



STUDENTS' ATTITUDE TOWARDS USING WHATSAPP FOR EDUCATIONAL ACTIVITIES AT FEDERAL UNIVERSITY DUTSIN-MA, KATSINA STATE, NIGERIA

Suleiman A. Ahmad, Ph.D.

Department of Educational Foundations, Federal University Dutsin-Ma, Katsina State, Nigeria

Corresponding author's email: saahmad@fudutsinma.edu.ng

ABSTRACT

Social networking sites have been so popular among students in Nigerian universities and other parts of the world. They use them for different purposes, patterns and modes. WhatsApp is one of them. It's a free messenger application that works across multiple platforms like iPhone and android phones. This universal application is being used widely among undergraduate students. They use it to send multimedia messages like photos, videos, audios and documents or simple text messages. It's clear that class groups created on WhatsApp are used as medium for teaching and learning. This comes in form of communicating with students by nurturing a kind of social atmosphere in the class. It helps in framing dialogue and collaboration between the students and their teachers. This research is a descriptive survey designs. The sample size comprised of 101 undergraduate and postgraduate students who were randomly selected from the different stratified levels of clustered departments. They were derived from the seven faculties of the university. The Research developed and used questionnaire as the study's instrument. Three (3) research questions guided this study; while the analytical tools were descriptive statistics in form of mean and standard deviation. Other tools employed were t-test and ANOVA by using SPSS version 23. Overall, findings demonstrated high level of attitude towards WhatsApp among the students. It also showed how the students use the application in various modes. The general findings confirmed that WhatsApp is being used as an academic tool for both teaching and learning in Federal University Dutsin-Ma.

Keywords: Social Media, Student Attitude, WhatsApp, Education

INTRODUCTION

The world is in constant changing as a result of the advancement brought by science and technology. It seems quite hard these days to escaping technology. (Johnson and George, 2014) Social Networking Sites (SNSs) have been so popular among students in universities. They use different types of SNSs and for different purposes, patterns and modes in different parts of the world. The students mostly use their smart phones in accessing the SNSs (Vorderer, Krömer and Schneider, 2016). This enables them to use it anytime and anywhere. SNSs have been used for variety of purposes including communication, exchanging media, and entertainment (Raza, Qazi and Umer, 2017; Eid and Al-Jabri, 2016, Gasaymeh, 2017). WhatsApp is found to be one of the current changes in social networking technology that is commonly used mainly on mobile phones and computers. (Eric, 2015)

Gasaymeh (2017) stated that WhatsApp Messenger is one type of SNSs that might have potentially support teaching and learning in higher education. WhatsApp Messenger has been so popular in different parts of the world Statista, 2017 on their statistics showed that there were 1.2 billion active monthly users of WhatsApp in the year 2017. (Naveen Kumar, 2017)

Gasaymeh, (2017) further affirmed that "WhatsApp Messenger is a smartphone and web-based instant message application that allows users to exchange information using a variety of media including text, image, video, and audio messages". WhatsApp is a free, easy to use, fast, convenient, personal mode of communication. (Church and de Oliveira, 2013; Sahu, 2014)

Sonia and Alka (2017) also opine that "WhatsApp is a free messenger application that works across multiple platforms like iPhone and android phones, and this application is being widely used among undergraduate students to send multimedia messages like photos, videos, and audios along with simple text messages." (p. 23). It requires registering using a mobile phone number before it is used. To be eligible for registration user must confirm to be above 13 years and a valid mobile number duly subscribe to a particular data plan or Wi-Fi connectivity. The registered users must agree and conform to their privacy terms, legal policies and condition. The latest version was 2.18.277 and all their copy right is protected. (WhatsApp Corporation, 2018)

Social media and newer instant messaging applications are rapidly changing our mode of communications; their emergence and proliferation has impacted significantly how students learn and the way instructors teach (Griesemer, 2014; Hamiyet, 2016). Upon these, WhatsApp, as a relatively new tool, could be good for educational activities; and has quite similar positive characteristics just like other previous social media technological tools that are implemented to support academic activities. WhatsApp has some additional features that can encourage teachers and students to use in order to enhance understanding. (Bouhnik and Deshen, 2014; Hamiyet, 2016) Izyani and Mohamed (2016) asserted that "such technology gives an immense impact on human lives where the use of

WhatsApp application in education carries positive response to the learning development; This application has become popularly in use as a teaching and learning tool in many institutions" (p. 93).

Johnsons and Goerge (2014) as mentioned in Izyani and Mohamed (2016) asserted that "WhatsApp is apparently a new phenomenon; only a few researches could be found about the WhatsApp usage as a communication platform between students and teachers thus suggested for in-depth future studies on the issue of attitude, impact and effect of WhatsApp in teaching and learning" (p. 84)

WhatsApp messenger was purposely created by Brian Acton and Jan Koum in 2009 to make communication and the distribution of multimedia messaging more easily and faster. The duos earlier were coworkers for 20 years at Yahoo. "WhatsApp after few years later was acquire by Facebook in 2014 but continued to operate as a separate application with a laser focus on building a messaging services that works fast and reliable anywhere in the world." (Eric, 2015)

WhatsApp as stated on its website (www.WhatsApp.com) is a text based messaging application for mobile smart phones and computers. It allows users to create and share text-based chats, media messages such as GIF images, videos and audios using Internet connection. WhatsApp mainly depends on an active Wi-Fi network or mobile subscribe data system to provide its users the ability to send and receive different social applications online. It connects directly to one's phone number without any password or login.

Statistics have shown that there were "1.2 billion active monthly users of WhatsApp in 2017" (Statista, 2017). WhatsApp facilitates "online collaboration and communication and promotes students' school performance" (Barhoumi, 2015). For instance, in just one year between January 2015 and February 2016, the number of active users had grown sharply from six hundred million to one billion. As at December 2017 the users reached 1.2 billion. The current users on WhatsApp in December 2018, is 1.5 billion from across 180 countries.

Rosenberg and Asterhan (2018) reaffirm that WhatsApp is a Mobile Instant Messaging (MIM) application made available to the public for the first time in 2009. Within several years, WhatsApp gained "incredible popularity in many countries around the world" (p. 23). They further stated that "at the beginning of 2016 one in every seven people on the globe uses the WhatsApp application (compared to 700 million users of Facebook Messenger)" (p. 24). For instance it was reported that "in Ghana's tertiary institutions many students frequently use WhatsApp to keep self in campuses and for academic purposes" (Yeboah, and Ewur, 2014); and in "Israel, around 93% of adults use the application, and the average number of WhatsApp messages teenagers receive stands at around 500 per day" (Rosenberg and Asterhan, 2018).

According to Bere (2016), WhatsApp messenger has the following collaborative features:

- **Multimedia:** It allows the user to exchange videos, text messages, images and voice notes.
- **Group Chat:** It supports the interaction of up to 50 group members.
- **Unlimited Messaging:** The number of messages you can share on WhatsApp is unlimited. The application uses 3G/EDGE internet data plan or Wi-Fi to ensure continuous data transmission across platforms.

- **Cross Platform Engagements:** Users interact with different devices (personal digital assistants, Smart phones, Galaxy tablets) to message one another through various media (text messages, pictures, videos, voice notes).

User can use WhatsApp by phone's Internet connection to send messages to friends and family for free so you can avoid SMS fees. However data charges may apply. It helps keep in touch with the groups of people that matter the most, like one's family or coworkers. With group chats, user can share messages, photos, and videos with up to 256 people at once. User can also create and name group, mute or customize notifications, and more. With WhatsApp on the web, one can seamlessly synchronize all chats to a personal desktop computer so that one can chat on whatever device is most convenient. The WhatsApp desktop app package is downloadable from the website 'www.WhatsApp.com'. WhatsApp keep trail of all interaction by indicating if the message is a forwarded, copied, modified or newly created by the sender. Each message is limited to only 20 recipients at a time. It provides two (2) level verification features on its setting tool which if activated is quite effective in preventing hacking the individual accounts.

WhatsApp supports voice calls, so that one can talk to other users i.e. friends and family for free, even if they're in another country. The free video calls, allows for face-to-face conversations for when voice or text just isn't enough. WhatsApp voice and video calls uses phone's Internet connection, instead of cell plan's voice minutes; thus, cuts expensive calling charges.

On WhatsApp users' personal moments are shared; the package has end-to-end encryption into the latest versions of the application. When end-to-end encrypted, messages and calls are secured means its only the user and the other person communicating with can read or listen to them and nobody in between, not even WhatsApp Corporation can have access to it. WhatsApp allows capture with a built-in camera the moments and send photos and videos instantly. WhatsApp, send documents up to 100 MB of photos, videos, documents in (.pdf) and other formats, spreadsheets, slideshows and so forth very quickly even if one is on a slow connection.

WhatsApp offers status package for the user that have phone numbers saved on each one's phone memory. The status package allows users snapshot pictures, record videos and upload them directly from the phone gallery or even type a text to the status update. The status update as default last for 24 hours before it automatically disappears.

There are many literatures that highlight on the impact of WhatsApp in teaching and learning. For instance, a study was conducted in Uyo, Akwa Ibom State by Etim, Idongesit and Ema (2016) on WhatsApp utilization and academic performance of geography students. They revealed a significant influence of WhatsApp utilization on geography students' academic performance (p. 45). Also, Mingle and Adams (2015) investigated on the 'participation of Ghana High Schools students in social media network and their academic performances'. They found that social media network participation negatively affected the students' performance. Jairus, Christian, Ogwuche, Thomas, Taiyol, Ode, Ekpo and Adoga (2017) examined the 'use of mobile phone and its influence on Benue State secondary school students' academic

performance'. They found that there was a significant relationship with the students' mobile phone usage and their academic performance (p. 19). Izyani and Mohamed (2016), in their study, noted that "WhatsApp utilization is important since it enhances students' proficiency in the use of English language and help them learn the language better" (p. 96).

Kumar, Lian and Vasudevan (2016) investigated on the 'opinions of students towards WhatsApp utilization as an instructional tool; they found that, "using WhatsApp both within and out of classroom environment improved the learning performance of students since students can use it anywhere-anytime." (p.17)

Johnson and George, (2014) hold the view that "with WhatsApp messenger, communication through mobile phones has become easier, faster and cheaper." To them, it is also "less expensive as compared to the normal messaging on mobile phone". They also stated that "an individual can chat with friends and family overseas through WhatsApp without having to incur global SMS charges." They further opined that the "provision and access to learning material anywhere, anytime, and in various formats has potential to enhance deep student learning capabilities." In their report they also reaffirmed that in higher education, WhatsApp is used for the enhancement of discussions and sharing information among students and their lecturers (p. 87).

Joicy and Sornam (2018) reported that Malecela (2016) asserted that "using WhatsApp as learning tool is useful to both students and instructors." They also suggested that "electronic etiquette should be applied in teacher student learning process through WhatsApp".

Technology is really changing the educational landscape in the modern days. Internet technology has shifted both teaching and learning from the static state to a more dynamic and mobile platform; In essence "information and knowledge available to both teachers and learners are no longer tied to the boundaries of classroom environment but can be acquired anywhere, even on-the-go". (Eberechukwu and Queendarline, 2018; Levent, 2017) Patil (2015) identifies postgraduate students' conceptualization and usage of WhatsApp Messenger. In his study he holds that WhatsApp messenger is used by a greater majority of postgraduate students regularly for educational purposes. He thus suggested that university must integrate the mobile technology into learning process so that a platform can be created to share the digital information.

Many studies concluded on the positive impacts of WhatsApp as an important application for educational purposes such as for "effective information-sharing and ease of communications" (Levent, 2017). It is also stated that Facebook and WhatsApp were also found to be "common applications used for information sharing and academic communication among university students especially for academic activities" (Devi and Tevera, 2014).

Aicha, (2014) stated that "WhatsApp reaches everyone immediately". Nitza and Roman (2016) added that "WhatsApp also allows student users review materials at home and come with additional knowledge beyond the formal classes. Moreover, teachers can correct students' mistakes immediately and add comments." Following use of WhatsApp groups, students feel confident, and have chance to ask questions. "Even students who do not stand out in class can express themselves with this app without feeling shame and helplessness teacher

will answer their questions quickly and effortlessly." (Buchnik and Deshen, 2014)

Following the incessant use of WhatsApp, it is evident that it too has entered the educational system and academia. Previous studies have found that class WhatsApp groups are used for communicating with students, nurturing a social atmosphere in class, forming a dialogue and collaboration between the students, and as a means of learning. Another benefit of this application is the possibility it gives to teachers to become more familiar with their students and to influence students' discourse. Moreover, "WhatsApp has academic benefits evident in the availability of the teacher, learning that continues outside the classroom and rapid access to study materials" (Nitza and Roman, 2016). WhatsApp is found to be "one of the most popular SNSs among university students" (Joicy and Ally Sornam, 2018).

The study of Raiman, Antbring and Mahmood (2017) which was based on finding out the possibility of supplementing medical education among medical students with WhatsApp messenger especially during clinical attachment; the study revealed that there was "high WhatsApp Messenger acceptance and feasibility as supplement during Problem-Based-Learning education among medical students" (p. 27).

Gasaymeh (2017) also investigated university students' usage of WhatsApp for educational and personal perceptions towards WhatsApp integration into teaching/learning. The study observed that "university students' WhatsApp usage for social/personal purpose was high" while that for "educational purpose was low". However, they perceived that "it will be useful and fun if WhatsApp is integrated into their teaching/learning" (p. 6).

Nitza and Roman (2016) on their study they investigated students' achievement and satisfaction levels in a seminar course when learning through WhatsApp platform. Their findings observed "positive correlation between achievement and satisfaction among WhatsApp users" (p. 237).

Yeboah and Ewur (2014) used quantitative methods to study on 'the impact of WhatsApp usage on students' performance in tertiary institutions in Ghana'. The study showed "negative impact upon students." Some of the distractive dimensions identified were, "destruction of students' spellings and grammatical construction of sentences"; "lack of concentration during lectures." These resulted in "unbalanced WhatsApp activities" as well as "poor academic preparation and distraction from assignment work" (p.163).

RESEARCH OBJECTIVES

The following objectives were raised for this study:

1. To investigate on attitude towards the use of WhatsApp among students in Federal University Dutsin-Ma
2. To investigate the extent of the use of WhatsApp for education purposes among students in Federal University Dutsin-Ma
3. To investigate the implications on the use of WhatsApp for education purposes among students' in Federal University Dutsin-Ma

RESEARCH QUESTIONS

1. What is the extent of attitude towards use of WhatsApp among students in Federal University Dutsin-Ma
2. What is the extent of use of WhatsApp for education purposes among students in Federal University Dutsin-Ma
3. What is the level of implications on use of WhatsApp for education purposes among students in Federal University Dutsin-Ma

size comprised of 101 undergraduate and postgraduate students which were randomly selected by the researcher from different stratified levels which are clustered according to departments from across the seven (7) faculties of the federal university Dutsin-Ma. The random samples were taken from the open participation purposively offered to the students from each faculty whilst considering gender, level and field of study.

The instruments used were the researchers' modified and adopted 30 items structured questionnaire. The respondents were asked to respond based on 5 Likert scale level as: (strongly agree (1), agree (2), no decision (3), disagree (4), strongly disagree (5). Three (3) objectives and three (3) research questions guided this study.

The procedure for this study's data gathering was a field survey where 120 questionnaires were administered by the two (2) engaged research assistants and only 101 were retrieved and screened after collected by self and thus used for the analysis. The quantitative data analysis was done by using the analytical tools such as mean, standard deviation for the descriptive-analysis on the variables all at 0.05 level of significance using SPSS version 23.

RESEARCH METHODOLOGY

The research design is a quantitative approach. Generally, survey research is when the data is gathered from the samples to get to know and describe the characteristic or criteria on opinions, perceptions, and or attitudes of the population. This is the reason why this study used this research design.

The participants' population of the study comprised of all the students in federal university Dutsin-Ma. The targeted sample

RESULTS AND DISCUSSION

For the demographic result in terms of gender, faculty and level the following was presented:

Table 1: Distribution of respondents on gender

Gender	N	Mean	Std. Deviation	Valid Percent
Valid MALE	63	1.3762	.48686	62.4%
FEMALE	38			37.6%

Table 1 indicates distribution across gender where male represent F=63 (62.4%) and female F=38 (37.6%) respondents respectively.

Table 2: Distribution of respondents on faculty

Faculty	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Agric	11	10.9	10.9	10.9
Arts	10	9.9	9.9	20.8
Educ	10	9.9	9.9	30.7
PhySci	16	15.8	15.8	46.5
LifeSci	22	21.8	21.8	68.3
MgtSci	19	18.8	18.8	87.1
SocSci	13	12.9	12.9	100.0
Total	101	100.0	100.0	

Table 2 indicates distribution across various faculties where almost equal range of representation F=10 to F=19 (9.0% to 15.8%) is found with only faculty of life science having F=22 (21.8%) a little bit above faculty which is due to the higher of students in the faculty.

Table 3: Distribution of respondents on level

Level	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 100L	20	19.8	19.8	19.8
200L	26	25.7	25.7	45.5
300L	27	26.7	26.7	72.3
400L	19	18.8	18.8	91.1
PG	9	8.9	8.9	100.0
Total	101	100.0	100.0	

Table 3 indicates distribution across various level where range of F=19 to F=20 (19.8% to 26.7%) representation almost equal representation is found with postgraduate level having F=9 (8.9%) a little bit below other level which is due to the higher of students in the faculty.

To answer the research question 1 'what is the extent of attitude toward use of WhatsApp for education purposes in Federal University Dutsin-Ma', the following result was resented:

Table 4: Description on responses on extent of attitude toward use of WhatsApp

		SA	A	UD	D	SD	N	Mean	SD
WhatsApp helps me get build good relationships	f	38	44	11	6	2	101	1.9109	.94973
	%	37.6	43.6	10.9	5.9	2.0			
WhatsApp helps me get more students friends	f	28	53	9	11	0	101	2.0297	.89950
	%	27.7	52.5	8.9	10.9	0			
WhatsApp helps me get more easy to use it	f	22	47	23	8	1	101	2.1980	.90576
	%	21.8	46.5	22.8	7.9	1.0			
WhatsApp helps me get more interests and motivation	f	19	32	30	14	6	101	2.5644	1.12620
	%	18.8	31.7	29.7	13.9	5.9			
WhatsApp helps me get less scared and hesitant when using it	f	18	38	24	18	3	101	2.5050	1.07353
	%	17.8	37.6	23.8	17.8	3.0			
WhatsApp helps me get more fun when using it	f	30	45	13	9	4	101	2.1287	1.06455
	%	29.7	44.6	12.9	8.9	4.0			
WhatsApp helps me solve more technical problems while using it	f	25	30	21	18	7	101	2.5248	1.23769
	%	24.8	29.7	20.8	17.8	6.9			
WhatsApp helps me get more socialize and solve my social problems	f	28	37	14	14	8	101	2.3762	1.24781
	%	27.7	36.6	13.9	13.9	7.9			
WhatsApp helps me get more sense of belonging to my school	f	24	40	15	16	6	101	2.4059	1.18472
	%	23.8	39.6	14.9	15.8	5.9			
Generally I have positive attitude towards WhatsApp	f	31	39	13	13	5	101	2.2277	1.16517
	%	30.7	38.6	12.9	12.9	5.0			

Table 4 showed that a large number of students have "positive attitude toward use of WhatsApp" (M=2.2; SD=1.2) WhatsApp allows users to "get build good relationships" (M=1.9; SD=.95) and "exchange information", "get fun", "socialize" and "solve problems"(M=.3; SD= 1.2) freely using their internet data plans. This reaffirms Johnson and George, (2014) who hold that WhatsApp enhances socialization, poster discussions and facilitate sharing information among students (p. 87).

To answer the research question 2 what is the extent of use of WhatsApp for education purposes in Federal University Dutsin-Ma the following result is presented

Table 5: Description on responses on extent of use of WhatsApp for education purposes

	SA	A	UD	D	SD	N	Mean	SD	
WhatsApp helps communicate with classmates on our courses	f	63	36	1	1	0	101	1.4059	.56883
	%	62.4	35.6	1.0	1.0	0			
WhatsApp helps communicate with instructors on our courses	f	28	43	10	19	1	101	2.2277	1.08518
	%	27.7	42.6	9.9	18.8	1.0			
WhatsApp helps publish announcements regarding our courses	f	64	27	6	2	2	101	1.5248	.85550
	%	63.4	26.7	5.9	2.0	2.0			
WhatsApp helps discuss ideas about our courses with classmates	f	42	40	8	11	0	101	1.8812	.96216
	%	41.6	39.6	7.9	10.9	0			
WhatsApp helps discuss ideas about our courses with instructors	f	30	38	11	17	5	101	2.2970	1.20453
	%	29.7	37.6	10.9	16.8	5.0			
WhatsApp helps seek help on our courses from classmates	f	43	39	12	5	2	101	1.8515	.95274
	%	42.6	38.6	11.9	5.0	2.0			
WhatsApp helps share links on topics and resources on our courses	f	37	47	7	6	4	101	1.9406	1.01805
	%	36.6	46.5	6.9	5.9	4.0			
WhatsApp helps form/join student groups for educational purposes	f	48	40	10	3	0	101	1.6832	.77370
	%	47.5	39.6	9.9	3.0	0			
WhatsApp helps organize/attend meetings with classmates/instructors	f	50	40	3	4	4	101	1.7327	.98885
	%	49.5	39.6	3.0	4.0	4.0			
Generally WhatsApp helps facilitate learning anytime anywhere	f	39	37	15	6	4	101	2.0000	1.06771
	%	38.6	36.6	14.9	5.9	4.0			

Table 5 showed that a large number of students agree of use of WhatsApp for academic purposes. They indicate that generally using WhatsApp helps facilitate learning anytime anywhere (M=2.0; SD=1.1). They also indicates types of educational activities that the students used WhatsApp for such as “share links on topics and resources”(M= 1.9; SD= 1.0), “organize/attend meetings with classmates/instructors” (M=2.3; SD=1.2). WhatsApp allows users to “discuss ideas about our courses with classmates”(M=1.9; SD=.96).This concur with Kumar, Lian and Vasudevan (2016) that, “using WhatsApp both within and out of classroom environment improved the learning performance of students since students can use it anywhere- anytime.”

To respond to the research question 3 what is the level of implications on use of WhatsApp for education purposes in Federal University Dutsin-Ma, the following result is presented.

Table 6: Description on responses on level of implications on use of WhatsApp and its use for education purposes

	SA	A	UD	D	SD	N	Mean	SD
WhatsApp is new to me and I am not comfortable using it	f 12	15	10	34	30	101	3.5446	1.36766
	% 11.9	14.9	9.9	33.7	29.7			
WhatsApp is difficult to access and use	f 7	11	15	40	28	101	3.7030	1.18781
	% 6.9	10.9	14.9	39.6	27.7			
WhatsApp is not useful in educational activities	f 6	24	14	28	29	101	3.4950	1.29324
	% 5.9	23.8	13.9	27.7	28.7			
WhatsApp is helping in sharing unwanted materials	f 17	32	19	21	12	101	2.7921	1.28310
	% 16.8	31.7	18.8	20.8	11.9			
WhatsApp is destroying social relationships	f 13	22	21	29	16	101	3.1287	1.28579
	% 12.9	21.8	20.8	28.7	15.8			
WhatsApp is destroying academic achievement	f 12	21	26	22	20	101	3.1683	1.29668
	% 11.9	20.8	25.7	21.8	19.8			
WhatsApp is destroying students' manners	f 11	22	27	22	19	101	3.1584	1.27069
	% 10.9	21.8	26.7	21.8	18.8			
WhatsApp is making students become lazy	f 16	35	16	17	17	101	2.8416	1.34709
	% 15.8	34.7	15.8	16.8	16.8			
WhatsApp is making teachers not attend to class	f 9	15	24	21	32	101	3.5149	1.31616
	% 8.9	14.9	23.8	20.8	31.7			
Generally WhatsApp is a waste of time to be use if not careful	f 14	15	19	24	29	101	3.3861	1.39979
	% 13.9	14.9	18.8	23.8	28.7			

Table 6 showed that a large number of students rejected as implication that use of WhatsApp generally is a waste of time (M=3.4; SD= 1.4). Although they indicated that 'it is not new to them to use' (M=3.5; SD= 1.4), they accepted that "it destroys relationship" (M=3.1; SD= 1.2). The students also rejected that it makes "teachers not attending class" (M=3.5; SD= 1.3). But they accepted the notion that it make users be lazy towards academic activities (M=2.8; SD= 1.3). They somewhat agree of 'sharing unwanted materials' on WhatsApp (M= 2.8; SD= 1.3). This relates to Yeboah and Ewur (2014) who showed "negative impact upon students," and "distractive dimensions" such as, "destruction of students' spellings and grammatical construction of sentences"; "lack of concentration during lectures." which leads to "distraction from assignment work" (p.163).

The finding indicates demographic distribution across faculties where all faculties have almost equal representation, with only faculty of life science being a little bit above other faculties because it has the higher population of students in the university. Also in terms of distribution according to level of study it revealed that postgraduate students have the lowest representation a little bit blow other levels. This was due to the low numbers of the postgraduate students in the university. Result also showed that a large number of students have "positive attitude toward use of WhatsApp". Many also have indicated that WhatsApp allows users to "get build good relationships" and "exchange information"; "get fun", "socialize"; "solve problems" as well as freely use their internet data plans. This reaffirms Johnson and George, (2014) who hold that WhatsApp enhances socialization, discussions and sharing information among students.

With regards to extent of use of WhatsApp for academic purposes; overwhelming majority of the respondents agreed that a large number of students use of WhatsApp for academic purposes. They indicate that generally WhatsApp helps facilitate learning anytime anywhere. They also indicate types of educational activities that the students used WhatsApp for such as "share links on topics and resources". They used it to "organize and attend meetings with classmates and instructors". The results also revealed that WhatsApp allows users to "discuss ideas about courses with classmates". This concur with Kumar, Lian and Vasudevan (2016) that, "using WhatsApp both within and out of classroom environment improved the learning performance of students since students can use it anywhere-anytime."

Similarly, the finding showed that a large number of students see it as implication that "use of WhatsApp generally is a waste of time". Although they indicated that 'it is not new to them to use', they accepted that "it destroys relationship". The students also rejected that it makes "teachers not attending class". But they accepted the notion that it make users become lazy towards academic activities. They somewhat agreed that it is use for 'sharing unwanted materials'. This relates to Yeboah and Ewur (2014) who showed "negative impact upon students," and "distractive dimensions" such as, "destruction of students' spellings and grammatical construction of sentences"; "lack of concentration during lectures." which leads to "distraction from assignment work".

CONCLUSION

On the general note the result from the students' responses showed that they have positive attitude towards using WhatsApp. They equally indicated employing WhatsApp for

academic activities. However, learning in higher education, especially in teacher education needs to be understood as being better with technology. This is because the student of teacher education will be the future educators. Thus, they need modern digital skills for learning and communication. WhatsApp use is a handy motivating behaviour and skill that could be used for quite beneficial results. So in view of this, the students' responses indicated that WhatsApp helps them get more interests and motivation. The result also revealed that WhatsApp is helping in sharing unwanted materials among students.

Overall, findings demonstrated that the attitude towards WhatsApp was high. It also indicated at high level how the students use the application for various motives. The results further revealed the mode and conveniences of its usage; ease of use, and general usefulness. The general findings confirmed that WhatsApp is being used as an academic tool for both teaching and learning. Many students stated that "WhatsApp helps them communicate with instructors on taught or to be taught courses." It also helps them in seeking help or assistance from friends, classmates and teachers on various courses". However as implication some students said that WhatsApp use is "making teachers not attending to classes sometimes" as well as "making other students become too lazy". General report from the result also indicates no significant difference in terms of attitude towards use of WhatsApp among the student of Federal University Dutsin-Ma; whereas, significant difference was reported among faculty members in terms of using WhatsApp. So also it further indicated significant differences in terms of level of the student in using WhatsApp and its application for academic purposes in Federal University Dutsin-Ma.

RECOMMENDATIONS

- University lecturers should always supplement their classroom teaching with newer technologies such as WhatsApp group discussion.
- Social networking platforms offer on-the-go learning opportunities the students needs to adopt it all times.
- Lecturers should be encouraged to explore other ways of regular meeting and interaction with the students, using this application in this technological area.
- Students are required to improve understanding in the use of WhatsApp in their learning activities.
- Management of tertiary institutions should intensify guidance and counseling sessions in their respective institutions regarding the use of WhatsApp.
- Time management the use of WhatsApp should be incorporated into the curriculum of tertiary institutions.
- Online webinars, quizzes using WhatsApp should be frequently conducted by lecturers and encourage or compel students to join.
- Cell phones usage should be control in lecture halls to restrict students chat during lectures.
- Laws, ethics and terms in using WhatsApp should be taught to students and be observed.
- Orientation in form of symposium and seminars on Cyber ethics against cyber threat needs to be intensified in institutions.
- Further studies are required to improve understanding in relation to the use of WhatsApp in university students' learning.

- However, future research should address students' attitudes towards specific uses of WhatsApp in their learning by using different method.

REFERENCES

- Aicha, B. A. (2014). The impact of WhatsApp mobile social learning on the achievement and attitudes of female students compared with face to face learning in the classroom. *European Scientific Journal*. Vol.10, (22). Retrieved from, <http://www.eujournal.org/index.php/esj/article/viewfile/3909/3700>
- Barhouni, C. (2015). The effectiveness of WhatsApp mobile learning activities guided by activity theory on students' knowledge management. *Contemporary Educational Technology*, Vol. 6(3), Pp. 221-238.
- Bere, A. (2016). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. *British Journal of Educational Technology*, Vol. 44(4), Pp. 544-561.
- Bouhnik, D., and Deshen, M.(2014).WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education Research* Volume 13, Pp. 217-231. Retrieved from, <http://www.jite.org/documents/Vol13/JITEv13ResearchP217-231Bouhnik0601.pdf>
- Church, K., and de Oliveira, R. (2013, August). What's up with WhatsApp?: Comparing mobile instant messaging behaviors with traditional SMS. *Proceedings of the 15th international conference on Human-computer interaction with mobile devices and services* (Pp. 352-361). ACM.
- Devi, T. S. and Tevera, S. (2014). Use of social networking site in the University of Swaziland by the health science students: A Case study. *Journal of Information Management*, Vol. I (1), Pp. 19-26.
- Eberechukwu, A. S. and Queendarline, N. N. (2018). WhatsApp utilization and academic performance of computer in education trainee teachers in University of Port-Harcourt. *International Journal of Education, Learning and Development*. Vol.6, (5), Pp.15-25, May 2018. Retrieved from, www.eajournals.org
- Eid, M. I., and Al-Jabri, I. M. (2016). Social networking, knowledge sharing, and student learning: The case of university students. *Computers and Education*, Vol. 7 (9), Pp. 14-27.
- Eric, J. (2015). Why Selling WhatsApp to Facebook would be the biggest mistake of Jan Koum's and Brian Acton's Lives. *Forbes*. (online) Retrieved from, <http://eujournal.org/index.php/esj/article/viewFile/3909/3700>
- Etim, P. J., Udosen, I. N., and Ema, I. B. (2016) Utilization of WhatsApp and students' performance in Geography in Uyo Educational Zone, Akwa Ibom State. *International Journal of Innovation and Research in Educational Sciences*, Vol. 3 (5), Pp. 23-49

- Gasaymeh, M. (2017). University Students' use of WhatsApp and their perceptions regarding its possible integration into their education. *Global Journal of Computer Science and Technology: G Interdisciplinary*, Vol. 17, (1), Pp. 1-9
- Griesemer, J. A. (2014). Using-social-media-to-enhance-students-learning-experiences. Retrieved from, <http://asq.org/edu/index.html>
<http://rube.asq.org/edu/2014/03/best-practices/using-social-media-to-enhance-students-learning-experience>
- Hamiyet, S. (2016). Affecting higher students learning activity by using WhatsApp. *European Journal of Research and Reflection in Educational Sciences* Vol. 4 (3), Pp. 88 *Progressive Academic Publishing, UK*. Retrieved from, www.idpublications.org
- Izyani, binti M. and Mohamed, A. E. (2016). Students' perception on the use of WhatsApp as a learning tool in ESL classroom. *Journal of Education and Social Sciences*, Vol. 4, (5 June) Pp. 89-98
- Jairus, E. U., Christian, U. U., Ogwuche, A. J., Thomas, O. I., Taiyol, T. T., Ode, E. J., Ekpo, S. O., and Adoga, I. A. (2017). Impact of mobile phone usage on students' academic performance among public secondary schools in Oju local government area of Benue *International Journal of Education, Learning and Development* Vol.6, No.5, pp.15-25, May 2018 Published by European Centre for Research Training and Development, UK. Retrieved from, www.eajournals.org
- Johnson, Y., and George, D. E., (2014). The impact of WhatsApp messenger usage on students' performance in tertiary institutions in Ghana. *Journal of Education and Practice* Vol.5, (6). Pp. 78-89. Retrieved from, www.iiste.org
- Joicy, C., and Sornam S. A. (2018). Perception of WhatsApp usage among students of College of A. J. Excellence: A Case Study. *Indian Journal of Information Sources and Services*. Vol. 8 (1), Pp. 73-78. Retrieved from, www.trp.org.in
- Kumar, V. S., Lian, T. Y. and Vasudevan, H. (2016). UNIKL RCMP undergraduates' perception on using WhatsApp as a tool for Mandarin Language teaching and learning. Retrieved from https://www.researchgate.net/profile/Vishalini_Selva_Kumar/publication
- Levent, C. (2017). The Impact of WhatsApp Use on Success in Education Process *International Review of Research in Open and Distributed Learning*. Vol. 18, (7)
- Malecela, I. O. (2016). Usage of WhatsApp among postgraduate students of Kulliyah of Education, International Islamic University Malaysia. *International Journal of Advanced Engineering Research and Science*.
- Mingle, J. and Adams, M. (2015). Social media network participation and academic performance in senior high schools in Ghana. *Library Philosophy and Practice*.
- Naveen, K. (2017). Survey Analysis on the usage and impact of WhatsApp Messenger.
A master's degree Project submitted to Indira Gandhi National Open University (IGNOU) DOI: 10.18311/geis/2016/15741
- Nitza, D. and Roman, Y. (2016) WhatsApp messaging: Achievements and success in academia. *International Journal of Higher Education*, Vol. 5 (4). Pp. 234-241
- Patil, S., Deepthi, and Tadasad, O. (2015). Usage of WhatsApp messenger amongst post-graduate students in a university environment: A study of Karnataka state women's university, Vijayapura, *International Journal of Multidisciplinary Research and Development*, Vol.2, (11), Pp. 591-594.
- Raza, S. A., Qazi, W., and Umer, A. (2017). Facebook is a source of social capital building among university students: evidence from a developing country. *Journal of Educational Computing Research*, Vol. 55(3), Pp. 295-322.
- Raiman, L., Antbring, R. and Mahmood, A. (2017). WhatsApp messenger as a tool to supplement medical education for medical students on clinical attachment, *BMC Medical Education*, 17 (7). Pp. 22-31
- Rosenberg, H. and Asterhan, C. S. C. (2018). WhatsApp, teacher? student perspectives on teacher-student WhatsApp interactions in secondary schools. *Journal of information technology research*. Vol. 17 (2)
- Statista. (2017). Number of monthly active WhatsApp users worldwide from April 2013 to January 2017 (in millions). Retrieved from <https://www.statista.com/statistics/260819/numberof-monthly-active-whatsapp-users/>
- Sahu, S. (2014). An analysis of WhatsApp forensics in android smartphones. *International Journal of Engineering Research*, Vol. 3(5), Pp. 349-350
- Sonia G. and Alka R. (2017). Effectivity of E-Learning through WhatsApp as a teaching learning tool. *MVP Journal of Medical Sciences*, Vol. 4(1), Pp. 19-25
- Vorderer, P., Krömer, N., and Schneider, F. M. (2016). Permanently online - Permanently connected: Explorations into university students' use of social media and mobile smart devices. *Computers in Human Behavior*, Vol. 6 (3), Pp. 694-703.
- WhatsApp Corporation, (2018). About WhatsApp. www.WhatsApp.com
- Yeboah, J. and Ewur, G. D. (2014). The impact of WhatsApp messenger usage on students' performance in tertiary institutions in Ghana. *Journal of Education and practice*, Vol. 5(6), Pp. 157-164.



©2020 This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International license viewed via <https://creativecommons.org/licenses/by/4.0/> which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited appropriately.