



PERCEPTION OF UNDERGRADUATES TOWARDS THE UTILIZATION OF ONLINE COLLABORATIVE TOOLS FOR LEARNING

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Abstract

Online collaborative tools are online innovative and

Keywords: Perception, Undergraduates, Utilization, Online Collaborative Tools, Learning

instructional tools that can be used to supplement traditional teaching and learning for the enhancements of students' positive academics

performance. In spite of its immense instructional benefits, these tools have not been fully utilised for learning among undergraduates in Nigeria. Hence, the study examined the Perception of Undergraduates towards the Utilization of online Collaborative tools for learning in selected Universities in South-west, Nigeria. Findings indicated

INTRODUCTION

Online collaborative tools are innovative instructional resources available on the internet that can complement traditional teaching and learning methods, ultimately contributing to improved academic performance among students (Songsirisak & Jitpranee, 2019). In a study conducted by Chen (2023), collaborative learning tools were defined as software designed to facilitate group-based problem-solving tasks. However, a comprehensive understanding of collaborative learning skills necessitates an examination of the interactions that occur between teachers and students.

According to Chiu (2004), collaborative learning typically involves groups of students collaborating to explore, comprehend, or devise solutions, resulting in the creation of a tangible representation of their learning process. Chiu (2004) further asserts that individuals engage in collaborative learning by leveraging each other's resources, tools, and expertise to evaluate one another's ideas and oversee

that 392 (27.8%) respondents strongly agreed that they think positively about using blog, wikki and WhatsApp for learning, 807 (57.2%) respondents agreed, 173 (12.3%) respondents disagreed while 40 (2.8%) respondents strongly disagreed. The mean score of 3.10 established that most of the respondents think positively about using blog, wikki and WhatsApp for learning. The grand mean score on the Attitudes of undergraduate students towards the use of online collaborative tools for learning was 2.61. since the grand mean score of 2.61 is greater than the benchmark of 2,50, it can be deduced that undergraduate students possesses good attitudes towards the use of online collaborative tools for learning. The study concluded that there was a significant relationship between undergraduate students' perceived usefulness to use collaborative tools for learning. Based on the findings, the study recommends that government should give the necessary supports on the procurement of all needed facilities for collaborative learning. Undergraduates should help themselves by exhibiting high positive attitudes and competencies in the utilization of online collaborative tools. Also, Undergraduate should help themselves by making use of online collaborative tools for instructional purpose and shift their foci from using it for fun and entertainment.

One another's work. Collaborative learning is an educational approach in which both learners and teachers collaborate to solve problems, accomplish tasks, or produce a final product. Within this collaborative learning environment, students are influenced socially and emotionally as they engage with diverse perspectives and are tasked with articulating and refining their own ideas.

Chen (2023) defines collaborative learning as an educational approach where students and teachers join forces to explore significant questions or undertake meaningful projects. This involves groups of students from different schools coming together over the internet to collaborate on shared assignments using Online Collaborative Tools (OCTs) such as blogs, Wikipedia, personal websites, and WhatsApp. Chen's research suggests that the accessibility and utilization of OCTs in the learning process can enhance students' motivation in an instructional setting.

In higher education, it is essential for undergraduates to fully engage with their learning environments to achieve desirable, effective, and efficient outcomes. The traditional lecture-based approach alone cannot effectively address these responsibilities, highlighting the necessity of leveraging OCTs to facilitate learning across all educational domains (Oludotun, 2021).

Furthermore, Oladotun (2021) underscores the critical importance of effectively using OCTs in Nigerian universities to achieve various educational objectives and enhance the quality of lessons, both inside and outside the classroom. OCTs transform teachers from mere information providers into facilitators, allowing undergraduate students to harness the appropriate online collaborative tools to interact with their peers within and beyond the classroom environment.

Online collaborative tools, as described by Olumorin (2008), are software programs accessible via the web, designed to perform various functions using communication channels that include text-based, audio-based, and video-based methods, often incorporating graphics and animation. These tools enable users to modify and adapt their learning experiences in terms of time and space, offering a dynamic and versatile approach to education. Positive attitude on the part of the

students is very important if online collaborative tools are integrated in to the university curriculum. Adetimirin (2008) studied factors affecting the use of technology in higher education. Among the factors that affect its successful use in the classroom are students' attitudes and disbelief in the use of technology. Studies on student attitude to computer confirmed that students have positive attitude, yet computers were not being used for instructional purpose (Olumorin, 2008). The National Policy on Education (FRN, 2004) emphasised the need to use ICT at all levels of education. Students at the university level should therefore not develop negative attitude to implementation of ICT in general and online collaborative tools in particular. This is because good ICT-related behaviour among undergraduates' students would replicate good ICT behaviour on their students.

However, no matter how positive the attitude may be, if the students do not intend to use OCTs for learning, all other efforts will continue to proof abortive. Intention refers to having something in mind as a plan or purpose. It means planning to do something. It is a matter of willingness from the heart. Adeyanju (2012) reported that there are more computers and other information technologies in tertiary institutions nowadays, the use of these technologies have in a large number of cases, not enhanced either individual or institutional level of productivity. The reasons adduced for this include inadequate training in new skills, and unwillingness by students themselves to learn new skills.

Statement of the Problem

Online collaborative tools are not the sole effective means of facilitating collaborative learning. In the context of Nigerian universities, the adoption of online collaborative tools for educational purposes is still in its early stages, as noted by Aladesusi (2016), as cited in Christopher, Kayode, Shedrach, and James (2014).

Unfortunately, many Nigerian university students tend to use these online collaborative tools primarily for entertainment, such as listening to music and engaging in social media chats. This diversionary use of technology can distract them from their academic pursuits (Focheri & Molfino, 2010).

However, there are various online collaborative tools that students can download onto their mobile devices, potentially enhancing their learning experiences and positively influencing their academic performance. Despite the potential benefits, Nigerian universities have not yet fully embraced the use of online collaborative tools as innovative learning aids (Abimbade, 2011).

To the best of the researcher's knowledge, there is limited research on how online collaborative tools can be effectively employed for learning and their impact on learning outcomes. This study aims to fill this gap by investigating undergraduate students' perceptions of the utilization of online collaborative tools for learning in selected universities within the South-west geopolitical zone of Nigeria. Purpose of the Study

The main purpose of this study is to investigate perception of the utilization of online collaborative learning tools by universities undergraduate, in South-West Nigeria. Specifically, this study will:

1. determine the attitude of undergraduates towards the use of online collaborative tools for learning;
2. determine the influence of gender on undergraduates' attitude towards the use of online collaborative tools for learning

Research Questions

The study will provide answers to the following research questions:

1. What is the attitude of undergraduates towards the use of online collaborative tools for learning in South-west Nigeria?
2. Do Nigeria university undergraduates' attitudes towards using Online Collaborative Tools for Learning vary based on gender in South-west Nigeria?

Meaning and Relevance of Information Communication Technology in Education

In recent years, there has been an interest on how computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all level and in both formal and non-formal settings. The emergence of information and communication technology in sustaining Nigeria's standard of education cannot be overruled due to its benefits in the teaching and learning (Ofondu, 2010).¹⁰⁸ ICT is an umbrella term that includes any communication devices or application, encompassing radio, television, cellular phones, computer and network hardware and software, satellites systems and as well as the various services and application associated with them such as video conference and distance learning (Akpan, 2008).The study further emphasize, that the use of ICT has become very important in human life most especially at the present time.

ICT has changed the way businesses and industries are conducted and influenced the way people work, interact and function in society (Bhattacharya & Sharma, 2007; UNESCO, 2002). ICT has become common phenomenon at home, at work, and in educational institutions (Kirkup & Kirkwood, 2005). The rapid rate at which new technologies change and develop also implies that higher education systems must keep pace with advancements in knowledge and skills, in addition to the demands and requirements for employees to stay relevant. It is crucial that universities in the region equip their students with the appropriate knowledge, skills and aptitudes to be competitive in an increasingly global and competitive economy. Although, the use of ICT is not the panacea for all the challenges faced by higher education systems in the region, it does leverage and extend traditional teaching and learning activities, and has the potential to positively impact on learning (Jaffer, Ng'ambi & Czerniewicz, 2007).

Furthermore, ICT is becoming increasingly ubiquitous within higher education, and it has been used far beyond enhancing teaching and learning to include promoting research, scholarly community engagement, and administration (Jaffer, 2007).In addition, the integration of ICT in higher education is also moving beyond getting personal computers into the hands of learners and towards mobile technology, virtual world, and cloud computing, among others. Thus, higher education systems has to be innovative and leverage on the developments in ICT to lead by example in using these technologies to provide more accessible, affordable, effective and efficient higher education. The nations and the people in the region are counting on graduates of their higher education systems to be competitive in creating wealth for their respective countries.

Researchers tend touse different terms when referring to the use of ICT in higher education, and some of the common ones include educational technologies, learning technologies, e-learning, online teaching, digital learning objects, communication technologies, web-based learning, hybrid or blended learning and virtual learning environments (Mlitwa 2007; Kirkup & Kirkwood; 2005, Smith, 2004). Blurton (2002) defined ICT broadly as a diverse set of technology tools and resources for communicating, creating, disseminating, storing, and managing information. However, regardless of the terms used, (Mlitwa,2007) linked these terms to knowledge about ICT,

ICT as a tool to advance knowledge, or ICT as a domain of knowledge for using ICT as a tool. As a tool, it extends human capabilities to solve problems, helps students in acquiring knowledge, and assists teachers and administrators in enhancing teaching and learning. Technology also encompasses the knowledge and skills required to effectively use ICT as a tool.

Traditionally, courses in universities have emphasized content and are centered on textbooks. Lecturers taught through lectures and presentations, and tutorials and assignments enabled students to rehearse and consolidate learning (Oliver, 2000).¹⁰⁹ However, current pedagogical orientation and instructional technologies coupled with the pervasive presence of ICT encourage curricula focusing on competency and performance. These curricula emphasize capabilities and place importance on how information is used and, thus, require access to a multitude of information sources and information types. Learning is student-centered and learners require confidence in their core intellectual abilities, such as communication, interpretation, reflection and resolution (Forde, 2007)

The use of ICT in higher education has resulted in a move from teacher-centered delivery and transmissive learning to student-centered learning. ICT functions as information sources and cognitive tools, supporting and enabling students to be responsible for their own learning (Jonassen & Reeves, 1996). Hattangdi and Ghosh (2008)¹⁰⁰ used the terms informative, situating and constructive tools to further define the functions of ICT. Learning environments become inquiry-based and problem-centered within authentic settings. Lecturers are facilitators, coaches and mentors and ICTs support the learning environment (Oliver, 2000).

Higher Education Students' Attitudes to Online Collaborative Tools for Learning

With the increased demand of higher education in Nigeria, e-learning has gained popularity. To meet the growing demand most of the Nigeria universities have set up an e-learning portal for students who do not have time to attend physical classes but have time to study online. Previously, research has been carried out to investigate the learners' attitude (Singh, 2005), perceived usefulness and challenges (Song, Singleton, Hill & Koh, 2004; Kim, Liu & Bonk, 2005), and factors leading to unsuccessful group collaboration (Roberts & McInnerney, 2007; Liu, Joy, & Griffiths, 2010) in a collaborative online learning environment. However, results have shown that student's attitude are likely to vary depending on type of e-learning technology used, infrastructure availability (internet and computers) and the use of different learner activity management systems (LAMs) in HLIs.

The Kim (2005) study on an MBA online course reveals that even when students had positive attitudes towards online learning because of its benefits (flexibility, more learning experience through social interaction and enhancement of virtual teaming skills) they are faced with some challenges such as difficulty in communication with peers, lack of sense of community and absence of real-time feedback. Existence of these challenges is an indication that learners in this course could not realize the benefits of collaborative learning.

Roberts and McInnerney (2007) identified seven common problems in an online learning environment: student antipathy towards group work, selection of the groups, lack of essential group-work skills, free-rider, possible inequalities of students' abilities, withdrawal of group members and assessment of individuals within the groups. Zorko (2009) investigated factors which inhibit collaboration in wikis and the study provided recommendations on how to increase collaborative behaviors in the wiki in problem based English language learning. Studies have also shown that online learners get frustrated with collaborative learning due to commitment

imbalance on the task and lack of common learning goals among students hence requiring the instructor to equip online learners with social and group skills necessary for effective collaboration (Capdeferro & Romero, 2012).

Research undertaken in the area of attitude and attitude formation shows that attitudes and beliefs are linked, and attitudes and behaviors are linked; moreover, attitudes are essentially divided into likes and dislikes (Siragusa & Dixon, 2008). With the broad expansion of ICT in education during the last decade, many research studies have explored the attitudes of users (educators and students) towards the integration of collaborative tools in learning (Gasaymeh, 2009; Wen & Shih, 2008).

University students in developing countries have varying attitudes towards e-learning but generally their attitudes are positive (El-Gamal & El-Aziz, 2011). This was emphasised by Nassoura (2012) who pointed out that many students had positive attitudes towards online collaborative tools for learning because it had a positive impact on their motivation as well as self-esteem. In some developing countries, the learning process and the adherence to traditional practices are inseparable. Thus, technology-based tools for e-learning are viewed as an interference with the practices that have been valued for generations.

A good example of this scenario is Botswana. According to Brown, Thomas, van der Merwe and van Dyk (2008), the socio-cultural environment in Botswana is very strong. Students in Botswana's higher learning institutions are still so strongly embedded in it that their attitude towards online collaborative tools reflects it. Despite having taken significant steps towards a Western-style economy and towards urbanisation, the country maintains strong connections to its traditional roots. According to Brown, Thomas, van der Merwe and van Dyk (2008), students gain most of their knowledge from their integration with the various communities that have strong values, knowledge and beliefs.

Deb (2011) asserted that attitude towards technology-based learning tools, in Botswana and other developing countries is gradually disappearing, as the obvious usefulness of these tools is being realised. As Internet-enabled mobile devices are becoming more and more popular in developing countries, so is the range of areas in which they are applied; and this includes online collaborative learning. Mobile devices such as Internet-enabled phones are very popular and are increasingly being used for blogging and social networking; this, in turn, helps improve user attitudes towards collaborative learning. Deb (2011), noted that the physical separation between the learner and the instructor tends to create a feeling of isolation on the part of the learner leading to negative attitudes towards the use of online collaborative tools.

Hussain, (2007) concluded that over 90% undergraduate students viewed learning through satellite TV and the Internet as advantageous, and student attitude towards collaborative learning were generally positive. Omidinia, Masrom and Selamat (2011) identified student attitudes as a factor that determined how e-learning was adopted in Iran. Selim (2007) stated users who were very familiar with web technologies and the skills needed to use computer and mobile devices for instruction developed positive attitudes. On the other hand, students who were not skilled in ICT became anxious about the use of computers, had lower expectations from educational technology, and they did not believe in the benefits of e-learning (Vrana, Garyfallos, Zafiroopoulos, & Paschaloudis, n.d.). Student attitudes towards the use of online collaborative tool have been identified as critical to the success of collaborative learning (Zhang & Bhattacharyya, 2008). Bhuasiri, Xaymoungkhoun, Zo, Rho and Ciganek (2012) found that in developing countries the most significant factors were related to increasing technology awareness and improving attitude

toward online collaborative learning, enhancing basic technology knowledge and skills, improving learning content, requiring computer training, motivating users to utilise e-learning systems, and requiring a high level of support from the university.

Attitudes have been shown to be an important predictor of usage and implementation of technology (Rodgers & Chen, 2002). While attitudes are not directly observable, they can be inferred from responses given that show some state or disposition that has been engaged (Eagly & Chaiken, 1993). The assumption by researchers is that attitudes are formed through a cognitive learning process where one gains information and then form beliefs. The information is gained through experiences with the object, such as the internet or a particular website (Eagly and Chaiken, 1993). With the high usage of the internet, it can be assumed that undergraduate students have had many experiences on the internet and have formed attitudes towards its educational usage. As more and more undergraduate students and educators are envisioning the internet as a source for information to be used in the classroom, it is important that we monitor students' attitudes and usage to ensure curriculum is developed to meet the needs of this technology rich generation.

Influence of Gender on the Use of Online Collaborative Tools for Learning

Gender is a socio-economic variable for analyzing roles, responsibilities, constraints, and needs of men and women in a given context. It refers to the social and cultural constructs that each society assigns to behaviors, characteristics and values attributed to men and women. The basis of the construct lies behind the idea that they are natural or intrinsic, and therefore, unalterable. These gender constructs are shaped by ideological, historical, religious, ethnic, economic and cultural determinants. These are usually translated into social, economic and political inequalities, where men's activities and their gender attributes are perceived as essentially superior to women's. Buttressing this notion, Oludotun (2021) opines that gender relations in Nigeria are characterized by a lot of imbalance, to the disadvantage of women, by keeping women in subordinate positions to their men counterparts.

The society and the male subculture still see women and their aspirations as subordinate, resulting in a situation in which the marginalization, trivialization and the stereotyping of women becoming glaring aspects of Nigerian life. According to Civil Resource Development and Documentation Centre (CIRDDOC, 2001) gender could be described as a system of roles and relationships between men and women that are determined not biologically but by social, political and economic context. Gender also involves the process by which individuals who are born into social categories of male and female become the social categories of men and women through the acquisition of locally defined attributes of masculinity and femininity which is beyond biological differences, all other differences between men and women are socially constructed and have no logical relationships with their biological composition. BurgosBebay (2010) asserts that though gender roles are distinctively different and important in every existing human society, they are nevertheless not unequal and that during struggles, they are irrelevant.

Burgos-Bebay (2010), Boserup (2007) argued that colonization came with gender inequality as an instrument to strategize the perpetuation of women subordination, subjugation and exploitation. In the developing nations like Nigeria, where people are raised in a culture highly dominated by role differentiations, the women are often reminded of their natural roles as wives and mothers and that these are the only places where they can fit in and perform. The effect therefore, is that women especially in Nigeria tend to shy away from other roles they can

comfortably fit into. This stereotype thereby strengthens the patriarchal worldview amongst most African that women are not expected to participate in decision-making process. By implication therefore, women should be seen not heard. The concept of gender is used to understand the social and political relations between men and women as well as how the concepts of femininity and masculinity are constructed. Gender attributions are therefore often justified on the basis of sexual or biological differences. For instance, women are perceived to be “naturally” nurturing, a characteristic linked to their reproductive capacity as child bearers. This gender attribution has permeated the field of science and technology globally. This is because it is often categorized as “hard” and therefore “masculine”, a field traditionally considered suited for men not women. For instance, the perception that women fare poorly in science and technology relative to men is often attributed to biological limitations of women, rather than to gender stereotypes in educational materials, teaching approaches, study opportunities and technological designs that contribute to gender gap in ICT use. Encapsulating the above situation, Okunna (2000) argues that the Nigerian woman is characterized by low self-esteem because the society has continued to regard her as unimportant and inferior to her male counterpart.

Methodology

This chapter presents the methods and procedures that was employed in the process of collecting data for this research. It will be presented under the following sub-headings: Research Design, Sample and Sampling Technique, Research Instrument, Validation of Research Instrument, Procedures for Data Collection and Data Analysis Techniques.

Research Design

This study is a descriptive research using cross-section survey method. The study is descriptive in the sense that the research describes events as they appear without any manipulation. A researcher-designed questionnaire was used to collect information from the respondents on the Perception of Undergraduates on the utilisation of Online Collaborative Tools for learning in selected Universities in South-West, Nigeria. Survey method was chosen for the study because it enabled the researcher to gather large amount of information on Undergraduates’ perception of collaborative tools for learning.

Sample and Sampling Techniques

The population for the study consists all the university undergraduate students in the South-western States of Nigeria. The target population for this study were all undergraduates’ students of the Faculty of Science and Education in all Federal and State universities in South-west Nigeria. Stratified random sampling technique was used to select undergraduates along gender from the Faculty of Science and Education of the federal and state Universities so as to obtain clear data for the variables of gender that was used for the analysis. This was done across departments in each of the selected faculties in the universities.

Research Instrument

The instrument for this study was a questionnaire adapted from the previous studies of Lund (2001)¹⁰⁶, Moon, Ji-won and Kim (2001)¹⁰⁶ and Olasedidun (2014). The questionnaire titled perception of undergraduates on the utilisation of online collaborative tools for learning. Items

were selected based upon their relevance to perceived usefulness, perceived ease of use, attitudes toward use and intention to use online collaborative tools for learning.

Section III was sub-divided into four (A-D). These sub-divisions are:

A. Undergraduate perceived usefulness of online collaborative tools for learning.

The response mode for the items was Likert type rating of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

Data Analysis Techniques

The analysis of data that was gathered through the questionnaire was done using descriptive and inferential statistics. The frequencies were converted to mean to answer the research questions
Result

Research Question Four: What is the attitude of undergraduates towards the use of online collaborative tools for learning in South-west Nigeria?

Table1: Attitude of undergraduates towards the use of online collaborative tools.

S/N		SA		A		D		SD		MEAN	SD
		N	%	N	%	N	%	N	%		
1)	I think positively about using blog, wikki and whatsapp for learning	392	27.8%	807	57.2%	173	12.3%	40	2.8%	3.10	.710
2)	Online collaborative tools are not relevant to my discipline	195	13.8%	333	23.6%	673	47.7%	211	14.9%	2.36	.898
3)	The use of online collaborative tools will hinder my learning development	203	14.4%	316	22.4%	642	45.5%	251	17.8%	2.33	.931
4)	I will never register for a course that will force me to use ICT tools for learning	103	7.3%	206	14.6%	637	45.1%	466	33.0%	1.96	.876
5)	Blogs, Youtube, flicker are not meant for learning but only for social engagements	299	21.2%	293	20.8%	590	41.1%	240	17.0%	2.46	1.006
6)	I wish that online collaborative tools were not as important as they are	288	20.4%	335	23.7%	463	32.8%	326	23.1%	2.41	1.055
7)	Using online collaborative tools has been a pleasant experience.	405	28.7%	680	48.2%	308	21.8%	19	1.3%	3.04	.747
8)	Online collaborative tools will make students to become lazy	221	15.7%	476	33.7%	496	35.1%	219	15.5%	2.50	.935
9)	The use of online collaborative tools in learning will make many students to fail if not discipline	401	28.4%	476	33.7%	473	33.5%	62	4.4%	2.86	.881
10)	Online collaborative tools can motivate the participation and can provide students with learning opportunity	374	26.5%	804	56.9%	142	10.1%	92	6.5%	3.03	.791
	Attitudes towards the use of online collaborative tools for learning	1412								2.61	

The attitude of undergraduates towards the use of online collaborative tools for learning in South-west Nigeria was reviewed and the result was presented in table 1. The findings indicated that 392 (27.8%) respondents strongly agreed that they think positively about using blog, wikki and WhatsApp for learning, 807 (57.2%) respondents agreed, 173 (12.3%) respondents disagreed while 40 (2.8%) respondents strongly disagreed. The mean score of 3.10 established that most of the respondents think positively about using blog, wikki and WhatsApp for learning. Also, majority of the respondents with 673 (47.7%) disagreed that Online collaborative tools are not relevant to their discipline, 195 (13.8%) respondents strongly agreed, 333 (23.6%) respondents agreed, and 211 (14.9%) respondents strongly disagreed. With a mean score of 2.36, Online collaborative tools are relevant to the discipline of most of the respondents. Furthermore, most of the respondents (642, 45.5%) disagreed that that the use of online collaborative tools will hinder their learning development, 203 (14.4%) respondents strongly agreed 316 (22.4%) respondents agreed while 251 (17.8%) respondents strongly disagreed. A mean score of 2.33 proved that the use of online collaborative tools will facilitate their learning development.

Further, out of the 1412 respondents, majority 637 (45.1%) respondents disagreed with the statement that they will never register for a course that will force them to use ICT tools for learning, 466 (33.0%) respondents strongly disagreed, 103 (7.3%) respondents strongly agreed, while 206 (14.6%) respondents agreed. A mean score of 1.96 proved that most of the respondents will register for a course that will force them to use ICT tools for learning. Also, higher number of respondents 590 (41.1%) disagreed with the statement that Blogs, YouTube, Flicker are not meant for learning but only for social engagements, 299 (21.2%) respondents strongly agreed, 293 (20.8%) respondents agreed while 240 (17.0%) respondents strongly disagreed. The mean score of 2.46 established that majority of the respondents believed that Blogs, YouTube, Flicker are meant for learning but not only for social engagements. 288 (20.4%) respondents strongly agreed that they wished that online collaborative tools were not as important as they are, 335 (23.7%) respondents agreed but majority (463&32.8%) respondents disagreed while 326 (23.1%) respondents strongly disagreed. A mean score of 2.41 proved that most respondents wished that online collaborative tools were as important as they are. 405 (28.7%) respondents strongly agreed that Using online collaborative tools has been a pleasant experience, 680 (48.2%) respondents agreed, 308 (21.8%) respondents disagreed while 19 (1.3%) respondents strongly disagreed. With the mean score of 3.04, majority of the respondents believed that Using online collaborative tools has been a pleasant experience.

The findings also established that 221 (15.7%) respondents strongly agreed that Online collaborative tools will make students to become lazy, 476 (33.7%) respondents agreed, 496 (35.1%) respondents disagreed while 219 (15.5%) respondents strongly disagreed. A mean score of 2.50 established that half the respondents opined that Online collaborative tools will make students to become lazy while the other half opined that Online collaborative tools will not make students to become lazy. 401 (28.4%) were respondents strongly agreed that the use of online collaborative tools in learning will make many students to fail if not discipline, 476 (33.7%) respondents agreed, 473 (33.5%) respondents disagreed while 62 (4.4%) respondents strongly disagreed. The mean score of 2.86 proved that the use of online collaborative tools in learning will make many students to pass. 374 (26.5%) respondents strongly agreed that Online collaborative tools can motivate the participation and can provide students with learning opportunity, 804 (56.9%) respondents agreed, 142 (10.1%) respondents disagreed while 92 (6.5%) respondents strongly disagreed. With mean score of 3.03, majority respondents agreed

that Online collaborative tools can motivate the participation and can provide students with learning opportunity.

The grand mean score on the Attitudes of undergraduate students towards the use of online collaborative tools for learning was 2.61. since the grand mean score of 2.61 is greater than the benchmark of 2,50, it can be deduced that undergraduate students possesses good attitudes towards the use of online collaborative tools for learning.

Research Question Nine: Do Nigeria university undergraduates' attitudes towards using Online Collaborative Tools for Learning vary based on gender in South-west Nigeria?

Table 1: Difference Between Male and Female Attitudes towards using Online Collaborative Tools for Learning.

GENDER RESPONDENTS	OF	N	% OF TOTAL N	MEAN	MEAN DIFFERENCE
MALE		744	52.7%	2.6219	
FEMALE		668	47.3%	2.5891	0.033
TOTAL		1412	100.0%	2.6064	

Difference in the attitude of online collaborative tools for learning between male and female Undergraduate Students in South-west Nigeria were analysed and the results presented in Table 16. The results showed that the mean score on the attitude of male Undergraduate Students towards online collaborative tools for learning of was 2.62 while that of their female counterparts was 2.59. The difference in the mean score on attitude of male and female Undergraduate Students towards online collaborative tools for learning was 0.03. The differences in the mean scores established a difference in the attitude of online collaborative tools for learning between male and female Undergraduate Students in favour of the male students.

Discussion of the finding

The attitude of undergraduates towards the use of online collaborative tools for learning was examined using research question 1. The result of the mean value showed that the responses of the respondents were on the positive side. This meant that the tendency of the students to welcome the innovation of using collaborative tools for learning was high.

In support of this finding,(El-Gamal & El-Aziz, 2011).⁹⁷revealed that University students in developing countries have varying attitudes towards e-learning but generally their attitudes are positive. This was also in consistent with Nassoura (2012) who pointed out that many students had positive attitudes towards online collaborative tools for learning because it had a positive impact on their motivation as well as self-esteem. In some developing countries, the learning process and the adherence to traditional practices are inseparable. Thus, technology-based tools for e-learning are viewed as an interference with the practices that have been valued for generations.

The findings of this study also validated the previous study of Kim (2005) whose study reveals that even when students had positive attitudes towards online learning because of its benefits (flexibility, more learning experience through social interaction and enhancement of virtual teaming skills) they are faced with some challenges such as difficulty in communication with peers, lack of sense of community and absence of real-time feedback. Existence of these

challenges is an indication that learners in this course could not realize the benefits of collaborative learning.

The intention of undergraduates intend to use online collaborative tools for learning in South-west Nigeria was examined by research question 5. I wish I never had anything to do with learning with online collaborative tools. The result of the mean score proved that university undergraduates intend to use online collaborative tools for learning in South-west Nigeria. The findings of this study agreed with the earlier findings of Venkatesh et al., (2003)¹¹⁸ as cited by Stigzelius (2011) defined behavioural intention, as the person's subjective probability that he or she will perform the behaviour in question. Robin (2011) explained Technology Acceptance Model to include the individual's behavioural intention to adopt the use of a system; behavioural intention is however intended to jointly determine the perceived usefulness and undergraduates attitude toward using online collaborative tools for learning. The study could not locate any other study to support or contradict this assertion.

Conclusions

This research explored the relationship among lecturers' perceived attitude towards collaborative tools in South-West Nigeria. The result obtained from data gathered and analyzed in this study indicated that the perception of undergraduates toward the usefulness of collaborative tools for learning was positive

The findings in the research also established that Male students have positive attitude towards the use of online collaborative tools for learning more than female Undergraduate Students. Also, the intention of undergraduates to use collaborative tools for learning was found to be positive. The result as well showed that there was a significant relationship between undergraduates students' perceived attitude to use collaborative tools for learning. The significant relationship was evident when each of the variables was used as dependent variable and others used as independent variables.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were made: Government and policy makers in education should endeavour to introduce the use of collaborative tools into university education curriculum in the universities so that both the lecturers and students will be using it for instructional purposes;

University students should help themselves by making use of collaborative tools for instructional purpose and shift their foci from using it for fun and entertainment;

Government should formulate workable ICT policy that will be friendly to all levels and categories of educational programme, universities not being left out;

Researchers in education should further develop keen interest on researching into collaborative tools. Such researches, if empirically based, would go a long way in establishing their findings with clearly stated recommendations. This would thus contribute to the existing knowledge;

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