest towards ICT. There may be a likelihood that lecturers who were older in

Influence of Socio-Demographic Magnus C. Unegbu, Nkechi Amaechi, Ifeoma Njoku, Immaculata Opara the academic cadre (Senior Lecturer and above) and those who were younger in the academic cadre (Lecture 1 and below) have had about the same kind of experiences with using ICT and have probably developed the same kind of interest towards ICT.

Recommendations

Based on the findings of this study, the following recommendations were proposed.

- i. Although age has no disparity in ICT use but lecturers should be encourage in the use of ICT in any point in time.
- ii. Seminars and workshops on ICT should be organized for both male and female lecturers. This will help to expose them more to potentials which ICT offers in the field of academics and through this arouse their interest more towards the use of ICT.
- iii. Lecturers with different ranks should embrace the use of ICT in order to remain relevant in their field of study. Using the ICT in assessing information will give them the advantage of keeping abreast with the global trends.

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