

# **EXTENT OF UTILIZATION OF SOCIAL NETWORKING SITES FOR ENHANCING ACADEMIC LEARNING OF UNDERGRADUATE STUDENTS IN THE SOUTH-SOUTH NIGERIAN FEDERAL UNIVERSITIES**

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**Abstract.** The need for undergraduate students to utilize social networking sites for enhancing their learning necessitated the study. The study was carried out to determine the extent of utilization of social networking sites (SNSs) for enhancing academic learning of undergraduate students. Five research questions and five null hypotheses guided the study. Proportionately stratified random sampling technique was used to draw the sample size of 331 undergraduate students from three out of the five federal universities in south-south geopolitical zone of Nigeria. A questionnaire titled the use of Social networking sites for Enhancing Academic learning of undergraduate students (USNSEAL-UGS) was developed by the researchers for data collection. The data were analyzed using mean, standard deviation and Z-test statistics. The findings from the results revealed that undergraduate students utilize Facebook, Whatsapp and Google+ for enhancing their academic learning at great extent. Gender had no

influence on the undergraduate students' utilization of social network sites in enhancing their learning. Based on the findings, recommendations were made which include that seminars and workshops should be organized by donor agencies, philanthropists, management of tertiary institutions and student union government (SUG) for undergraduate students in order to enlighten them on its effective utilization in improving their learning and their learning outcome.

*Keywords:* social network sites, academic learning, undergraduates

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### **Introduction**

Academic learning in recent time is focused on the learner. The learners acquire information, knowledge, idea, value, attitude from the source which could be the teacher, facilitator, textbooks etc; the information acquired is delivered through the channel. All this processes makes learning to be active and interesting. This is in line with the research conducted by Okekeokosisi & Okeke (2015), Okekeokosisi & Okigbo (2019) that effective learning involves active participation of the learner and the teacher. Learners are the center of instructional delivery. Learners through an active mental process of development, construct knowledge. Learners are the builders and creators of meaningful knowledge. Offoma (2009) upholds this view by stating that learners should not be spoon-fed. This implies that some gaps should be left in the teaching and learning process for the learner to solve the problem by himself /herself. This type of instructional process needs to apply constructive principles.

Constructivist is derived from constructivism. Constructivism simply means learning by doing. It can be referred as the theory of learning whereby learners process new knowledge from prior knowledge (Okigbo & Okekeokosisi, 2016). This definition could be linked to that of Nwafor (2007); constructivism is a theory that rests on the idea that there is an innate human drive, to make sense to the world. This method of learning is based on the belief that knowledge is not a thing that can be simply given by the teacher at the front of

classroom to students in their desks. Hence the introduction of social networking sites in academic learning to encourage construction of knowledge, participation of learners, exchange learning and easy search for information.

Social networking sites (SNS) can be defined as a network of friends, colleagues and other personal relationship. Boyd & Ellison (2007) added that social network is a web-based service that allows individuals to construct profiles, display user connections, search and traverse within that list of connection (Boyd & Ellison, 2013). It is a Web site that provides a venue for people to share ideas, information, knowledge etc. together which can come inform of videos, audio, audio-visual, charts, text messages etc. SNS are group of internet-based applications that build on the ideological and technological foundations of web 3.0, which allow the creation of highly interactive platform through which students share ideas, discuss and modify user generated contents. Web 3.0 is a third generation of the internet-based services or web enabled by the convergence of several key emerging technology trends. Similarly, Ezenwa (2014) defined social network as a social structure made up of a set of social actors (such as individual or organizations in the context comprises of students, lecturers and other stake holders) and a set of the dyadic ties between these actors. Ezenwa's definition supported the earlier views of Okoro (2013), who opined that social network is an effective tool in the process of teaching and learning and have increasingly improved the quality of students' learning outcome in higher education in recent years. The process encourages students' active engagement, collaboration and participation in class activities and group work and provides a flow of information, dissemination in a sophisticated method that yields measurable results. Therefore, undergraduate students have to embrace social network as a tool for enhancing effective teaching / learning. In their view, Abdullahi & Joshua (2014) summarized the definition of social network as all about getting connected to one another. Users of social network are connecting to each other regardless of national boundaries, culture or religion within fields and

across industries. Martin (2008) outlined the types of social networks as; Facebook, LinkedIn, Twitter, Whatsapp, e-mail, Google+, Youtube, 2go among others, all of which have the general property of being internet-based applications that build on ideological and technological foundations of web 2.0 and that allow the creation of exchange of user-generated content. In the research conducted by Greenhow et al. (2009), they are outlined social network sites that specifically serve educational purpose as Twiducate, Tweentribune, Blackboard, EDU2, Wikispacesclassroom, EdmodoMinecraftedu, Sumdog and others. However, social networking strongly supports the logic to keep both students and the institutions updated with the evolving needs and offerings by allowing them to have a more direct and social level of relation. Furthermore, Abudullahi & Joshua (2014) stated that social networking sites are great avenues for educational institutions to interact with actual students and potential ones. It presents a platform that is evolving of digital media, based on the concept of sharing and discussing information among online undergraduate students' users of the social community.

The utilization of social networking in the field of education has greatly impacted on the quality of teaching and learning globally. SNSs provide new opportunities for innovating and evolving modern system of education, learning institutions and for preparing learners for the 21<sup>st</sup> century. In highlighting the impact of social networking sites in the field of education. Vervaart (2014) stressed that social networking has increased students' participation in academic group discussion, sharing of homework, projects, team work and ideas. This supported the earlier view of Edegoh et al. (2013) who posited that the use of social networking sites in classrooms has facilitated students' delivery of homework and assignments.

On the other hand, Ajjan & Hartshorne (2008) had pointed out that social networking sites have the potential to support teaching and learning in tertiary institutions in Nigeria, providing learners with a chance to manipulate their learning environment and to participate actively in the learning process, thereby

encourages students' active engagement, collaboration and participation in class activities and group work. Social networking sites also provide a flow of information dissemination in a sophisticated method that yields measurable results.

Tertiary institution lectures (teachers) can utilize social networking sites in a variety of ways to improve their teaching process and avail multiple benefits for collaborative professional development. In support, Abdullahi & Joshua (2014) highlighted some key benefits of social networking sites to include; peer networking, reflection and sharing of classroom practices, knowledge sharing, locating learning resources, post conferences, workshops and training discussion. Social networking sites can help students to share links, answer questions from the instructor and even post questions and comments to fellow students. This will help them meet the goals of education generally.

Academic learning or learning does not happen at once, but builds upon and is shaped by previous knowledge. Learning is the act of acquiring new or modifying existing knowledge, behaviour, skills and may involving synthesizing different types of information (Karban, 2015). In relation to the definition given by Karban (2015), learning may be viewed as a process rather than a collection of factual and procedural knowledge. Umar & Aina (2004) expanded the definition by adding that it is a psychological process that refers to any change of behaviour that is relatively permanent and could be attributed to a result of some particular experience, observation or training. From this definition, three things are noteworthy. They are; change in behaviour, relative permanence, consequence of experience, observation or tracing. All the three must exist before learning can take place. To Daniel in Okigbo et al learning is a process of meaning making, not of knowledge reception. Okigbo et al further postulated that the meaning making learning cannot be measured but its results can be. The results of meaning making learning can be seen from learners' personal development.

Gender has become a contemporary focus to most researchers because gender factor can have some powerful effect on learning and education. Over the years, gender phenomenon has been evaluated from different perspective in

terms of how they affect learning in adolescent (Edomareniye, 2010). This can be seen from the survey research conducted by Enang (2014) and Asabere (2012) which revealed that male students utilize Facebook for knowledge acquisition more than their female counterparts. This is in contrast to the findings of Berrett (2012), which indicated that female students are more attracted by Whatsapp-web activities and more likely to use it in learning compared with male counterparts. Agreeing with this, Berrett's (2012) study portrays that gender differences is a major factor on the extent social networking sites is utilized in academic activities.

### **Challenges encountered in using social networking sites in learning**

Tertiary institution students are faced with a lot of challenges in using social networking sites in enhancing their learning. These challenges include: (i) *Poor funding system*: Funding has always been a critical constraint on enhancement of students' effective learning in tertiary institution in Nigeria. Tertiary education is more expensive to run because of the nature of its programme. In citing Titiloye & Abdullahi (2013), the critical problem of inadequate funding over the years has resulted in inability of tertiary institutions to expand their physical facilities to cope with the over increasing demand of the 21<sup>st</sup> century. The attainment of qualitative education in this contemporary world rests squarely on the application of social networking technology laboratories needs to be well equipped with social networking gadgets. It should be well equipped and connected to the internet to support teaching and learning in tertiary institutions; (ii) *Non-availability or inadequate social networking sites*: Nigerian government has lost focus; the government finds it difficult to invest in citizen's education. Adegbenjo in Abimbola (2014) observed that government investment in education was low and that government finds it difficult to release the meager 26 percent international benchmark recommended by UNESCO as budgetary allocation to education for developing countries; (iii) *Poor internet connectivity*: Tertiary institution students and lecturers accessibility to internet

connectivity is a challenge to social networking sites development and utilization of such facilities to enhance students' learning. According to Jegbefume et al. (2014), this situation affects the smooth flow of information for and about education; (iv) *Irregular power supply*: Inadequate power supply is the major challenge militating against the use of social networking in enhancing students' learning in higher institutions. Power supply is needed to put virtually all the social networking sites in use, especially as it relates to the teaching and learning. Regrettably, the unavailability of power supply could lead to total failure of the use of these social network devices to enhance students' learning in institutions of higher learning; (v) *Computer-illiteracy among educators of higher learning*: Evidence abound that a large number of tertiary institution educators who are expected to enhance students' learning using social networking sites in teaching and learning are not computer-literates. This ugly development could be as a result of the fact that most of the lecturers have phobia for using social network devices as instructional aids, contributing to this, Seghiome, Banea, Ibrahim and Akuvuo in Jegbefume et al. (2014) revealed that a large number of men and women educators do not offer themselves the opportunity to be computer literate despite the fact that there are many computer training centres in virtually every street in the country's urban and rural areas, (vi) *High cost of social networking*: The cost of procuring social networking devices is really expensive in developing countries vis-à-vis developed societies of the world. Despite the high cost of the social networking, the benefits cannot be over emphasized more so, the effective use of the technology in teaching and learning to enhance students' learning in higher institutions could be defeated by daunting challenges experienced in making purchase of the social networking sites.

### **Statement of the problem**

In recent years, educational visionaries and reformers have held high hopes for the use of technology to improve the quality of education. With the

emergence of information and communication technology, numerous social networking sites (SNSs) like Facebook, Whatsapp and 2go among others are available for students to use in enhancing their learning. However, the researcher is worried that tertiary institution learners seem not to be harnessing the enormous educational potentials of these social networking technologies as they are constantly busy with their laptops and mobile phones taking pictures, chatting, updating profiles even when classes and lectures are on.

In agreement, Adebowale (2013) observed with great concern that students in tertiary institution have abandoned the use of SNS for assignments, library research, reading and team work in preference to chatting with friends even at lesson time. This takes much of students' study time, results in difficulty in balancing online actives (whatsapp) and academic preparation, distracts students from completing their assignments and adhering to their private studies table and poor academic performance. Therefore, this study sought to ascertain the extent of undergraduate students in South -South Federal Universities utilize SNS for enhancing academic learning.

### **Objectives**

The aim of the study was to determine the extent of undergraduate students in South -South Federal Universities utilize SNS for enhancing academic learning. Specifically, the study sought to find out the extent: (1) Facebook is utilized for enhancing academic learning by undergraduates' students in South -South Federal Universities; (2) Twitter is utilized for enhancing academic learning by undergraduates' students in South -South Federal Universities; (3) Whatsapp is utilized for enhancing academic learning by undergraduates' students in South -South Federal Universities; (4) Google+ is utilized for enhancing academic learning by undergraduates' students in South -South Federal Universities; (5) LinkedIn is utilized for enhancing academic learning by undergraduates' students in South -South Federal Universities



## **Research questions**

Four research questions guided the study. They are: (1) to what extent is Facebook utilized by undergraduate students for enhancing academic learning; (2) to what extent is Twitter utilized by undergraduate students for enhancing academic learning; (3) to what extent is Whatsapp utilized by undergraduate students for enhancing academic learning; (4) to what extent is Google+ utilized by undergraduate students for enhancing academic learning; (5) to what extent is LinkedIn utilized by undergraduate students for enhancing academic learning.

## **Hypotheses**

Five null hypotheses provided focus to the research which will be tested at 0.05 level of significance.

**H<sub>01</sub>:** Male and female undergraduate students did not differ significantly in the mean ratings on the extent Facebook is utilized for enhancing academic learning?

**H<sub>02</sub>:** Male and female undergraduate students did not differ significantly in the mean ratings on the extent Twitter is utilized for enhancing academic learning?

**H<sub>03</sub>:** Male and female undergraduate students did not differ significantly in the mean ratings on the extent Whatsapp is utilized for enhancing academic learning?

**H<sub>04</sub>:** Male and female undergraduate students did not differ significantly in the mean ratings on the extent Google+ is utilized for enhancing academic learning?

**H<sub>05</sub>:** Male and female undergraduate students did not differ significantly in the mean ratings on the extent LinkedIn is utilized for enhancing academic learning?

## **Methods**

The study adopted a descriptive survey research design. The population consisted of all university undergraduate students in south-south Nigerian federal universities from the faculty of education. The faculty of education is made up of 10 departments. They are; science education, vocational education, educational foundations, adult education, guidance and counseling, educational management and policy, library science, early child education, special education and human kinetics.

The sample comprised of 331 universities' undergraduate students (98 males and 202 females). Proportionately stratified random sampling technique was used to sample three out of five Nigerian federal universities in south-south geopolitical zone. In each of the three Nigerian federal universities, 10% of the populations of undergraduate students from the faculty of education were used for the study. Thus, a sample of 331 university undergraduate students was drawn and used for the study. Researchers made 31-item structured questionnaire titled "the use of Social networking sites for Enhancing Academic learning of undergraduate students (USNSEAL-UGS)" was used for data collection.

The questionnaire was in two sections, section A and B. Section A sought information on gender. Section B sought information from five sub-areas which include: (i) extent of Facebook utilization in enhancing academic learning; (ii) extent of Twitter utilization for enhancing academic learning; (iii) Extent of Whatsapp utilization for enhancing academic learning; (iv) extent of Google+ utilization for enhancing academic learning; (v) extent of LinkedIn utilization for enhancing academic learning.

The instrument was structured on a four-points rating scale of Very Great Extent (VGE) – 5 points, Great Extent (GE) – 4points, Moderate Extent (ME) - 3 points, Small Extent (SM) – 2points, Very Small Extent (VSE) - 1point. The instrument was face validated by two experts in Measurement and Evaluation in the Faculty of education of Nnamdi Azikiwe University Awka, Nigeria. Two other experts in Computer Science Department in the Faculty of

Physical Sciences of the aforementioned University joined in the validation of the instrument.

The instrument was pilot-tested using 28 students drawn from schools not involved in the study. Test-retest method was used, first copies of the instrument were administered to the respondents and after an interval of two weeks, the instrument was re-administered on the same subjects and collected at a Spot. 100% return was recorded. Data from the two tests were analyzed using Pearson product moment correlation co-efficient which yielded the following values 0.66, 0.82, 0.94, 0.69 and 0.61 for each cluster A to E respectively. Thus the overall value is 0.74. This shows that the instrument is reliable and adequate for the study. The questionnaire was administered to the respondents by the researchers with the help of two research assistants. The questionnaires were retrieved on the spot, thus ensuring 100% return. Data collected were analysed using mean, standard deviation to answer the research questions while Z-test statistics was used to test the hypotheses at 0.05 alpha levels. The criterion mean was set at 2.50. Items with mean of 2.50 and above indicated that respondents accepted the level of utilization of SNS in enhancing academic learning while mean score below 2.50 is regarded as not acceptable by respondents as the level of utilization of SNS in enhancing academic learning. This implies that an item in the research question with a mean rating of 2.50 and above shows that the item was accepted. However, if the value falls below 2.50, the item stood rejected. The hypotheses were tested at 0.05 level of significance using Z-test statistics.

## **Results**

Results were presented on tables according to research questions and hypotheses in the study.

*Research question one:* To what extent is Facebook utilized by undergraduate students for enhancing academic learning?

**Table 1.** Mean and standard deviation on the extent of Facebook utilization by undergraduate students for their academic learning enhancement; N = 300

S/N	Items on Facebook	Mean	SD	Decision
	I utilize Facebook to			
1	Share book reviews	3.51	0.74	Great extent
2	Search online projects	3.30	0.69	Moderate extent
3	Enhance communication with lecturers and fellow students	4.59	0.35	Verygreat extent
4	Follow news feeds	4.57	1.05	Verygreat extent
5	Post assignments and lecture schedules	4.00	0.96	Great extent
6	Elicit conversation via comments	3.89	0.87	Great extent
7	Share educational resources	4.33	0.46	Great extent
	<b>Grand Mean</b>	<b>4.02</b>		<b>Great extent</b>

Data in Table 1 shows that one of the items is being utilized for enhancing academic learning of undergraduate students at moderate extent. Out of the seven Facebook items listed, undergraduate students utilized four at great extent and the rest at a very great extent. The grand mean of 4.02 can attest to it. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their rating.

*Research question two:* To what extent is Twitter utilized by undergraduate students for enhancing academic learning?

**Table 2.** Mean and Standard deviation on the extent of Twitterutilization by undergraduate students for their academic learning; N = 300

S/N	Items on Twitter	mean	SD	Decision
	I utilize Twitter to			
8	Tweet about upcoming assignments	1.90	1.08	Small extent
9	Create a career list	2.22	1.10	Small extent
10	Provide the class with a running news feed	2.49	0.35	Small extent
11	Coordination assignments	1.76	1.46	Small extent

12	Follow issues in the class	1.63	0.91	Small extent
13	Network with other students	1.94	1.08	Small extent
14	Post education videos	2.28	1.02	Small extent
15	Facilitate research	2.18	1.02	Small extent
	<b>Grand Mean</b>	<b>2.05</b>		<b>Small extent</b>

Table 2 points that all the items listed are being utilized for enhancing academic learning by undergraduate students at a small extent. The grand mean of 2.05 x-rays that on the whole, undergraduate students in the area of the study utilize Twitter for academic learning at a small extent.

*Research question three:* To what extent is Whatsapp utilized by undergraduate students for enhancing academic learning?

From Table 3, only one item is being utilized in facilitating learning by undergraduate learners at moderate extent. Out of the six Whatsapp items listed, undergraduate students utilized three at a great extent and the rest at a very great extent. The grand mean of 4.16 addresses the situation.

**Table 3.** Mean and standard deviation on the extent Whatsapp is utilized by undergraduate students for their academic learning; N = 300

S/N	Items on Whatsapp	mean	SD	Decision
16	I utilize Whatsapp to increase the level of communication between fellow students and create another avenue for learning	4.50	0.75	Very great extent
17	Create audio lessons that can be sent directly to other students	4.50	0.61	Verygreatextent
18	Enhance critical thinking	4.32	0.78	Great extent
19	Stay in contact with other students outside the classroom and remind them of upcoming assignments	4.17	1.04	Great extent
20	Send out assignment to fellow students even when they are not in class	4.24	0.92	Great extent
21	Create video lessons using solutions such as You Tube fellow students can share via Whatsapp	3.24	0.25	Moderate extent
	<b>Grand Mean</b>	<b>4.16</b>		<b>Great extent</b>

*Research question four:* To what extent is Google+ utilized by undergraduate students for enhancing academic learning?

**Table 4.** Mean and standard deviation on the extent Google+ enhances undergraduate students academic learning through its utilization; N = 300

S/N	Items on Google+	mean	SD	Decision
22	I utilize Google+ to Find assignment on the internet	4.64	0.34	Very great extent
23	Communicate with peers in another school	4.69	0.44	Verygreat extent
24	Align communication with other students	4.67	0.52	Very great extent
25	Share an anonymous writing samples with fellow students	4.52	0.17	Very great extent
26	Post announcement to follow students	4.56	0.52	Very great extent
27	Streamline cross-curricular projects with other students	4.55	0.44	Very great extent
28	Encourage fellow students to use smart phones for formal learning	4.63	0.45	Very great extent
	<b>Grand Mean</b>	<b>4.52</b>		<b>Very Great extent</b>

In Table 4, all the items listed promote undergraduate students academic learning at a very great extent. The grand mean of 4.52 can speak to it.

*Research question five:* To what extent is Linkedin utilized by undergraduate students for enhancing academic learning?

Table 5 pinpoints that all Linkedin items listed only two where utilized by learners in higher institutions of learning at a very small extent. The grand mean of 1.44 addresses the issue.

**Table 5.** Mean and standard deviation on the extent LinkedIn facilitates undergraduate students academic learning through its utilization; N = 300

S/N	Items on LinkedIn	Mean	SD	Decision
29	I utilize LinkedIn to Add work samples, images and video introductions to the profiles	1.03	0.17	Very small extent
30	Create assignments that utilize LinkedIn as a research tool	1.66	1.27	Small extent
31	Design activities around LinkedIn interviews	1.49	0.82	Great extent
32	Share the networking benefits of LinkedIn with learners	1.44	1.09	Very small extent
33	Develop a LinkedIn group to keep fellow learners up-to-date and connected	1.57	1.17	Very small extent
	<b>Grand Mean</b>	<b>1.44</b>		<b>Small extent</b>

*Hypothesis one:* Male and female undergraduate students did not differ significantly in the mean ratings on the extent Facebook is utilized for enhancing academic learning?

**Table 6.** Z-test analysis of male and female undergraduate students on the extent Facebook is utilized for enhancing academic learning; N - 300

Gender	N	X	SD	df	Z-cal	Z-crit	Decision
Male	98	3.49	1.04	298	-1.59	1.96	
Female	202	3.64	1.07				Accept

From Table 6, the Z cal is -1.59 which is less than Z critical (1.96) at 298 degree of freedom. The null hypothesis that male and female undergraduate students did not differ significantly in the mean ratings on the extent Facebook is utilized for enhancing academic learning is therefore upheld.

*Hypothesis two:* Male and female undergraduate students did not differ significantly in the mean ratings on the extent Twitter is utilized for enhancing academic learning?

**Table 7.** Z-test analysis of male and female undergraduate students on the extent Twitters utilized for enhancing academic learning; N = 300

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>SD</b>	<b>df</b>	<b>Z-cal</b>	<b>Z-crit</b>	<b>Decision</b>
Male	98	2.02	0.71	298	1.21	1.96	
Female	202	1.91	0.79				accept

The analysis in Table 7 showcase that the Z cal is (1.21) less than Z-crit (1.96) at 298 degree of freedom. The null hypothesis that male and female undergraduate students did not differ significantly in the mean ratings on the extent Twitter is utilized for enhancing academic learning is hereby accepted.

*Hypothesis three:* Male and female undergraduate students did not differ significantly in the mean ratings on the extent Whatsapp is utilized for enhancing academic learning?

**Table 8.** Z-test analysis of male and female undergraduate students on the extent Whatsapps utilized for enhancing academic learning; N = 300

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>SD</b>	<b>Df</b>	<b>Z-cal</b>	<b>Z-crit</b>	<b>Decision</b>
Male	98	4.00	0.47	298	3.61	1.96	
Female	202	3.73	0.82				reject

Table 8 shows that the calculated Z -value of 3.61 is greater than the critical Z -value of 1.96 at 298 degree of freedom. This implies that male and female undergraduate students differ significantly in the mean ratings on the extent Whatsapp is utilized for enhancing their academic learning. Hence, the null hypothesis is rejected

*Hypothesis four:* Male and female undergraduate students did not differ significantly in the mean ratings on the extent Google+ is utilized for enhancing academic learning?



**Table 9.** Z-test analysis of male and female undergraduate students on the extent Google+ is utilized for enhancing academic learning; N = 300

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>SD</b>	<b>Df</b>	<b>Z-cal</b>	<b>Z-crit</b>	<b>Decision</b>
Male	98	4.37	0.69	298	-0.57	1.96	
Female	202	4.41	0.10				accept

In Table 9, the Z-cal is -0.57 which is less than the Z-crit of 1.96 at 1.96 degree of freedom. This means that male and female undergraduate students did not differ significantly in the mean ratings on the extent Google+ is utilized for enhancing academic learning of undergraduates. Therefore, the null hypothesis was accepted.

*Hypothesis five:* Male and female undergraduate students did not differ significantly in the mean ratings on the extent LinkedIn is utilized for enhancing academic learning?

**Table 10.** Z-test analysis of male and female undergraduate students on the extent LinkedIn is utilized for enhancing academic learning; N = 300

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>SD</b>	<b>df</b>	<b>Z-cal</b>	<b>Z-crit</b>	<b>Decision</b>
Male	98	1.95	1.07	298	1.47	1.96	
Female	202	1.93	1.19				accept

Table 10 portrays that the calculated Z-value of 1.47 is less than the critical Z-value of 1.96 at 298 degree of freedom. This explains that male and female undergraduate students did not differ significantly in the mean ratings on the extent LinkedIn is utilized for enhancing academic learning. Therefore, accept the null hypothesis.

## **Discussion**

The findings from the results shown on Table 1 revealed that, undergraduate students use Facebook for their academic learning enhancement at great extent. Table 6 further points that male and female undergraduate students did not differ significantly in the mean ratings on the extent Facebook is utilized for enhancing academic learning. Hence Facebook promotes learning. The results of the study gave credence to the findings of Harper in Hamade (2013) and Karimi & Khodabandelou (2013) that Facebook is effectively use by tertiary institution learners at a very high extent. This can be attributed to its low cost, positive impact in learning, strengthening interpersonal relationships, improving self-esteem and encouraging virtual meeting with co-research scholar. In line with the findings of Singh & Kumar (2013), male and female do not differ significantly on the extent of their utilization of Facebook for academic purpose. This means that Facebook is for knowledge acquisition.

Table 2 finds points that undergraduate students make use of Twitter in small extent for their academic learning. Table 7 explains it further by revealing that male and female undergraduate learners do not differ significantly in their mean rating on the extent of Twitter usage in academic learning. This agrees with the findings that male and female students utilize Twitter for academic purpose in a very small extent.<sup>1)</sup>

The findings of the study in Table 3 revealed that undergraduate students utilize Whatsapp for enhancing their academic learning at great extent. The findings are in accordance with the opinion of Susilo in Stefko & Mudrik (2016), which found that students in developing countries (Nigeria inclusive) utilize Whatsapp to a great extent. The reasons according to the Susilo (2014) could be the fact that using Whatsapp in learning supports multiple accesses to learning resources which impacts students' ability to engage with peers and the tutor synchronously. In line with this, Rambe & Bere (2013) indicated that Whatsapp affordance for asynchronous communication directly impact students' active participation in learning. The retrievability of messages posted when students

are offline, outside network coverage or when their devices are switched off means that they could participate any time irrespective of context. Multiple interaction modes and diverse temporal times widened opportunities for student involvement without missing conversation flows. Still from Rambe & Bere (2013), students believe that Whatsapp discussion forums allow them to reflect “deeply” on questions and queries before giving their opinions. Furthermore, Table 8 indicated that there is no significant difference in the mean rating of male and female undergraduate students on the extent of Whatsapp utilization in learning. Agreeing with this, Barnett (2012) stressed that gender differences is a major factor on the extent social networking sites is utilized in academic activities. Barnett added that Whatsapp –web activities and features attracts users.

With respect to the fourth research question, Table 4 and Hypothesis 4, Table 9 respectively show case that undergraduate learners of higher institutions utilize Google + at a very great extent for their academic purpose. This is consistent to the findings of Brijju & Franklin (2013), that students of all ages utilize Google + for enhancing academic learning at a very great extent. It was not surprising that all the students indicated high usage of this social networking site. This is because of its educational benefits not only to the students, but also to teachers, school management, business men and women and they like. Google + gives students’ easy, convenient and rapid access to massive amount of information in their area of study and wider knowledge. This concurred with that of Roebuck & Siha (2013) that gender was not a significant factor on how students utilize social networking sites for academic purpose.

Analysis in Table 5 and Table 10 respectively made known that LinkedIn is of very small extent in area of its utilization by undergraduate learners of universities. Male and female undergraduates do not differ significantly in their mean rating on the extent LinkedIn is use for academic learning. This visible notice could be linked to the findings of Seaman & Tinti-Kane (2013) that LinkedIn is not effectively used by learners. Seaman & Tinti-Kane (2013) added

that the users utilize it for sales of products, business communications and building relationships. In the findings of Yukselturk & Buluf (2009) the null hypothesis was accepted that there are no gender effects in utilizing LinkedIn for learning.

### **Summary of major findings**

The study found out that: (A) Undergraduate students utilize Facebook for enhancement of their academic learning; (B) Whatsapp are being utilized in enhancing academic learning of undergraduate students; (C) Undergraduate students utilize Google+ for their academic learning enhancement.

### **Educational implementation**

For effective enhancement of undergraduate students academic learning, calls for students enlightens on how to utilize SNS in improving their learning. This will promote self-learning, discovery and skill development.

### **Conclusion**

The study concludes that some of the social networking sites which could help in learning are slightly utilized by learners in learning, not minding their educational benefits.

### **Recommendations**

Based on the findings of the study, the following recommendations were made: (i) Social network sites should be expanded and new pages should be created to enhance academic activities to avoid set backs on the students learning; (ii) Seminars and workshops should be organized by Donor agencies, Philanthropists, Tertiary institutions and Student union government (SUG) for undergraduate students in order to enlighten them on its effective utilization in improving their learning and their learning outcome.

## NOTE

1. <https://twittermood.s3.amazonaws.com/images/poster.pdf>

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