Impact of Scaffolding Learning Strategy on Pre-Service Teachers' Attitude to Cybercrime Prevention

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ABSTRACT: *The study investigated the impact of scaffolding learning strategy on pre-service teachers' attitude to cybercrime prevention. The study adopted the quasi-experimental research design of the survey type. The following instrument was developed by the researcher and used for the study, namely: Scaffolding Learning Strategy Guide and Lecture Note (SLSG), Conventional Method Guide and Lecture Note (CMG), Attitude to Cybercrime Prevention Scale (ACPS) and Computer Literacy Test (CLT). The participants for this study were selected using multistage sampling procedure. The first stage involved the use of simple random sampling technique to select three universities (one university for each learning strategy) in the region i.e. Southwest, Nigeria. This was followed by the use of purposive sampling technique to select the department of Social Studies education in each of the universities was selected. Consequently, intact class in each of the selected universities was used alongside three research assistants and three lecturers of the department. The data obtained through the administration of the instruments was analysed using descriptive and inferential statistics. All the hypotheses were tested and decisions were taken at 0.05 level of significance. The findings of the study revealed that Scaffolding Learning Strategy (SLS) has no effect on the attitude of Social Studies Pre-service Teachers' attitude to cybercrime prevention, teachers' gender does not affect their attitude towards cybercrime prevention and computer literacy does not influence the attitude of social studies pre-service teachers to cybercrime prevention. Therefore, it was recommended that the use of instructional strategies should be well articulated so as to bring about change in the attitude of the learners, gender of the learners should not be seen as factor affecting the attitude of learners towards learning. Hence, during teaching, teachers should give room for gender disparity among the learners and emphasis should be place on the computer literacy of learners. That is, learners should be encouraged to have knowledge of the use of computers in teaching and learning process.*

KEYWORDS: scaffolding learning strategy, pre-service, teachers, attitude and cybercrime.

INTRODUCTION

Education is one of the major sectors that propel the development of egalitarian societies all over the world; this might have triggered Blaike (2002) to state that education is one of the sectors in the society that helps to train humans in all aspects of their existence to be useful to themselves and the society at large. The highest level of investment and the most specialised form of human capital is opined to be the university education which enhances the economic growth of any society. This further suggested the reason why Castells and Manuel (1994) were of the opinion that university education in the new world would drive the world economy. Introducing computer into the education process was the third initiative after the advent of prints, that is, books, as the first and libraries as the second initiatives, respectively; the Internet emanated from the computer initiative as the fourth revolution to foster its usefulness to humanity in their quest for knowledge and to develop their society (Amosun, Ige & Choo, 2015:507). However, despite the benefits of Internet to the development of humanity, it appears that some people are using it against its purported objectives.

The myriads of crimes committed by some Internet users to other innocent users seem to be beclouding the immense benefits that the Internet has brought to humanity (Amosun, Ige & Choo, 2015:508). The advent of Information Communication Technology and its usage to accomplish the laid down aims and objectives in the general society, and also particularly at universities, is obsolete due to the unconscious involvement of users in cybercrimes that have resulted to exploration of the cyberspace to catch fun at the expense of other users' cyber welfare (Tonhauser & Ristvej, 2019:1594). Crimes perpetuated through the Internet predominantly by youths across the world in recent times ranged from cyber harassment, racial abuse, spread of obscene pictures, rumour peddling, impersonation, defamation of character, collecting money under false pretence, bullying, flaming, stalking, phishing, to password theft and so on (Choi, Cho & Lee, 2019:3).

Cybercrimes are described as harassment, victimisation, bullying, offences etc. committed through the usage of Information and Communication Technology devices (cell phones, computer, and Internet)) and social media platforms, such as Facebook, Whatsapp, Skype, Tiktok, Twitter, Instagram, Likee, Messengers (Yahoo or Facebook) and so on, which are emerging phenomena around the world (Makhulo, 2018:26). Cybercrime can be broadly divided into two, namely: *Property Cybercrime* and *Interpersonal Cybercrime*. For the purpose of this study, the researcher is concerned with identifying with the notion of 'Interpersonal Cybercrime' as it tends to deal directly with individual's behaviours in the cyberspace. According to Roberts (2007:3), Interpersonal Cybercrime is an offence committed among and against individual(s) usually aimed at downgrading and defamation of the target's character, using Information and Communication Technology devices. This seems to have eaten deep into the fabrics of the university education and other sectors of education in Nigeria, thereby having adverse effects on the national development of the country in a way that makes it fall into the class of a social menace which needs urgent and

collective attention of the public. In another vein, involvement in interpersonal cybercrime had in no time increased the level of school dropouts and propelled the level of incessant criminal acts in the society at large, which is a case for public concern and attention (Slonje, Smith & Frisén, 2013:27).

Different reasons may be accountable for students' involvement in cybercrime as well as falling victim of such crimes. These could be inadequate awareness or knowledge of the pros and cons of Information Communication Technology. Also, as observed by the researcher that numerous identified crimes in the cyberspace are predominantly carried out by the male gender, without totally excluding the female gender. It was also noticed that some females help the male counterparts to fashion out means of getting back at any suspected offender in the physical environment through the ICT platforms which help to hide their original identities (Hutchings & Chua, 2016:169). Another observable reason for the involvement in cybercrime, either knowingly or unknowingly, is the computer literacy level of individuals. This goes a long way in determining how well people can manoeuvre their ways through the Information Communication Technology devices, by using the different platforms, such as Social Media, to deal with identified targets.

Though many scholars had researched into cybercrime and it's preventions but this study intends to bridge the gap of the understudied social menace in the context of undergraduates (pre-service teachers) and specifically in universities in Africa but cautiously narrowing it down to universities in Nigeria as no noticeable research had being done as regards this globally acknowledged social problem. It is on this note that the researcher intends to introduce Cybercrime (Interpersonal cybercrime) Prevention into the school curriculum, especially the curriculum of the Social Studies pre service teachers at the tertiary level. This shall be channelled into equipping the pre service teachers with adequate knowledge on the pros and cons of Information Communication Technology, in order for them to transfer the same knowledge to the younger generation. Moreover, the content of these Cybercrime preventions may not be adequately taught through the lecture method popularly called "conventional method"; hence, scaffolding learning strategies will be considered as a method that could be used to improve the knowledge of pre-service teachers in cybercrime prevention. This study therefore investigated the impact of scaffolding learning strategy on pre-service teachers' attitude to cybercrime prevention.

LITERATURE REVIEW

Cybercrime
According to Ren, Kwan, and Schwanen (2013:187), the use of the Computer (Internet) has become a major focus in studies on information, geography, sociology, and related fields, over the last fifteen years. The 'ARPANET' evolved into the 'Internet,' which was based on the idea that there would be a plethora of autonomous networks of varying designs, starting with the 'ARPANET' as the primary packet switching network and moving on to packet satellite networks, ground-based packet radio networks, and other networks (Leiner, et al., 1997:5).

The chronological progression of computer crime is deceptive, as cyber thieves are capable of committing crimes in a short period of time and, more significantly, over long distances (Jaishankar, 2008). Because of the active character of the online space, it is also difficult to discuss cybercrime. As a result of the complication that exists in establishing the place or location of crime, cybercrime has dynamically complicated the impact of geography. According to Ige (2008), internet crime is commonly known as 'Yahoo Yahoo' or 'Yahoo Plus' (street forename for fraudsters employing 'Mayehun' (voodoo power/magic) for their victims), in a survey done on the incidences of Internet crimes among school-aged children in Nigeria. In his study, Ige (2008) explained that the "use of another named person and a social security number to obtain goods and services," often known as "identity theft," was the most popular internet crime among Nigerian school-aged children. It was the outcome of the study conducted by Ige (2008) that warranted the development of the action cybercrime prevention programme that brought in education to complement the diverse security programs developed by computer scientists and information security experts.

Cybercrime Prevention
The field of Social Studies has become entrenched in the Nigerian primary and secondary schools, and the importance of studying it cannot be overstated. It is claimed to be the most effective treatment for the illness of moral debauchery (Cyber Crime) and to instil in children a sense of decency (Cyber Crime Prevention) (Adesina and Adeyemi, 2007). They go on to say that Social Studies is a course of study in the Nigerian secondary schools that is used to instil in students the information, attitudes, abilities, and actions that are critical for human interaction in the society. These are some of the reasons why the Action Cyber Crime Prevention Program will be emphasised in Social Studies and Civic Education.

In the year 2001, Nigeria was rated second among the apex ten nations known for cybercrimes with 2.7%. Also, in year 2002, Nigeria was ranked in the second position with 5.1% and third position with 2.9% in year 2003. In the year 2004, Nigeria yet reserved the third position with 2.87%, although this year has the smallest perpetration of internet crimes involving Nigerians. In the year 2005, Nigeria was ranked second with 7.9%, and third repetitively, in years 2006, 2007, 2008 and 2009 with 5.9%, 5.7%, 7.5% and 8.0%, respectively. Nigeria was ranked third in the world in 2010, with 5.8% of the total. There was a downward trend in the number of Nigerians engaging in scamming operations in 2010. This easing could be related to the terrible conditions brought on by the global economic downturn. Internet fraudsters can only thrive if the economies of the target countries are in good shape. Nonetheless, it should be noted that the Internet Crime Reports only indicate the top ten biggest cyber troublesome countries, leaving the rest of the world's top ten countries out.

For Nigerian school-aged children, the Computer (Internet) is both a source of information and a cause of concern. The overall picture is that the internet provides such a vast amount of useful educational information and resources. Children online, on the other hand, may not only be at the

risk of coming into contact with sexually explicit resources, mature predators, and peddlers of abhorrence, but also at the risk of committing any of these crimes while on the Internet. The Internet's technological nature has not been industrialised to the point where content control is straightforward to achieve (Dick & Herbert, 2003).

Computer literacy of Social Studies Pre-service Teachers
Information and Communication Technology (ICT) is not regarded as the sole tenacity of the information. In this light, ICT appears to be a vital tool for carrying innovative teaching and learning practises forward (Drent & Melissen, 2008). The effective performance of both teachers and students is dependent on the incorporation of ICT into schools. As a result, teachers must be quite adept at utilising ICT (Voogt & Roblin, 2012; Pineida, 2011).

Pre-service students' previous exposure to equipment in school had an impact on their ability to use ICT in their education, and if they had had a negative understanding, they would have been hesitant to use it in their practise (Ching & Ching, 2012). While studies show that pre-service instructors are aware of the implications of online literacy (Stockham & Collins, 2012), results on proficiency levels are mixed. According to Smith (2013), there was widespread skepticism and a lack of knowledge among teachers when it came to the term "computer literacy." The teaching of how to integrate technology into teaching is an essential topic for educators who want to integrate technology into education (Pamuk & Peker, 2009). Yapc & Hevedanl (2012) recommend that pre-service teachers acquire the facts and dexterities necessary for ICT use, throughout their pre-service teaching phase and use them during their pre-service teaching time and in their professional lives.

In this regard, teacher education programmes have played a significant role in preparing pre-service educators to integrate ICT into their classrooms. Throughout their education, the programmes should assist them in acquiring technology-enhanced abilities (UNESCO, 2008). According to Pamuk and Peker (2009), computer phobia will prevent teachers who are afraid of computers from successfully implementing instructional technology. In addition, Aslan and Zhu (2014) discovered those pre-service teachers' educational cognitive, benefits from ICT-related courses in their instructional comprehension, and declared ICT potentials all predict their ICT incorporation into teaching practise.

Technology has spread like wildfire through every aspect of mankind, including education, and teacher education. Nonetheless, a close examination of the evidence foundation for the use of ICT in teacher preparation courses and field knowledge reveals that implementation comes before scientific confirmation (Smith & Kennedy, 2014). As a result, teacher educators should be aware of emerging trends in ICT. At the same time, they should be aware of the benefits and drawbacks of trading, applying, and using a diverse set of tools (Clark, 2009). Just as there is a universal agreement on the need to improve teaching practices by educational machinery, the academia has long shown that the successful use of technology for instructional reasons exceeds just the

accessibility of the appropriate gadgets, training in computer literacy and enhancing educators' ICT-related character and beliefs. By the turn of the 21st century, the scholars' argued that the significance of ICT in education has continued globally. In a number of studies, the consequences of such proposals have been disclosed, reporting on the constructive attitudes instructors hold regarding ICT. This is according to Zyad (2016) in Erguig (2006). Pre-service and in-service teaching programmes have been built and driven by the evidence-based understanding that a teacher's self-efficacy and attitude toward didactic technology are inextricably linked.

The interaction between educational and technical modernism, as well as how they envisioned big changes in teaching methods which is concerned about the current status of ICT integration in education have prompted numerous studies to look into what motivates instructors to use technology to achieve educational goals (Wong and Hsu, 2008). Cubukcuoglu (2013) discovered that removing a variety of sources of insecurity was beneficial in convincing instructors to use ICT in the classroom.

A positive attitude toward the use of ICT to advance classroom experiences was one of the characteristics identified. On the other hand, the study shows that in order to foster such a positive attitude in teachers, they must be familiar with the necessary computer literacy skills. It was also suggested that having a clear grasp of the benefits of technology could help to attract ICT implementation in education.

According to Merc (2015), the consistency of pre-service teacher trainees' purposeful use of technology for their academic goals and the conditions in the trainings where they practised. Similarly, the study discovered the utility of the ICT strategies used by these teacher trainers. In keeping with previous research studies, the respondents stated that they had a positive attitude toward the use of ICT in educational activities. The lack of infrastructure in the classroom had a discouraging effect on the use of ICT in the classroom. Nonetheless, the schools where they received their classroom instruction lacked the necessary equipment for an effective and long-term implementation of ICT.

Concept of Scaffolding Learning Strategy
Scaffolding is a metaphor derived from structural work, where it portrays a temporary structure used to erect a structure. Scaffolding is the assistance (parameters, rules, or ideas) that a teacher provides to a learner in an educational context. Scaffolding allows students to receive assistance with only the abilities that are new to them or that are out of their comfort zone (Margaret, 2018). The term "instructional scaffolding" refers to the support provided during the learning process, which is tailored to the needs of the student, with the goal of assisting the learner in achieving his or her learning objectives. The goal of this learning process is to develop a deeper level of understanding (Sawyer, 2006).

Empirical Studies on Scaffolding Learning Strategy

The scaffolds boost a learner's ability to build on past knowledge, while also allowing them to internalise new information (Robinson & Daniel, 2017; Omiko, 2015). Numerous studies on the scaffolding instructional approach, which are related to this study, have been undertaken in the past and might be used as a template. In the field of mathematics, the scaffolding instructional style is both scary and highly effective. It is a school-based educational strategy that stresses active involvement or a higher level of student control over their learning.

According to Aditi (2017), the effects of Instructional Scaffolding on attitude toward secondary school science students were discovered. The trial involved 100 high school students (50 males and 50 females) from two alleged C.B.S.E. schools in the Bathinda district. One school served as the control group, while the other served as the experimental group. For two weeks, the control group was trained using standard techniques, while the experimental group was trained using a variety of scaffolding methods. Two worksheets provided by C.B.S.E. were used for pre-test and post-test data collection, and an attitudinaire was used to examine students' attitudes toward science, following the implementation of the scaffolding approach for the experimental group. The T-test was used to find the significance difference in academic achievement of students in the two clusters, both before and after scaffolding approaches were used in the experimental group, both for pre-test and post-test. It was also used to find the significance difference in students' attitudes toward science before and after scaffolding approaches were used in the experimental group. The results clearly showed a significant difference in the mean academic achievement scores of students in the two groups. For example, learners who were taught using scaffolding procedures performed significantly better than those who were taught using traditional techniques. Learners urbanised a constructive approach to science when they were instructed using many scaffolding strategies at the same time.

Neeta (2018) scrutinized the effect of instruction with scaffolding on attainment in science, comparative to cognitive techniques and intelligence in his study. The sample was drawn from 8th class learners (N=80) belonging to two special schools of Fazilka region in Punjab, associated to PSEB Mohali. Instructional resources, based on instructions with scaffolding was arranged by the teacher and executed to the experimental group. Control group was trained with the aid of traditional technique. Gain scores were documented by calculating the dissimilarity of pre-test and post- test for all the learners. The researcher gave the following conclusions: i) The attainment of the team through scaffolding instructional method was found to be significantly higher than the team trained by traditional teaching method ii) The dissimilarity of attainment was not significant at two levels of cognitive approaches. iii) The accomplishment achieve score of the high intelligence team was significantly higher in contrast to the low intelligence team. iv) The communication result of teaching methods and cognitive methods was not significant. v) No significant relationships result has been found for teaching methods and intelligence levels on realisation score. vi) There was no significant relationship between teams based on cognitive methods and intelligence levels. vii) The relationships influence of teaching methods, cognitive

and levels of intelligence has been found to be not significant, although method and intelligence autonomously affect the attainment gain score.

Gender and Scaffolding Learning Strategy
When trained by supportive learning, females outperform males (Olson, 2002). When exposed to shared learning, however, khairulanuar, Nazre, Sairabanu, and Norasikin (2010) found a gender imbalance in favour of males. In contrast, Chianson, Okwu, and Kurumeh (2010), Keramati, Tahmasbi, Rafat, and Khashab (2011), as well as Gambari, Shittu, and Taiwo (2013), found that gender had no bearing on students' academic performance in shared learning. Females in Anambra State, Nigeria, fared better when taught via Personalized System Instruction, according to Okafor and Adeleye (2012). The adage that connotes the saying that "what a man can do, a woman can do better" simply affirms that the female gender is capacitated to perform at pal with their male counterpart in carrying out actions circularly, academically and in other aspects of life without disparities in the outcome of their actions. Although in some cases and in certain peculiar actions/activities the male is observed to be more agile and swift to action because of the societal class of duties to the different genders, but in the aspect of learning and performance it may be difficult to ascertain or affirm that male performs better than female when exposed to share learning and vice versa.

Statement of the Problem
Introducing Information Communication Technology into the education process is to foster its usefulness to humanity in their quest for knowledge and to develop the society at large. However, despite the benefit of Information Communication Technology to the development of humanity, it appears that some people are using it against its purported objectives. The advent of Information Communication Technology and its usage to accomplish the laid down aims and objectives of the university education is observed to be gradually fading through the unconscious involvement of users in cybercrimes which might be as a result of trying to explore the space or trying to catch fun at the expense of another persons' liberty. Different reasons may be accountable for people's involvement in cybercrime as well as falling victim of such crime. Such reason may be inadequate awareness or knowledge of the pros and cons of Information Communication Technology.

It is on this note that the researcher intends to infuse Cybercrime Prevention into Social Studies and Civic Education school curricula, most especially the tertiary curriculum, designed for pre service teachers in social studies education. This is in order to give adequate knowledge of ICT pros and cons to vulnerable youths as they are being prepared to impact knowledge into the younger generations. Moreover, these concepts may not be adequately taught through the lecture method popularly called conventional method, hence scaffolding learning strategies will be recommended.

Objectives of the study

The following objectives will guide the study:

1. Examine the impact of scaffolding strategies on Social Studies Pre-service teachers' attitude to cybercrime prevention;
2. Determine the impact of Social Studies pre-service teachers' gender and computer literacy on their attitude to cybercrime prevention.

Research Hypotheses

These research hypotheses were tested at 0.05 level of significance:

1. There will be no significant main effect of Scaffolding Learning Strategy (SLS) on Social Studies Pre-service Teachers' Attitude to cybercrime prevention
2. There will be no significant main effect of Social Studies Pre-service Teachers' gender on their attitude to cybercrime prevention.
3. There will be no significant main effect of Social Studies Pre-service Teachers' computer literacy on their attitude to cybercrime prevention.

METHODOLOGY

The study adopted the quasi-experimental research design of the survey type. The research design is considered appropriate for this study because it evaluates the impact of scaffolding learning strategy on the attitude of Social Studies pre-service teachers when taught cybercrime prevention. The following instrument was developed by the researcher and used for the study, namely: Scaffolding Learning Strategy Guide and Lecture Note (SLSG), Conventional Method Guide and Lecture Note (CMG), Attitude to Cybercrime Prevention Scale (ACPS) and Computer Literacy Test (CLT). The participants for this study were selected using multistage sampling procedure. The first stage involved the use of simple random sampling technique to select three universities (one university for each learning strategy) in the region i.e. Southwest, Nigeria. This was followed by the use of purposive sampling technique to select the department of Social Studies education in each of the universities was selected. Consequently, intact class in each of the selected universities was used alongside three research assistants and three lecturers of the department. The data obtained through the administration of the instruments was analysed using descriptive and inferential statistics. All the hypotheses were tested and decisions were taken at 0.05 level of significance.

RESULTS

Hypothesis 1: There will be no significant main effect of Scaffolding Learning Strategy (SLS) on Social Studies Pre-service Teachers' Attitude to cybercrime prevention.

Table 1: Summary of Analysis of Covariance (ANCOVA) of Post-Attitude Scores of Social Studies Pre-service Teachers by Treatments, Gender and Computer Literacy

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	18514.068[a]	16	1157.129	3.208	.000	.122
Intercept	47423.555	1	47423.555	131.491	.000	.263
Preatt	5163.759	1	5163.759	14.318	.000	.037
Group	854.099	2	427.049	1.184	.307	.006
Gender	112.195	1	112.195	.311	.577	.001
Complit	374.325	2	187.162	.519	.596	.003
Group * Gender	84.016	2	42.008	.116	.890	.001
Group * Complit	2177.906	3	725.969	2.013	.112	.016
Gender * Complit	307.521	2	153.761	.426	.653	.002
Group * Gender * Complit	233.020	3	77.673	.215	.886	.002
Error	133083.217	369	360.659			
Total	1456838.000	386				
Corrected Total	151597.285	385				

a. R Squared = .122 (Adjusted R Squared = .084)

b. Computed using alpha = .05

The result presented in table 1 showed that there was no significant main effect of treatment on social studies pre-service teachers' attitude to cybercrime prevention ($F_{(2,384)}$ =1.184; $p>0.05$, partial $\eta^2 = 0.006$). The effect size is 0.6% which implies that 0.6% of the variance in the dependent variable is attributed to the independent variable. Since the associated probability value 0.307 is greater than 0.05 set as level of significance for testing the hypothesis, this means that the null hypothesis was not rejected. This result indicates that there is no significant difference in the attitude of social studies pre-service teachers to cybercrime prevention

Hypothesis 2: There will be no significant main effect of Social Studies Pre-service Teachers' gender on their attitude to cybercrime prevention.

Table 2: Summary of Analysis of Covariance (ANCOVA) of Post-Attitude Scores of Social Studies Pre-service Teachers by Treatments, Gender and Computer Literacy

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	18514.068[a]	16	1157.129	3.208	.000	.122
Intercept	47423.555	1	47423.555	131.491	.000	.263
Preatt	5163.759	1	5163.759	14.318	.000	.037
Group	854.099	2	427.049	1.184	.307	.006
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Group * Gender * Complit	233.020	3	77.673	.215	.886	.002
Error	133083.217	369	360.659			
Total	1456838.000	386				
Corrected Total	151597.285	385				

a. R Squared = .122 (Adjusted R Squared = .084)
b. Computed using alpha = .05

The result presented in table 2 revealed that there was no significant main effect of gender on social studies pre-service teachers' attitude to cybercrime prevention ($F_{(2,384)} = 0.311$; $p > 0.05$, partial $\eta^2 = 0.001$). The effect size is 0.1% which implies that 0.1% of the variance in the dependent variable is attributed to the independent variable. Since the associated probability value 0.58 is greater than 0.05 set as level of significance for testing the hypothesis, this means that the null hypothesis was not rejected. Inference drawn is that gender has no significant effect on the attitude of social studies pre-service teachers to cybercrime prevention.

Hypothesis 3: There will be no significant main effect of Social Studies Pre-service Teachers' computer literacy on their attitude to cybercrime prevention.

Table 3: Summary of Analysis of Covariance (ANCOVA) of Post-Attitude Scores of Social Studies Pre-service Teachers by Treatments, Gender and Computer Literacy

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	18514.068[a]	16	1157.129	3.208	.000	.122
Intercept	47423.555	1	47423.555	131.491	.000	.263
Preatt	5163.759	1	5163.759	14.318	.000	.037
Group	854.099	2	427.049	1.184	.307	.006
Gender	112.195	1	112.195	.311	.577	.001
Complit	374.325	2	187.162	.519	.596	.003
Group * Gender	84.016	2	42.008	.116	.890	.001
Group * Complit	2177.906	3	725.969	2.013	.112	.016
Gender * Complit	307.521	2	153.761	.426	.653	.002
Group * Gender * Complit	233.020	3	77.673	.215	.886	.002
Error	133083.217	369	360.659			
Total	1456838.000	386				
Corrected Total	151597.285	385				

a. R Squared = .122 (Adjusted R Squared = .084)
b. Computed using alpha = .05

The result presented in table 3 showed that there was no significant main effect of computer literacy on social studies pre-service teachers' attitude to cybercrime prevention ($F_{(2,384)}$ =0.519; p>0.05, partial η^2 = 0.003). The effect size is 0.3% which implies that 0.3% of the variance in the dependent variable is attributed to the independent variable. Since the associated probability value 0.59 is greater than 0.05 set as level of significance for testing the hypothesis, this means that the null hypothesis was not rejected. Inference drawn is that computer literacy has no significant effect on the attitude of social studies pre-service teachers to cybercrime prevention.

DISCUSSION

The finding of the study revealed that Scaffolding Learning Strategy (SLS) has no effect on the attitude of Social Studies Pre-service Teachers' attitude to cybercrime prevention. This implies that there is no significant difference in the attitude of social studies pre-service teachers to cybercrime prevention. This finding does not support observation by Umaru (2010). Acquiring the abilities needed to solve learning challenges boosts learners' interest, self-efficacy, and conviction. Self-efficacy, built-in force, decision-making abilities, sympathy, broad-mindedness

towards differences, emotions of endorsement, and even school turnout have all been mentioned as benefits of collaborative learning. Teamwork, according to Jacobson and Baribor (2012), stimulates students' learning interest, stirs their exploring aptitude and vital philosophy, and develops their team spirit and community communication smarts. Learners who work in groups might become more dynamic in their learning. When students work in a cluster with their peers, they are inspired to express themselves and examine the ideas of others. Cooperative learning, according to Simek, Byilar, and Kucuk (2013), is a method for achieving a certain end product or goal, by allowing people to work together in groups. Similarly, Ruel and Bastianns (2003) saw cooperative learning as a teaching method that allows students to employ psychological processes to contribute to their knowledge on their own. According to Naseem and Bano (2013), when learners of various cognitive, academic, and physical levels are open to the factors of accomplishing a task, they have the ability to interact and collaborate as a group.

The finding of the study revealed that gender has no significant effect on the attitude of social studies pre-service teachers to cybercrime prevention. This implies that gender has no effects on the attitude of social studies pre-service teachers to cybercrime prevention. This findings is in consonant to the observation of Chianson, Okwu, and Kurumeh (2010), Keramati, Tahmasbi, Rafat, and Khashab (2011), as well as Gambari, Shittu, and Taiwo (2013), found that gender had no bearing on students' academic performance in shared learning. Females in Anambra State, Nigeria, fared better when taught via Personalised System Instruction, according to Okafor and Adeleye (2012). The adage that connotes the saying that "what a man can do, a woman can do better" simply affirms that the female gender is capacitated to perform at pal with their male counterpart in carrying out actions circularly, academically and in other aspects of life without disparities in the outcome of their actions. Although in some cases and in certain peculiar actions/activities the male is observed to be more agile and swift to action because of the societal class of duties to the different genders, but in the aspect of learning and performance it may be difficult to ascertain or affirm that male performs better than female when exposed to share learning and vice versa. However, it is in contrast to that of Khairulanuar, Nazre, Sairabanu, and Norasikin (2010) who found a gender imbalance in favour of males.

The finding of the study revealed that computer literacy has no significant effect on the attitude of social studies pre-service teachers to cybercrime prevention. Hence, computer literacy does not influence the attitude of social studies pre-service teachers to cybercrime prevention. This finding is in support of Stockham & Collins, (2012). Who found that pre-service instructors are aware of the implications of online literacy. A positive attitude toward the use of ICT to advance classroom experiences was one of the characteristics identified. On the other hand, the study shows that in order to foster such a positive attitude in teachers, they must be familiar with the necessary computer literacy skills. It was also suggested that having a clear grasp of the benefits of technology could help to attract ICT implementation in education. According to Merc (2015), the consistency of pre-service teacher trainees' purposeful use of technology for their academic goals and the conditions in the trainings where they practised. Similarly, the study discovered the utility

of the ICT strategies used by these teacher trainers. In keeping with previous research studies, the respondents stated that they had a positive attitude toward the use of ICT in educational activities. The lack of infrastructure in the classroom had a discouraging effect on the use of ICT in the classroom. Nonetheless, the schools where they received their classroom instruction lacked the necessary equipment for an effective and long-term implementation of ICT.

CONCLUSION

Based on the findings of the study, it was concluded that Scaffolding Learning Strategy (SLS) has no effect on the attitude of Social Studies Pre-service Teachers' attitude to cybercrime prevention, teachers' gender does not affect their attitude towards cybercrime prevention and computer literacy does not influence the attitude of social studies pre-service teachers to cybercrime prevention.

Recommendations

It was however recommended that:

1. The use of instructional strategies should be well articulated so as to bring about change in the attitude of the learners.
2. Gender of the learners should not be seen as factor affecting the attitude of learners towards learning. Hence, when the teaching, teachers should give room for gender disparity among the learners.
3. Emphasis should be place on the computer literacy of learners. That is, learners should be encouraged to have knowledge of the use of computers in teaching and learning process.

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