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Self-Concept and Motivational Variables as Correlates of Acquisition of ICT Competence among Students of Tertiary Institutions in Delta State, Nigeria

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ABSTRACT
The paper investigated the level of information and communication technology competence among Social Studies students of tertiary institutions in Delta States, Nigeria. It also looked at the influence of motivational variables as well as the influence of self-concept on the attainment of Information and communication technology competence. This was with a view to improving ICT competence in higher institutions of learning. The study employed survey research design. The population consisted of all Social Studies students of tertiary institution in Delta State, Nigeria. Purposive sampling technique was employed in selecting one hundred Social Studies undergraduates. Three research questions emanated from the study. Data were analyzed using simple percentages and chi-square statistics. The results among others, showed that data analysis, Microsoft publishing and Photoshop had the lowest competence level amongst students. Also, self concept had a very strong influence on the acquisition of word processing knowledge with significant value of 0.027. It was recommended that students need to be encouraged inthe use of ICT tools.
Keywords: *Self Concept, Motivation Variables, ICT Competence, Social Studies Students*

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INTRODUCTION

With the primary goal of enabling students to integrate into and contribute their fair share to the growth and development of the society to which they belong, social studies as an area of study was first introduced in Nigeria many years ago. According to Salami (2001), the overall objectives of the Social Studies Curriculum are to help the Nigerian child to:

- cultivate the capacity for environment adaptation;
- foster a sense of national identity and solidarity;
- evolve into responsible citizens who are eager to help the society advance;
- foster a compassionate understanding of the diversity and interdependence of all individuals within the local community as well as the larger national and global communities;
- instill the proper values, skills, and attitudes;
- develop an interest in learning, respect for the truth, tolerance, nationality, initiative, organizational skills, self-control, cooperativeness, liberty, and social security;
- foster in youngsters a sense of civic responsibility and a desire to positively contribute to the establishment of a united Nigeria; and
- encourage children to think critically so they can solve their own problems and the problems of others, and to participate thoughtfully in social situations.

Okogi, Ebom and Efe (2025) and Adeyemi (2008) sees information and communication technology advancement as a tool necessary for the global and competitive environment of today thanks to these goals and the expansion of knowledge. Information and communication technology has without a doubt evolved into a tool that is widely accepted in our educational system. The ability to use information and communication technology has grown from knowing how to use basic word processing to having the understanding of spreadsheets and internet abilities required to complete certain tasks within a given

time frame with little to no error.

ICT competency, according to Easton and Addo (2006), is a term used to characterize one's capacity to effectively use ICT resources (computer, internet, networking, broadcast, and telecommunication media). It reflects a standard and prerequisite for proficiency that includes understanding of computer hardware, operating systems, file concepts, working knowledge of a word processor, at least one additional software function (such as spreadsheet, database, etc.), internet usage, and electronic mails.

According to Johnsons, Bartholomew, and Miller (2006) and IT Proficiency (2007), a student's ICT competence level includes not only knowing how to use computers on their own but also using them as a tool for organization, communication research, problem solving through web browsing, e-mail, and internet access, as well as having a working understanding of the fundamental functionality of application software. Examining the role of motivational and self-concept factors that may help Social Studies students achieve ICT competency is necessary at this point. Equally relevant is self-concept, which deals with how a person views "self" in connection to ICT proficiency. It is an internal model made up of self-evaluations. It has a specific relationship to one's aptitudes. Self idea or concept has the power to change behavior and results on the cognitive and emotional levels.

On the other hand, motivation is typically seen as the force that propels a person's activity and is fueled by a desire for a particular outcome. One is motivated to move and take action toward whatever goal they wish or intend to accomplish by their own inner power. The term "motivation" can also be used to refer to the cause of an activity or the thing that provides behavior meaning and purpose. According to Kim (2014), motivational variables in learning are characteristics that encourage a learner to pursue changes in their skills, knowledge, mental models, abilities, attitudes, and patterns of interaction. The readiness and willingness of students to learn, as well as factors like interest, perceived relevance, goal orientation, and self-efficacy, can all be considered as motivational variables.

Ormrod (2010) believed that motivation has a variety of effects on students' learning and behavior, including directing behavior toward specific goals, increasing effort and energy, increasing activity initiation and persistence, influencing cognitive processes, determining which consequences are rewarding and discouraging, and frequently improving performance. Extrinsic motivation is determined by people's environments and by particular tasks, but intrinsic motivation is determined and discovered within people as long as the task is deemed useful. Extrinsic motivation pushes someone to do something for a material reward, but intrinsic motivation pushes someone to do something for personal fulfillment. However, motivation, whether internal or external, greatly depends on an individual's temperament and personality. Therefore, it is clear that students learn better when they regard the work, the subject, their own goals, financial incentives, and other factors to be important.

The learning environment is now more subtle than ever, which makes it nearly astounding how quickly information and communication technology has changed education. Students must have a positive self-concept regarding acquiring ICT competence and get familiar with information technology tools in order for the education sector to achieve quality. This will boost their academic performance and provide a path to enviable lucrative career. Various indices of pupils' ICT proficiency levels have been the subject of much research in both developed and developing nations. There is little data on the relationship between self-concept and motivation factors and ICT proficiency among undergraduates studying Social Studies. The world is changing as a result of technological growth, and this change has particularly influenced the field of education. For greater academic achievement, a competitive edge on the job market, and the ability to work for themselves, higher education students must be ICT proficient. This paper was based on the assumption that it is possible to predict Social Studies students' acquisition of ICT proficiency in tertiary institutions in Delta State, Nigeria, by using self-concept and motivation characteristics.

Research Questions

The following questions was raised to guide the study

i. What is the level of ICT proficiency among Delta State students studying social studies in tertiary institutions?
ii. Do motivational factors affect students studying social studies in tertiary institutions in Delta State as they learn ICT skills?
iii. Will self-concept have an impact on how Delta State students studying social studies at tertiary institutions develop their ICT skills?

METHODOLOGY

The study employed descriptive survey research design. The population consisted of all Social Studies students of tertiary institutions in Delta State, Nigeria. Purposive sampling technique was employed in selecting100 Social Studies undergraduates from the respective tertiary institutions in the state. Three research questions emanated from the study. Three research questionnaire instruments were used for

the collection of the data for this study. The three instruments were validated before use and yielded a coefficient index of 0.78, 0.76 and 0.79 of respectively. Data collected were analyzed using simple percentage and Chi-square statistics.

RESULTS AND DISCUSSION

Research Question One - What is the level of ICT proficiency among Delta State students studying social studies in tertiary institutions?

Table 1: Analysis of Results on Level of ICT Competence among tertiary Social Studies Students

ICT Packages	Competent	Fairly Competent	Not Competent	Total
Word Processing	72	23	8	100
Analysis	31	38	26	100
Academics reason	84	18	8	100
Text/graphics	39	22	29	100
Power Point Presentation	55	25	25	100
Microsoft publisher	22	27	41	100
Photoshop	39	29	42	100
Internet/Browsing	73	10	7	100
E-mail	84	15	11	100
e-library	61	24	25	100
Video Reasons	42	27	29	100
e-Payment	57	21	28	100
Mobile Phone Browsing	89	10	6	100
Networking	87	5	6	100

As shown in table 1 above, most of the respondents indicated that they were competent on most of the packages especially the following packages: Word Processing (72%), Internet Browsing (73%), Email Service (84%), Mobile phone browsing (89%), Academic reason (84%), Power point presentation (55%), e-Library (61%) and Networking (87%). This implied that over 50% were competent users of the aforementioned application. However, Microsoft Publishing, Data Analysis and Photoshop have the lowest competency level among the respondents with 22%, 31% and 39% respectively. These results underscore the need for the Social Studies students of tertiary institutions in Delta State to develop competency in the use of Data-analysis, Microsoft/Desktop publisher and photo-shop packages, amongst other applications.

Research Question Two

Do motivational factors affect students studying social studies in tertiary institutions in Delta State as they learn ICT skills?

Table 2: Analysis of Findings on Motivational Factors and Learning of ICT Skills

Motivational Variables (Learning environment)	Agree	Undecided	Disagree	Total
Making Internet services available affects my decision to acquire ICT	87	7	6	100
Increasing the affordability and accessibility of internet services will increase my ICT acquisition.	91	4	5	100
I use Info tech facilities only when there is power supply	48	13	39	100
I learnt Information and Communication Technology skills because they are added into the school programme	35	6	59	100
My quest for ICT understanding has been influenced by the society's expanding tendency toward ICT compliance.	89	5	6	100
Motivation variable (instructor communication style)	32	27	41	100
I usually consult the internet when given assignment	86	8	6	100
My lecturer has an impact on my knowledge of ICT	57	15	28	100
Lack of ICT resources has made it difficult for me to learn about ICT	53	17	30	100
Social networks have motivated me to learn ICT skills	79	10	11	100
Peers have dispirited me from being ICT compliant	23	12	65	100

From the Table 2, 91 respondents agreed that making internet services more affordable and accessible

will increase their acquisition of ICT knowledge. 89 respondents agreed that the rising trend of ICT compliance influenced their acquisition of ICT knowledge. 87 respondents agreed that making internet service available in their environment will influence their acquisition of ICT. This indicates that a greater proportion of our kids have learned ICT because it is part of the curriculum at the school. However, the inclusion of ICT tools in the classroom environment for students will encourage the development of ICT skills. When compared to the learning environment (89.0%), the instructor's communication style has a smaller impact on students' development of ICT competence (68.75%).

Research Question Three

Will self-concept have an impact on how Delta State students studying social studies at tertiary institutions develop their ICT skills?

Table 3: Acquisition of ICT Competence and Self-Concept

Acquisition of ICT Competence		Agree	Self-Concept Undecided	Disagree	Chi-Square	P-Value
Word Processing	Yes	14(15.2)	53(57.6)	25(27.2)		
	No	4(50)	4(50)	-	7.196	0.027*
Data Analysis	Yes	15(20.3)	37(50.0)	22(29.7)		
	No	3(11.5)	20(76.9)	3(11.5)	5.808	0.055
PowerPoint	Yes	13(17.3)	39(52.0)	23(30.7)		
	No	5(20.8)	18(70.8)	2(8.3)	5.645	0.227
Design (Microsoft	Yes	11(18.6)	31(52.5)	17(28.8)		
Publisher)	No	7(17.1)	26(63.4)	8(19.5)	1.372	0.504
Photoshop	Yes	12(20.7)	31(53.4)	15(25.9)		
	No	6(14.3)	26(61.9)	10(23.8)	0.902	0.637
Internet Browsing	Yes	15(16.1)	54(58.1)	24(25.8)		
	No	3(42.9)	3(42.9)	1(14.3)	3.193	0.203
Email Services	Yes	14(15.7)	50(56.2)	25(28.1)		
	No	4(36.4)	7(63.6)	-	5.501	0.064
E-Payment	Yes	10(13.9)	44(61.1)	18(25.0)		
	No	8(28.6)	13(46.4)	7(25.0)	3.177	0.204
Networking (fbk)	Yes	17(18.1)	55(58.5)	22(23.4)		
	No	1(16.7)	2(33.3)	3(50.0)	2.229	0.328

*Significant at 0.05level

The findings, which are significant at the 0.05 level of significance, are shown in Table 3 and explore the impact of self concept on the acquisition of ICT competence. It is noted that a significant value of 0.027 was found on Word Processing, indicating that self-concept has a very strong influence on students at Delta State's tertiary institutions' acquisition of word processing expertise. This is due to the fact that the majority of people think word processing is simple to learn and doesn't require any specialized expertise. Additionally, it is often utilized in academic work, making it difficult to locate a student who is unfamiliar with this specific package. Word processing does not require the kind of specialized skills, positive self-concept, or motivation that other packages do. On the other hand, Data Analysis did not show any significance (p=0.055, 0.052) since their p-value is greater than 0.05. But they do have some significance, especially when compared to Photoshop, which has a 0.902, to them. In order for students to acquire ICT knowledge and competencies, their perceptions of all other programs must be altered.

DISCUSSION

The results of this study showed that undergraduate students majoring in social studies were proficient in some ICT applications, including Facebook networking (89%), phone browsing (84%), internet browsing (83%), e-mail services (74%) and academic purposes (74%), but they were less proficient in data analysis (36%), Microsoft publishing (32%) and Photoshop (29%).

These findings were in line with those of Bayhan and Sipal (2008), who discovered that students' familiarity with computers and frequency of use had a significant impact on their level of computer competency. Only computer use and self concept strongly influenced undergraduates' computer competency, according to Agbatogun's (2010) research. Based on the findings of Jegede's 2009 study, which revealed that the majority of the software packages currently in use in Nigerian industries, schools, and financial institutions are either foreign (developed outside of Nigeria) or locally adapted,

undergraduate computer packages like Microsoft publishing and data analysis shouldn't be abandoned either. It is impossible to overstate the importance of skilled and productive programmers since computers are useless without software, which is essentially programs, and there can be no programs without programmers.

The findings of this study also revealed as noted in Osah (2022) that the majority of respondents believed that the availability and affordability of internet services would increase their ICT acquisition, and that the societal trends toward ICT compliance that are becoming more prevalent have driven their ICT competence acquisition. Additionally, the respondents said that having access to internet services was what drove them to acquire ICT, which was consistent with the findings of Imhof, Vollmeyer, and Beierlein (2007) as well as Agbatogun (2010), who believed that motivational factors like engagement frequency and computer system interaction raise competence levels.

The results of this study also showed that students' self-concept in word processing directly influenced their acquisition of ICT competence (2 = 0.27, p 0.05), whereas the results showed no significant influence of their self-concept towards the other computer packages, such as data analysis, academic purposes, text and graphics, Power point, Microsoft Photoshop, internet browsing, e-mail services, e-library, video recording, and e-payment. The results were in line with those of Okogi and Emordi (2022) and Agbatogun (2010), whose researches revealed that only computer usage and self-concept significantly predicted undergraduates' computer competence, while factors like gender were unable to significantly influence the prediction of students' computer competence level. Additionally, Egwu, Akhogbai and Okogi (2024) and Kaino (2008) found no discernible gender differences in the pupils' perceptions of the value of computers. Also, Rozell and Gardner (2000) tested a model of the cognitive, motivational, and affective processes influencing computer-related performance using a path-analysis of longitudinal data gathered from 600 undergraduate students in the management information department. The findings demonstrated that almost all of the projected paths had theoretical and practical implications that were at least partially supported.

CONCLUSION

The study looks at self-concept and motivation factors as correlates of students studying social studies at tertiary institutions in Delta State, Nigeria, learning information and communication technology skills. The study found that there is a need to develop a technologically literate workforce, capable of meeting the challenges of technological developments. Emphasis was placed on examining students' competency level in the usage of ICT. Any discipline must therefore take the appropriate action and repackage its curriculum to accommodate innovation in its educational system.

RECOMMENDATIONS

In light of the conclusion, the paper recommended that governments at all levels provide educational institutions with the infrastructure and tools they require, such as computers, computer labs, and technical support that will help them improve their ICT literacy, as regular computer use is a remedy for computer anxiety. Additionally, educational institutions should offer counseling services and motivational lectures on changing one's attitude, values, and beliefs to help students' self-concept.

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