

**Influence of Facebooking and Social Media Use on
Academic Performance among Nigerian
Undergraduate Social Sciences Students**

By

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Declaration

I declare that “**Influence of facebooking and social media use on academic performance among Nigerian undergraduate social sciences students**” is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

Signature

Date

Dedication

This dissertation is especially dedicated to my darling wife, Racheal Motolani Olufunke Oyetunde, my dear children, Joshua Oyetunde, Josiah Oyetunde and Joanna Oyetunde. Their curiosity and support, to see this work and all things involved while I was on the research field driven to success, have been unique and so much encouraging. They have been so wonderful to me all the times.

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Glossary

Internet

The Internet is a worldwide telecommunication system that provides connectivity for millions of other smaller networks. The Internet is often referred to as a network of networks. It allows computer users to communicate with each other across distance and computer platforms (Florida Center for Instructional Technology, 2013).

Social Network/Social Networking

This is the process of reaching out and connecting with other people to sharing information between individuals. A social network represents the connection between people through interpersonal means, such as friendship, common interests, or ideas while social networking is the process for the connection. Social networking fulfils the human or social need to bond through established interpersonal relationship. (Cheryl L. Coyle and Heather Vaughn Bell, 2008)

Social Media: The web-based tools enabling its users to create, share or exchange information, electronic files and documents in digital formats. Social media are community online platforms to relate or network socially with other people on matters of common or mutual interests. Examples of social media are Facebook, Twitter, Google+, Instagram, Pinterest and YouTube (Hana S. Noor Al-Deen, John Allen Hendricks, 2013)

Facebook: This is one of the social media or social media networking websites which is claimed to be the most popular among them all. It started as a social platform for students only, but it has grown to become public and global.

Facebooking: Relative to this study and as coined by the researcher, facebooking is the practical use of Facebook. It involves surfing on the Facebook website and carrying out activities such as posting on personal, friends' or groups' walls, chatting (or making Facebook phone calls on mobile phones), watching videos, reading documents, listening to audios, using Facebook applications and other related activities.

Student Academic Performance: This means the final grade or result obtained by a student after different standardized course assessments or tests are undertaken in a course. It is denoted by the grade point average (GPA) or cumulative grade point average of a student (CGPA).

Summary

Anyone using the Internet is likely to use Facebook and anyone using Facebook is likely to use it just about every day. The prevalent uses of the Internet and related technologies is a sign-showing that they have become a part of human life. On any student's academic side of life, the use of social media (taking Facebook as a case) has become commonplace, but their influences over the academic engagement and performance of students requires deeper understanding. In Africa, the need for studies on the interplay between social media and education is growing. This study focuses on the influence of Facebook on the academic performance of undergraduate social sciences students using three federal Universities in Nigeria, West Africa as research sites. The study shows that Facebook use did not significantly influence the academic performance of the surveyed students at these universities and that its use can, however, be harnessed for augmenting student academic performance and for advancing education in general.

Key Terms

Social media, Facebook, academic performance, mass media, sociology, information and communication technology, internet, Nigeria, university students, virtual class

Chapter 1

INTRODUCTION

The continuous emergence of different online technologies continues to blur the line between the traditional media and their audience. This phenomenon occurs from the overtaking by the widespread modern use of two-way communication (occurring mainly in social manner) over the one-way broadcast method of the traditional media (Mayfield, 2008). The overtaking mentioned here refers to nothing influencing, than the social media. Answering the question ‘What are social media?’, Mayfield (2008) pointed out that one can best understand social media as a group of new online media which enables wider participation (contributing information or content and giving feedback), openness (almost no barrier accessing and making use of information), conversational (two-way communication), community (bonding and sharing of common interests), and connectedness (linking other online tools or services/resources).

In answer to the same question (what are social media?), In Publication No. 2010-03-E of the Library of Parliament, Canada, social media as a term was referred to as the wide-range of online and mobile services that allows users to be involved in online information exchanges and contributions of user-generated content within the scope of community-based interests. According to this source, social media include blogs, wikis, social bookmarking websites, media sharing websites and, particularly, social networking websites among which is Facebook.

In another way, the term social media refers to the platforms on which collaborative creation and sharing of information for social purposes takes place on the world wide web. Social media are usually on a large scale membership and comprise of the social interactions taking place using website services, online tools and the content (media) that are created and shared (Research Information Network, 2011). Social media are made available in the form of websites and these websites are also known as ‘social networking’ websites (or tools) which are based on the use of the Internet.

The definition of the Internet was found to be divergent and following the view of Abbate (2017), there is not a single correct definition. However, there was a pattern that ran through the definitions of the Internet which the researcher noted. It was observed that the Internet is the global information superhighway or system that logically linked computers (and related devices) together to provide communication networks. While this definition appears to take care of the technical or hardware structure of the Internet, the software aspect of the Internet enables the interlinks, access and exchanges of different content across the globe. This is referred to as the World Wide Web (WWW).

In the 21st century, the use of the Internet (including the use of social media) has globally become an integral part of humans' daily lives (Sorensen et al, 2014). Beyond the common sense awareness of this global situation, different research findings which support the statement have been found available. To give an example, Nielsen (2012) reports that Internet users across the United States of America continue to spend more time on social media than on any other category of websites to the extent that the total time used on social media reached 121 billion minutes in July, 2012 from 88 billion minutes in July 2011. Increased usage of social media is a global phenomenon.

With the continuous improvements in information and communication technologies and increasing possibilities for ubiquitous internet connectivity, more freedom is anticipated for using social media whenever and wherever one wants. Relating to freedom, and as indicated by Nielsen (2012), social media (appearing in the form of MySpace, LinkedIn, Facebook, Mebo, Twitter and others) continue to alter the way in which humans access, generate, share and use information (Cabral, 2011). With the possibility for more freedom (i.e. of connectivity and access) regarding networking online anywhere and at any time, it is not difficult to note that social media use will remain a regular aspect of humans everyday life. Social media use is already pervasive in all contexts, but many implications of the specific use of social media in the lives of specific sets of users are not adequately conspicuous and they may not be until focused research efforts (such as this) are made to expose them. See appendices I and 2 for related distribution of users.

Students are a specific group of high percentage social media users. For example, the study on social media use involving selected students from all the colleges at the University of New Hampshire in the United States of America showed that 96% (1,082) of the surveyed students were regular Facebook users (Martin et al 2009). The widespread use of social media by students, in general, is no more remarkable than the implications of the use of it in their academic lives. The need to examine these implications (i.e. in other social contexts unlike the United States of America) is quite important for researchers today to understand how the use of social media impacts learning either by enhancing it or eroding it. Social media use has been recognized as advantageous in terms of enhancing communication, collaboration and the potential for the promotion of and support for learning (Junco, 2011). Hussain (2012) indicated that social media seemed to have a greater impact in higher education than other levels of education.

In order to establish the level of attachment of students to social media, LiveScience conducted a study which involved asking selected students to give up all social media for a day. The study showed that college students were attached to social media use up to the point that they would exhibit the same type of withdrawal symptoms which substance addicts experience when the drugs they take are removed from them (LiveScience.com, 2010). Similar research by the International Center for Media and Public Agenda (ICMPA) at the University of Maryland in the United States of America found that most college students were not just unwilling, they were functionally unable to be without their social media links to the world (ICMPA, 2010). Highlighting the negative impacts of social media, Junco (2011) indicated that there could be insidious effects on users who undertake addictive online communication which, as expressed, included the overuse of social media. Although Junco (2011) did not expand on the issue of Facebook addictive use, two studies looking at addictive use of Facebook (i.e. outside of the United States of America) indicated that the use of Facebook has become compulsive for certain students in the Asian part of the world (Malaysia, to be specific) where the penetration of the Internet could be described as much later than that of the United States of America. The studies were by Zaremohzzabich et al (2014) and Jafarkarimi et al (2016). The former study found that the students who were surveyed agreed that they needed to use Facebook less to avoid the challenges of compulsion to check Facebook, high

frequency use and using Facebook to evade offline responsibilities. Out of the 450 university students which the latter surveyed, 220 (47%), as concluded by the researchers, could be considered as Facebook addicts. All these highlight the tendency of the effects excessive Facebook use can have on the academic performance of Facebook student members.

The place of time used for academic and extra-mural activities by students could not be overlooked especially when considering how they use social media. As noted in the study conducted by Bronnert (2016) which focused on time management regarding the use of social networking websites, people have time for using Facebook and they are capable of managing their time except that there are various factors that generally influence fundamental behavior of time usage. With the consideration of this perception relating to the use of Facebook and with the other instances earlier presented, it is believed that it would be appropriate to examine the interplay between the fulfillment of social needs and the commitment to study on the part of university students. In other words, it is viewed that the time spent on social media could be a time better spent on studies unless the use of social media was incorporated into academic learning experience.

Regarding this research, it is perceived that the implied vulnerability of students in terms of inability to withdraw from the use of social media (including Facebook) can give rise to distractions from study, mismanagement of time or procrastination, excessive multitasking and similar risk behaviors that may obstruct the pursuance of academic success by students (ICMPA, 2010). Generally, the connection between Facebook and academic involvements of students appear under-researched and the outlook among social researchers shows that more and more research efforts need to be pooled to develop ample knowledge about the benefits and detriments of the use of social media such as Facebook in relation to academic performance among students. The study, therefore, will investigate the influence of the use of one social media tool, (with a focus specifically on Facebook) on academic performance of undergraduate students. It is appropriate to state here that this study focuses on Facebook because of its widespread use among present-day social media and because of its unique and accelerated growth in terms of popularity especially among students. The emphasis of the study on Facebook, aside from other social media, was motivated by the fact that

its creation was primarily based on the identified need for social interactions between University students.

The country, Nigeria, as well as three universities were chosen because social media research relating to students is emergent in the country and the ample need for its further development is continuously emphasized. This is in line with the view that scientific knowledge in this area is necessary to be built side by side with the trends in the ever-changing local and global social media milieu. The choices of the country and institutions were made by the researcher so as to contribute to the research efforts exploring the impacts of social media on education outside the American or European contexts. Since the researcher is a Nigerian, he has been so keen in carrying out the study in Nigeria (i.e. within the African setting). The link between information and communication technologies and education, the prevalence of the use of social media among the students and the public outlook that academic performance of students, in general, are deteriorating, informed the researcher's choice of three universities as the context of this study. Furthermore, the researcher envisaged that the outcome of such study could fit as a case study for other interested researchers to build on.

Information and communication technologies (ICTs) continue to advance rapidly and are accepted and integrated with remarkable speed in human society (Schaefer, 2011). With this in mind, this study will additionally pay attention to Facebook use features that were hardly focused on by related former studies (e.g. integration of academic resources sharing through Facebook and access to Facebook via the means of mobile phones, which plays a greater role in accessing the internet than logging on with a desktop computer. Mobile phones are far more 'mobile' in that they can be carried on one's person at all times and they enable the user to have faster access to the internet than other means such as personal computers).

1.1 Research Problem

This study will address the impacts of the use of social media (with a specific reference to the predominant use of Facebook) on academic performance among Nigerian undergraduate social sciences students at the Universities of Ibadan and Ilorin, as well as at the Obafemi Awolowo University, Ile-Ife.

The listed universities were chosen because of the following considerations:

a) the official “catchment area” admission system for national universities allow university applicants who are citizens to study in tertiary institutions in any part of the country. The existence of the federal university cluster served as an advantage for the study.

b) the oldest set of universities, top-rated and most populous federal universities are in the western part of the country. However, the three universities listed here were randomly chosen from the list of universities in the western part of the country.

c) the concentration of the chosen institutions in one part of the country was not expected to affect the representativeness of the sample since all the institutions are federal ones and their admission system are uniform.

d) the necessity to ensure the feasibility of the study without causing the risk of inadequate funding to carry it out. The concentration of the universities in one regional part of the country was viewed as a way to reach the cost objective for the study.

Section 4.3. of chapter 4 details the researcher’s selection of the research sites based on the federal system selection of universities in Nigeria (page 37) and will not explain this system here so as not to repeat the same information.

It is important, however, to relate here why Facebook is particularly selected out of all social media websites. By December, 2012, the number of Facebook active users had reached over one billion (Facebook, 2013). Alexa.com (2013), an Internet company specializing in the global ranking of websites, classified the use of Facebook by locations as home, school and workplace. Browsing from school ranked first and it still, notably, remains the first. All over the world, Facebook, (after Google), is the second most popular and most visited website. It is the most frequented social networking website (Alexa.com, 2013) and the most used among students including the undergraduate students targeted for this study.

1.2 Problem statement

*Facebooking*¹ has generally become one of the habits that encroach on students' study time, activities such as visiting the library or time spent reading notes and study materials. The survey of college students conducted by Kirschner and Karpinski (2010), as reported by Alloway et al (2013), measured the association between the use of Facebook and academic performance. It applied grade point average (GPA) and the time spent studying per week as variables. The study showed that students who did not use Facebook had higher grade point averages than students who used the social media website. One interesting thing about the study is that it spotlighted the blame put on poor time management by the Facebook user-participants for poor academic performance.

Junco (2011) had a similar but enlarged study to that of Kirschner and Karpinski's (2010). The study indicated that a substantial amount of time has to be spent on Facebook before the impact of facebooking could be seen on the grade point average. The study further provided that other factors (such as the type of activities performed, personal motive and accountability, and academic values) could be considered before making inferences on the influence of Facebook use on academic performance.

While some studies point to 'latent problems' between facebooking and academic achievement, the study by Fano and Pellizzari (2015) using the case of supporting face-to-face lecturers with Facebook pages, found no significant difference between the performances of Facebook student active users and non-active users. This study will take part in the growing efforts to identify and consider the impacts - positive or negative - which the use of Facebook exerts on academic performance with a focus on undergraduate social sciences students at the following Universities (located in Nigeria, West Africa):

¹ As defined (purposely, for this study) in the glossary.

- a) University of Ibadan, Ibadan
- b) University of Ilorin, Ilorin
- c) Obafemi Awolowo University, Ile-Ife

The study will also attempt to unpack the latent problems to show whether the impacts of the problem and its implications in these situations (research sites) experienced problems that are not addressed.

1.3 Rationale

The rationale for choosing the topic of this study is to contribute to the body of knowledge linking education, information and communication technologies (the internet in particular) as well as the interplay between them and social interactions. The need for establishing the potentials of adapting today's course delivery with online learning technologies (in this case, social media website tools) - known as hybrid or blended class - and the need for identifying instrumental approaches stakeholders in governance and education could take in their decision, plan and policy making processes formed a set of the rationales for the topic of this study.

This is applicable because educators and policy makers, in particular, are targeted regarding the recommendations that will emerge from this study. This is so important as far as research findings are usually envisaged for implementation as relevant as possible. The awareness of the findings of this study by its population (undergraduate university students) is one of the advantages underlying the rationales for the topic.

As stated above, one of the rationales for choosing the three Nigerian universities was the existence of distinct clusters of universities in Nigeria. For selecting a nationally represented sample, the federal (national) cluster remained suitable for conducting this study. Other reasons for targeting the listed universities are as pointed out in section 4.3.

Looking at social media trends in Nigeria and the impacts of these on Nigerian students' learning outcomes, it is of necessity to further the understanding on the interaction between social media and education in the country. It is imperative for

educators and even policy makers in the country to know about and understand, among other things, how students' use of social media (in this case, Facebook), relates to educational success.

The findings of this study and the recommendations it will generate will be of benefit to educational leaders, academicians, administrators and policy makers. Undergraduate students, in particular, will be enlightened about what benefits can accrue or what consequences can impend with using Facebook along with their study activities.

Generally, this study will contribute to existing knowledge about social media and their place in academic performance of students. It is believed that the potential findings of the research will lay a foundation for further inquiries.

1.4 Aim and objectives of the study

The aim of this study is to identify and examine the influence of the use of Facebook (based on social activities engaged in, usage of time and engagement in study) of targeted undergraduate social sciences students on their academic performance. For the study, academic performance was measured by the cumulative grade point average (CGPA)² of each surveyed student. The study was based on the social media activities students engaged in and the time spent on Facebook to show the impact on their study. Academic performance was measured by the cumulative grade point average as self-reported by the respondents.

² Grade point averages is a system for awarding academic grades based on the units of credit hours allotted to courses and the grade points obtained by students in courses undertaken. This is calculated by dividing the total grade points earned by total credit hours for all courses. The grade points usually range from 0 to 4 on a scale. CGPA is the cumulative GPAs a student earns through all the semesters for a program and it is taken into consideration in determining the classes of the degree finally awarded to a student in order to graduate.

The objectives of the study are to:

- investigate how much of time is spent on social media (only investigating Facebook use for this study).
- investigate how much time is spent studying (per day).
- investigate the ‘activities’ on Facebook and whether any is educational or only for social purposes. (Since social media is a communicative tool, it can be used for educational purposes too).
- find out how much time users consume on Facebook compared to study activities per day.
- draw up a list of study-appropriate activities and measure time spent in each.
- investigate the influence of Facebook use on the academic performance of the respondents.
- utilize the findings of the study to make recommendations to stakeholders (Nigerian educators, policy-makers and education role players in the information and communication sector of Nigeria).

1.5 Research questions

Based on the reviewed literature for this study, the theories identified and the hypotheses, some research questions are provided about facebooking and academic performance as to how these interplay on a day to day basis among the undergraduate students at the selected universities.

The central research question of this study is:

What is the influence/impact of the use of the social media website, Facebook, on undergraduate students’ academic performance within the selected Nigerian universities?

The researcher believes that answering the following related sub-questions is key in ascertaining the answer being sought for the above main study question:

- What are the socially-oriented activities students engage in on Facebook?
- What are the academically-oriented activities students engage in on Facebook?
- What is the frequency or amounts of time (i.e. how much time per day is used for facebooking and how much time the students spend on social activities compared to academic activities within a particular period?)
- Is there any connection between the facebooking engagements (or social other media engagements) of the respondents and their academic performance?

Similarly, based on the other findings of related studies, the researcher holds the view that exploring the variables such as those listed below in Table 1.1 is key to finding out the statistical relationship between the use of Facebook by the targeted undergraduate students and their academic performance.

1.6 Hypotheses

This study hypothesizes that the amount of time spent on Facebook, for whatever reasons and activities, by the undergraduate social sciences students at the selected Nigerian Universities will have either an adverse (negative) or positive impact on their academic performance, which is measured by various factors including the main factor, which is CGPA.

Some studies have found that Facebook use has no significant influence on academic performance or otherwise, for example (as discussed under section 1.1 above). Alloway et al (2013) observed the relationship between Facebook use and academic performance in the USA and found that Facebook users reported a lower GPA than non-users.

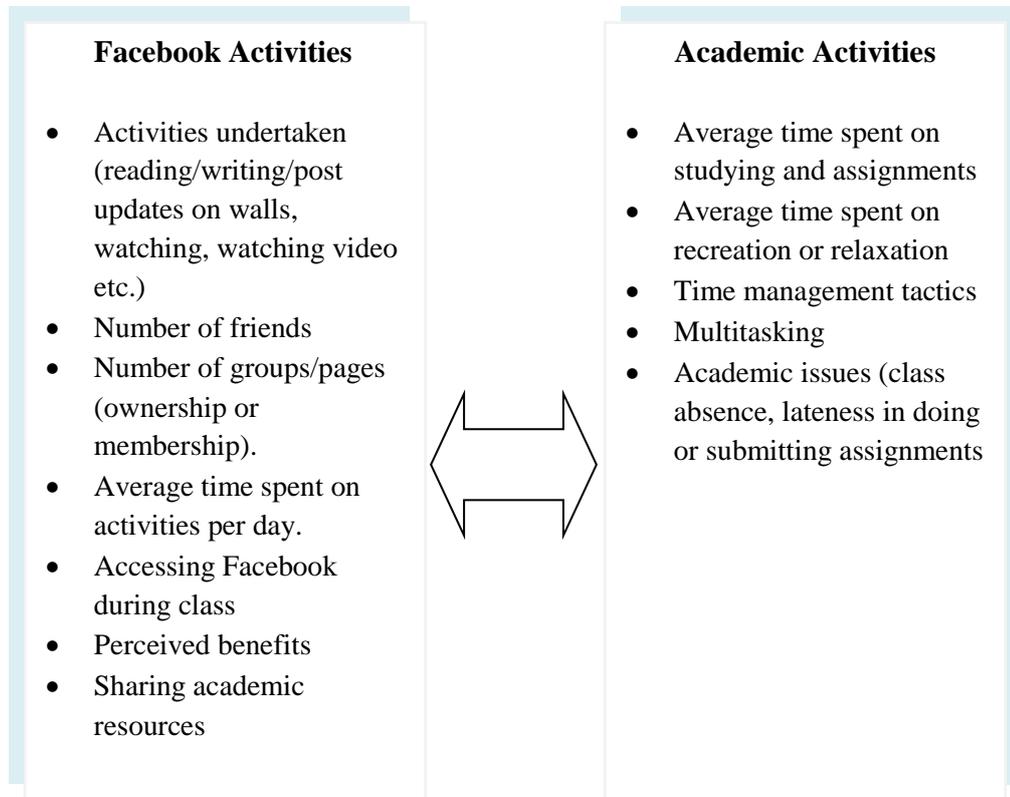
The study therefore seeks to contradict or support (test the theory of) the sub-hypotheses stating that:

1. Facebook use negatively impacts study hours and, therefore, also the cumulative grade point average of student users of Facebook.

2. The use of Facebook positively enhances and, therefore, contributes to the learning process when students are linked members to academic departments or educational Facebook pages or groups. In other words, adaptation of social media tools to teaching and learning positively influences the academic performance of students.
3. There is no real evidence that Facebook use affects the cumulative average grade performance of students.

All the sub-hypotheses to be tested will be within the purview of the strength and direction of two main variables of this study: “frequency of facebooking” (volume of Facebook use recurrence) and “academic performance” (CGPAs). The frequency of facebooking is believed to imply the level of immersion into the use of Facebook and, for the purpose of this study, accessing the level of social media use basically involves the particulars listed in Table 1.1.

Table 1.1: Variables indicating use of time in two main activities: Use of Facebook and Academic activities



Source: (Own)

The study seeks to consider the level of engagement of respondents in the use of Facebook for social, recreational and educational purposes versus their commitments to learning. It will consider the relationship between these aspects and academic performance of the participants. As a whole, the study explores the following:

- a) the frequency of use of Facebook.
- b) the average time spent on Facebook per day.
- c) the activities (social or recreational and learning) students are mostly engaged in (e.g. reading, doing assignments, visiting, relaxing or serving siestas, watching television and undertaking sports).
- d) how involved and accountable are students in their academics? For example, what time management tactics are students using in managing themselves with balancing facebooking and studying?

- e) the potential benefits of Facebook for student users.
- f) the Facebook features students use to for enhancing their learning online?
- g) the frequented platforms used to access Facebook (i.e. among desktops, mobile phones, laptops and tablets).
- h) the social status perspective of the students regarding the Facebook use and social media in general.

For this study, academic performance is taken to be decisive of the CGPA obtained and self-reported by the respondents and a student using Facebook daily is regarded as an active Facebook user (i.e. being a member of Facebook who logs into the website at least once daily). A day is held to be 15 hours spanning from 7 a.m. to 10 p.m. This period is assumed as the period having the peak hours when students simultaneously engage in study activities, facebooking and carrying out other online activities.

Chapter 2

REVIEW OF LITERATURE

Social media are not just websites. They are an interwoven system of services, tools, and practices that support online community building, collaboration, participation or interaction and sharing of information or resources (Junco et al, 2010). They are technologies that have drawn the attention of varieties of people (not excluding educators and students) and they have all become an important aspect in the lives of the users (Sorensen et al, 2014).

Referring to the study on social media conducted at the colleges at the University of New Hampshire in the United States of America which has been mentioned in the introduction, Martin (2009) stated that, apart from the finding that 96% (1082) of the surveyed students were found as regular Facebook users, Facebook was the most used social networking channel for the respondents than any other social media platform. This calls for the need to investigate the motivations for the situation and for what it implies for students. Generally, the relationships between Facebook and academic performance among undergraduate students appear under-researched. This study is, therefore, an attempt to look into Facebook as an example of social media and the effects of its use on the academic performance of undergraduate social sciences students of three different universities in Nigeria: University of Ibadan, Ibadan, University of Ilorin, Ilorin and Obafemi Awolowo University, Ile-Ife.

2.1 Reactions to social media by society

Valenzuela et al (2008) mentioned that moral panic is a common reaction to new forms of technological communication. They referred to the advent of television and how this spawned the fear of 'idiotization'. They similarly pointed to the purported consequence of alienation (or anti-social behavior) from public life which came along with the diffusion of the Internet. It is noted from these authors that the use of social media is not secure from the concerns such as unsafe disclosure of information, cyber-bullying, addiction to 'surfing' (and 'the fear of missing out' - or FOMO), apart from the other risk behaviors relating to the use of social media.

2.2 Popularity and benefits of Facebook use

Facebook was established in February, 2004 by Mark Zuckerberg and co-founders Dustin Moskovitz and Chris Hughes who were students at the Harvard University in the United States of America. It was started as a Harvard University campus-wide and student-only social networking system. Facebook, now has commanded high popularity among university students globally (Lubis et al, 2011), apart from the general public. For example, Pew Research Center (2011) reported that Facebook is one of the most popular social media used by British students and that in the United States of America, the use of Facebook is widespread among undergraduate students.

The following table provides a snapshot of the popularity (percentage of usage) among American graduates and college students. Data (extracted) are according to the 2013 demographics of 1,445 adults using key networking platforms as surveyed by the Pew Research Center's Internet Project (2013).

Table 2.1: Facebook popularity among American graduates and college students

<i>Social Networking Platform</i>	<i>Status</i>	
	<i>Some College (%)</i>	<i>College (%)</i>
Facebook	75	68
Instagram	21	15
Pinterest	20	25
Twitter	18	18
LinkedIn	15	38

Source: www.pewinterest.org

2.2.1 Regional Facebook penetration

As shown by the data in the technical report written by Meeuf (2014) – based on *Internet World Stats* - for the Carnegie Mellon University, the adoption of social media on global and regional levels cannot be overlooked, especially in a study like

this. For instance, Facebook penetration among Internet users by regional level is as shown in Table 2.2 below:

Table 2.2: Regional Facebook penetration

Region	% Population Internet Users	Facebook
Africa	14.9%	30.8%
Asia	26.9%	23.6%
Central and Soth Pacific	67.7%	60.1%
Europe	63.5%	46.9%
Latin America	31.3%	91.4%
Middle East	39.1%	26.3%
North America	78.6%	67.2%
South America	46.8%	70.9%

2.2.2 Social media adoption in Africa

Further noted from the technical report mentioned above is the data providing the insights about social media penetration into 6 (out of 58) African countries. The selection was based on having, at least, 20% of total population as Internet users. The following table presents the details:

Table 2.3: Social media penetration into selected African countries

Country	% Population of Internet Users	Facebook	LinkedIn	Twitter
Kenya	47.3%	9.6	n/a	n/a
Morocco	51	30.9	4.4	n/a
Nigeria	28.4	13.7	2.1	3.7
ReUnion	35.6	80,0	n/a	n/a
Seychelles	43.2	71.0	n/a	n/a
Tunisia	39.1	79.3	3.25	n/a

2.2.3 Popularity of Facebook among Nigerian students

Regarding the popularity of Facebook among Nigerian students, it was found that, in 2013, students formed 45% (23, 261,691) of the Internet users' population of 51,692,647 (www.twinpinenetwork.com). According to the social media use information provided on www.twinpinenetwork.com, the number of student users grows rapidly. From the review of some other profiles of social media use in Nigeria, it was noted that the social media habits of Nigerian students are related to perceiving the use social media as a 'social obligation'. This situation is attributed to treating, for instance, facebooking as a status symbol.

The use of social media has educational benefits. Selwyn (2012) agreed that learning now is more based around the principles of collective exploration and innovation rather than individualized instruction and that social media have benefits in this regard. The availability of social media tools encourages students to engage with each other, collaborate and share resources for education purposes. Facebook is found relevant to collective learning. Social media help to create learning communities among students, improve teacher-student interaction in form of web-based communication on, for instance, assignments and provide supports for classroom

learning (Munoz et al, 2009). As noted, the number of universities using Facebook for learning and communicating with students and graduates as well as marketing to attract potential students is growing. A clear example to show this is some academic departments at the University of South Africa (UNISA) having their own Facebook social networking sites from which students regularly find information and feedback on seminars, events, conferences, as well as occasional papers (e.g. www.facebook.com/pages/Unisa-Art-History--Visual-Arts-and-Musicology/133886626667526). This is positive for engaging students in learning and sharing of academic resources and information online.

2.2.4 Potentials of using Facebook as virtual classroom

A discussion on using Facebook for academic activities may not be complete without mentioning the use of virtual classroom, especially as this relates to today's student e-learning matrix. Batista (2013) stated that *“if we cannot take students to virtual classroom, we can take classroom to the students”*. This statement was in reference to the problem of inadequate online attendance of students on the virtual classes at the Metropolitan Autonomous University in Mexico. As noted, the problem was alleviated by 'empowering' Facebook as a virtual classroom.

Through the paper presenting the case of an inter-university collaboration on online learning (specifically, virtual classroom) between the New School Online University (NSOU) in New York City, USA and the University of KwaZulu-Natal (UKZN) in South Africa, Jansen (2011), a participant in the collaboration program, reported the beneficial potentials found in the application of virtual classroom/online learning technology in educational practices, particularly in Africa where majority of learners have lesser privilege of accessing higher education than elsewhere. The two cases mentioned above point to the potentials of innovations in education technology using the virtual or online environment. By this, the relevance of integrating social media into academic learning is reinforced.

The University of Ibadan, Nigeria (which is one of the targeted universities for this study) is another example. At the University, a teacher education postgraduate course

(Educational Media and Technologies) was redesigned to use Facebook as its delivery platform. It was noted that the choice “*fell on this particular social networking tool partly because of its popularity*” among the students. |

Mark Connolly in WCER Research Highlights (2011), however, cautions that “students who use social networking tools might pay significant hidden cognitive costs. Facebook, Google, and other social web services simultaneously seize and fragment our attention.” Attempt is made below to look into other types of costs for using social media – Facebook, in particular.

2.3 Costs of using Facebook by students

As mentioned in the introduction above, bringing up and examining issues in a wider scope on the influences of Facebook use by students is quite important to social researchers today. This is because of the need to build more knowledge about the dynamics of social networks, in general, in how these affect learning or education and the performance of students. The potential of Facebook is educationally promising according to Gafni and Deri (2012), but there are concerns as well about this social media platform. In the study carried out by these authors on the costs and benefits of Facebook for undergraduate students, they pointed out two types of costs of using Facebook: establishment phase costs and operational phase costs. While the costs involved at the establishment phase is meant to be the time and skill required for familiarizing with the use of the social platform, the operational phase costs are other requirements needed for the ability to access and use the social platform proficiently and continuously. This type of cost may relate to the social class or family background because of spending power (e.g. students from the middle class or lower working class may have lower frequenting on social media than those from the upper class of the society based on inadequate spending on Internet access). The authors stressed, among others, the number of hours student spend due to excessive emotional connection with Facebook surfing. They stated that this kind of incident, according to their study, led many first-year students they surveyed to use between three to six hours on Facebook surfing. The authors regarded a part of the hours as an opportunity cost for quality learning time, the cause of which was Facebook surfing. They maintained that the cost could be translated into benefits if such surfing is refocused

on undertaking academic activities. This can be in form of, for instance, carrying out assignments through the platform or carrying out a collaborative online discussion of a topic through the submission of comments on a dedicated Facebook page, especially by participating from outside the lecture venues or far away from the campus.

Giving the case of multi-tasking risk behaviors, Junco and Cotton (2011) indicated that the frequency of multitasking with certain ICTs was negatively predictive of overall college GPA. This is the conclusion of their study on the relationship between multitasking and academic performance. In fact, Facebook and text messaging were particularly referred as the ‘certain ICTs’.

2.4 Facebook use and attainment of academic grades

The Nigerian University system is based on academic preparation to attain degrees in different courses using CGPA. The length of study varies from 4 years to 7 years (each year represents a level – e.g. first year and second year means 100 level and 200 level respectively). Studies in art, social sciences, law and education are always undertaken in 4 years. Most courses in agricultural science, engineering and pharmacy usually take 5 years and each major science course is taken for 6 or 7 years including the period of internship. The education system in Nigerian universities is structurally British, as a legacy of the British colonial rule over the Nigeria. Attainment of degrees, diplomas or certificates depends on the course undertaken and numbers of years and is based on cumulative grade point average which combines all points obtained from 100 level to the final level. Nigeria has three categories of university: government, state and private. The latter category is relatively new in operation compared to the government-owned universities. There is a central (national) examination body (Joint Admission and Matriculation Board) which, as the name implies, is in charge of admission and matriculations matters of all Universities in Nigeria. In terms of modern technology adoption into education by the universities, this is not yet applicable across the universities. However, the outlook about this show that every university management now has the aspiration for its institution to be technology-compliant and the traces of this are showing more results especially within the private university category.

Internet penetration is widespread in the country. It is, therefore, obvious to observe that the use of social media is widespread as well especially among the youth (i.e. including students).

Below, the researcher examines the relationship between Facebook use and educational outcome (i.e. according to the observed research findings).

Firstly, Kirschner and Karpinski (2010), in Alloway et al (2013), observed the relationship between Facebook use and academic performance and found that Facebook users reported a lower GPA than non-users. This was based on the report that the users spent fewer hours per week for studying than non-users. This use of time for social media rather than studying is one sub-hypothesis that this study aims to test. According to Karpinski (2009), there were no difference in overall grade point average between users and non-users of Facebook. The studies carried out by Junco (2012) mentioned that time spent on Facebook and checking of Facebook were negatively related to overall scores attained by the students and that time spent on Facebook is slightly negatively related to time spent on studying. Furthermore, Alloway et al (2013) in their study titled "*Social Networking Sites and Cognitive Abilities: Do they Make You Smarter*" concluded that, from the students' learning experience, students were made to believe that there is a negative correlation between grades and time spent on tablets and the cell phone during class periods. This point tends to raise further questions about the place of mobility in Facebook, frequency of use and the implications of these for academic performance of students.

Miller (2014) in his book, *Minds Online: Teaching Effectively with Technology*, reported a study on Facebook and academic performance of undergraduate business school students that their increased overall Facebook use was associated with lower academic performance. He pointed out that the study showed that "self-reports of using online media correlated with poorer grades". He concluded that "poor academic performance was also, unsurprisingly, associated with the use of Facebook during class meetings".

Beyond the measures of GPA and hours spent, some recommendations in other research papers which the researcher reviewed pointed to some variables that must be

considered in further research. The recommendations included cognitive development, psychosocial development, self-esteem, moral and ethical disposition of users.

2.5 Facebook use in education

Concerning the interplay of Facebook and education, today's availability of social networking websites has prompted great enthusiasm among educators because of the roles the use of the websites can play in learning (Selwyn, 2009). While virtual learning management systems (e.g. Moodle, Blackboard and others) are now popular because of the relevance of their functionalities to teaching and learning, the adaptation of website features (also known as web tools or "plug-in applications") into learning on Facebook is now noticeable. In Africa, particularly, the adaptation of Facebook into curriculum, teaching and learning is found as minimal and studies relating to the influence of Facebook on academic performance are yet to incorporate cases of accessing Facebook via the use of applications on mobile phones and tablets. Mobile cellular phones and tablets are apparatuses or hardware for accessing internet connection through which social media sites are reached.

Barczyk and Duncan (2011) suggested that the application of social media to classroom teaching, that is, the tools at reach to help better engage and educate students, should be adopted into the curriculum but in a supplemental way. This suggestion implies that social media tools when applied to teaching and learning can positively impact the performance of both teachers and students but does not replace the traditional classroom method/s nor the conventional educational experience. In terms of using social media for communication and collaboration, the findings from the case study carried out by Wolf et al (2012) provided the evidence that the size of the studied low and upper level students using Facebook for communicating with their faculty members and classmates about coursework (e.g. sending articles to other students) was greater when compared with the size of the same set of students using Google+, Wikis, Twitter, blogs, YouTube and other social media websites.

To reiterate, the use of Facebook educational web tools or features is already becoming more common. In the list of "useful educational Facebook applications",

provided online by the Arts and Sciences Support of Education Through Technology (ASSETT) of the University of Colorado, (www.assett.colorado.edu) United States of America., is the Goodreads Books web tool. This enables users to keep track of what they are reading and it let their friends know what they are reading. Users are also able to share their thoughts and ideas on their favorite books, get recommendations for their next literary collection, access hundreds of book reviews from other users and create book clubs and discussion segments.

Following the above observations, it may be counter-argued that Facebook does not have a negative influence on students' academic performance (or their CGPA) as it has been found in other studies to have the potential to enhance teaching and learning, and thereby it is a platform used for encouraging learning and engaging students for academic purposes.

Looking at the availability of social media tools, educational institutions' supports for the use of the tools and the impression of positive impacts of all these, this study will explore the role which the adaptation of social media tools can have on academic performance of the targeted students. This study will test the sub-hypothesis that the adaptation of social media tools to teaching and learning positively influences the academic performance of students.

By all indications, Facebook, supposedly, with its social capacities, stands to positively help to change the face of education. However, it is observed that reinforcing the efforts to investigate the ways it can render the help maximally, is of necessity.

2.6 The declining of Facebook users in the West

Although his report provided through the angle of financial analysis, Henry Blodget, a financial analyst, gave the insight that Facebook use has never remained as an ever-skyrocketing trend. As he reported in 2012 on www.businessinsider.com, "*Facebook's web-based users in the U.S. declined year over year, and the company's core U.S. business may be shrinking.*" and "*the number of web-based users in the U.S. and other developed markets is shrinking.*" With these two statements, Blodget

pointed out that the number of Facebook's web-users (computer-based) has been reducing, but the number of mobile-users continues to increase.

According to the report titled: Facebook User Growth Could Decline in 2017, the traction or the dominance being earned by Facebook among social media could dwindle in the near future. This view, by Fuscaldo (2017) was based on the study carried out by Bridge Ratings showing that people in all age groups are using Facebook less than in years past. This forecast is similar to that made regarding the loss of appeal by Facebook which was presumed could make Facebook lose 80% of users by 2017, according to Princeton researchers and as reported by Garside (2014).

The above reports about Facebook's possibility to have lesser users' growth have implications for a study like this and, therefore, the researcher found it important to put this up altogether as a point for attention. This becomes so important as it points out more the volatility of the trends in social media and information and communication technologies in general. It also becomes important concerning the contexts or settings of related researches in the future. In other words, the decline of Facebook users, if related forecasts become a reality, in the West will have different effects in this part of the world to what takes place in the developing countries where Facebook users' base is noted to still grow rapidly. Looking at the unpredictability of information and communication technologies and ever-changing traction favouring other social media, it can be concluded that Facebook may lose its users appeal over time in the West, and even other place beyond this region of the world.

2.7 Internet and social media use in Nigeria

Towards perceiving the context of the study it will be instructive to show the profile of the internet and social media usage in Nigeria.

SocialBakers (www.socialbakers.com), in 2012, showed that there was no other *platform* than Facebook which had as many mobile users as in South Africa, Nigeria and Japan; countries which, as a result, have been labelled as 'Facebook mobile countries'. Nigeria led, with 81.2%, of the top 10 countries with highest Facebook penetration and mobile platform accessing in the world.

In its publication titled: *The Social Media Landscape in Nigeria 2014: The Who, the What and the How*, the Africa Practice Media Agency provided that in 2013, Internet penetration in Nigeria reached 30% (i.e. more than 50 million users) (www.africappractice.com, 2013). According to the same media agency, 70% of the Nigerian population of internet users already used social media websites by the year 2009. This increased to about 72% in 2013.

Apart from the fact that Nigeria is the third largest country in Africa and the 35th largest in the world in terms of facebooking, www.twinpinenetwork.com (as at 2013) gave some insights about Nigerian-specific Internet/Facebook engagements in the publication titled “*State of Digital Media: Nigeria*”. The following set of data represents the insights for 2013:

Table 2.4: Internet/Facebook engagements in Nigeria (2013)

Characteristics	Data
Nigeria Internet users’ population	51,692,647
Facebook users’ population	5,357, 500 (2013)
Largest users’ age group	18-24 years (1,930,460 users)
Gender	Male 69%, Female 31%
Nigerian Internet ‘netizens’ (i.e. people actively engaged online)	78% (between 19 and 35 years old)
An average time spent by Nigerian netizens online	Not less than 3 hours daily online
Students’ percentage of Nigerian Internet population	45%
The second online activity (among the top 7) in Nigeria	Social networking (72%)
The fourth online activity (among the top 7) in Nigerian	Work/business/studies
The most frequented social network website in Nigeria	Facebook (80%)

Source: www.twinpinenetwork.com

According to the website WeAreSocial (www.wearesocial.sg), the following data were as updated in January 2014:

Population of Nigeria	-	177, 155,754 (50% Urban/50% Rural)
Internet users' population	-	55,930,392 (32%)
Active Facebook users	-	11,200,000 (6%)
Active Mobile Subscription	-	114,000,000 (64%)

2.8 Studies on social media use in Nigeria

Data on social media use in Nigeria showed that concerted research focused on the social media aspects of online personal safety and privacy is ongoing and some noted studies in this area of social media use – Facebook in particular – provide some pertinent perceptions, which a study such as this will consider. The researcher noted the growing interests of Nigerian social researchers in social media especially in the area of education.

Sanusi et al (2014) conducted a study among the students of Kaduna State Polytechnic with 3 objectives: to find out the reasons for usage of social media, to ascertain the frequency of the use of social media and to identify how students perceive social media. The study first established that Facebook and WhatsApp (a social media application for chatting, phone calling and sharing of media materials) were widely used among the students. Furthermore, the study indicated that the students used social media to connect, interact, share information and chat with friends and that all these were done, in terms of frequency, all the time of the day. Even though the students regarded social media as an interesting and essential platform for enhancing academically related tasks, the study did not reflect that they were using it for academic purposes. A considerable number of the students agreed that the hours they spent surfing social media websites exposed them to the risks of being pre-occupied outside of academia and that the risks could negatively affect their academic output. This study refers to WhatsApp, the chatting application mentioned above, as it was popular and widely used among the students being studied. The study

also points to social media access through the hand-helds or portables: i.e. smartphones, tablets and laptops.

Resulting from the conclusion of the research conducted by Ogedebe et al (2012), “without an iota of ambiguity”, the use of Facebook did not have any adverse effect on the academic performance of students in Nigerian universities. Ogedebe et al (2012) tested students’ pervasive use of Facebook and what roles this played in students’ academic success. The population for the study (students between the ages of 18 and 21 years) was drawn from one federal university, one state university and one private university – all spread across Nigeria. The main variables measured included how actively students used Facebook, how much time they spent on the social media website and how often they updated their statuses and posted on friends’ or followers’ walls.

Two other studies reviewed by the researcher of this study and related to Nigerian students’ use of social media in academic performance, are titled:

- a) Nigeria Youth and Social Media: Harnessing the Potentials for Academic Excellence (by Adaja and Ayodele, 2013) and
- b) A Study of Social Network Addiction among Youths in Nigeria (by Olowu and Seri, 2012).

Adaja and Ayodele (2013) focused on the extent to which Nigeria youths leveraged the potentials and possibilities of social media platforms (Facebook, in particular) for networking with academic materials in pursuance of academic excellence. Their finding was that two-thirds of the Nigeria youth total population studied never used Facebook for exchange of academic information or resources. The study emphasized the need to encourage Nigerian youths to harness the potentials of social media for academic undertakings.

Considering the use of Facebook and its impacts on students’ performance in the context of Nigeria, the contributions of Olowu and Seri (2012) are highly significant. They considered studying the addiction aspect of using social media by Nigerian

youths. The findings of the study were that the youths (aged between 16 and 30 years):

- a) spent inordinate numbers of hours on social networking websites and that this negatively affected their academic productivity.
- b) were always agitated when they were not able to access their social networks at least thrice daily.

The focuses of the studies mentioned above provide pointers relating to the core of this study and they serve as the background (in the Nigerian context) from which this study can draw insights for proceeding with its scientific exploration.

Based on this review of literature and the theoretical background selected, this study will examine the correlation between the factors identified under section 1.4 (research question) above with a focus on time spent on Facebook (use of Facebook) and (academic performance measured in terms of the cumulative grade point average (CGPA) obtained by respondents.

2.9 Social media, public freedom and social change

Mass communication is a broad area of study and it is a multidisciplinary field for which the contributions of sociology cannot be overlooked. The confluence of mass communication and sociology and the ensuing implications cannot be overlooked as well. According to Cabral (2011), modern information and communication technologies have altered the way people generate, access and share information. To relate social media as a set of modern technology, the hitherto practice of having a group of people choosing on behalf of the public the set of information to have, the set of knowledge to get shared and the timing for dissemination have almost been reduced to none. With the use of social media, the public does not necessarily need to rely on the output of the traditional media before they learn about ongoing public affairs or before they get either entertained or educated. Cases of using the social media as tools of social change is instructive at this point. The emerging possibilities of using social media for enhancing learning as this study shows is another examples

of exercising the freedom of choices which the traditional media have never allowed. Social media empowers the individuals and the general public to make better choices about what and who they want to engage with as well as where. All these point to what has been referred to earlier as the 'possibility for more freedom'. The freedom offers the opportunity for people to collaboratively create a desired social change across distance and time, particularly based on the use of social media – today, not necessarily or compulsorily through the traditional mass media.

Chapter 3

THEORETICAL MODELS/Framework

Specifically looking at the social context, theories provide the explanations of phenomena in terms of the strength and direction of the relationship between the them. The significance of theories to researchers is the enablement they give to researchers to predict the outcomes of occurring phenomena to a possible extent (Black, 1999). Theories guide researchers to make intelligent decisions through their process of investigations (Graziano and Raulin, 1993). They inform how to go about not only identifying the topic area, conducting literature review, formulating the research questions, they also give direction about articulating the hypotheses, determining the participants (in social research) to study, what dependent and independent variables are to be selected and the methodology to choose (Teddie, 2007). All these are, apart from the other planned actions, precede the point of data collection in a research process.

The ‘Uses and Gratification Theory’ and ‘Student Involvement Theory’ will be used as the theoretical models for this study and they have been chosen based on the contributions they make to understanding the underlying relationship between the use of social media by students and how the students perform academically. The two theoretical positions were preferred because a theory that wholly examines the context of the use of social media and learning achievements were not found at the beginning of the study. It is regarded that the two theoretical positions will complementarily help in providing the insights needed for reaching the aims of this study.

3.1 Uses and Gratifications Theory

A classical study by Blumler and Katz (1974), based on investigation with mass communication background, posited that people (the audience of media) have always been passive users of the media. The proponents of the theory postulated that people, by personal choices, adopt a media based on their needs for gratifications. They showed, therefore, that the choices made (among several competing choices) by the audience are justifiable according to needs or goals. It is viewed that this theory

relates well with knowing why students choose Facebook among all social networking sites.

It has been argued that the theory focuses only on the consumption of what the media offers. However, it tends to be of key help in seeing the related dynamics between facebooking and personal gratifications. The theory provides perspectives on why people use the media. The reasons noted include having companionship, excitement, relaxation, social interaction and for information gathering.

Following the study in 2008 by Kara Krisanic (a Master student at the University of Missouri-Columbia), Frogot et al (2013), reported a comprehensive list of what were found to be the strongest predictors for the use of social media. They showed that using social media serves to fulfill the following needs: information/updates of information, entertainment, discussion, connection, product inquiry, commerce and impression management.

The following perspectives on the motivations for the use of social media were noted by the researcher.

- Filling up free time (diversion or passing the time when one is bored)
- Keeping in touch with previously established relationships
- Meeting people
- Doing what everyone is doing (critical mass effect)
- Sharing media
- Escaping other social situations
- Exploring things randomly
- Interpersonal utility
- Personal status seeking

The report by Frogot et al (2013), as mentioned above, showed social and psychological motivations as factors for using Facebook. It is believed that examining the needs highlighted above will help to identify the relevance or possible association of such needs with those of the participants in this study. Specifically, the

import of this theory is its help in understanding, for instance, motivations for unfocused non-academic use of Facebook that can directly or indirectly affect student learning outcomes as represented by the CGPA obtained.

It is observed that considering all the perspectives/factors will enhance the knowledge which this study seeks to create.

3.2 Student Involvement Theory

Originally developed by Alexander W. Astin in 1984, the theory highlights the influences of mediating factors between the personal and psycho-social amount of commitments that students give to attain desired learning outcomes. Astin (1999) defines students' involvement as "*the amount of physical and psychological energy that the student devotes to the academic experience*". This theoretical model suggests that a highly involved student is one who... "*devotes considerable energy to studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students*". The uninvolved student is directly the converse of this quoted definition of involved student (Astin, 1999).

Student involvement theory is found to be relevant to this study looking at the scope of engagement of students in the contemporary Web 2.0 literacy of the 21st Century vis-à-vis their concurrent involvement in studying and the relationship between the two could spell out in terms of academic performance. Web 2.0 is the general outlook on the development of the World Wide Web to a phase where static nature of the Internet to the user-generated content phase which include the social media. At the this phase the involvement of the users is higher and more demanding than that of Web 1.0.

As shown below, a look at the core concepts and the basic postulates of these theories will serve as a framework in examining the aim/s of this study and in developing the survey tool:

i) *Core Concepts*

- *Inputs: demographics, student background, previous experiences.*
- *Environment: range of experiences encountered during college.*
- *Outcomes: characteristics, knowledge, attitudes, beliefs, values, etc. that exist after college.*

ii) *Five Basic Postulates about Involvement*

- *Investment of psychosocial and physical energy.*
- *Involvement is continuous, students invest varying energy.*
- *Involvement has qualitative and quantitative features.*
- *Development directly proportional to quality and quantity of involvement.*
- *Educational effectiveness is related to the level of student involvement.*

An intense look on the propositions of the Uses and Gratifications theory along with the postulates of the Student Involvement theory will reveal, on the part of a student Facebook user, the place of the fulfillment of the needs for non-curricular (social) gratifications, on the one hand, and the needs for being an involved (academically committed) student, on the other hand. The use of the theory of student involvement provides that despite the possibility for lower than expected academic performance resulting from the use of Facebook, the investment of personal involvement in studying helps students to improve their academic performance. It is viewed that using the two theoretical arguments will complementarily help in achieving the aims of this study.

Chapter 4

RESEARCH METHODOLOGY

Research processes involve either one of the two major paradigms: quantitative and qualitative approaches. These portend the methodology applied to a research topic. Qualitative research paradigm tends toward looking at population dynamics with intended in-depth probing and it is carried out always in a purposive manner. It is, therefore, undertaken with much less of sample randomness and representativeness. Quantitative research paradigm has sample randomness, representativeness and high possibility for necessary generalization as its core focus. It also helps to seek and find relationships between the identified variables with high potential for objectivity on the part of the researcher (Black, 1999). Even though not all types of data under this approach are numerically quantifiable, the use of standard tests to identify related statistical significance is of importance and relevant to such studies in the social sciences.

The Harvard University publication titled “*A Guide to Writing a Senior Thesis in Sociology*” (2012) states that “*quantitative methods are used to determine patterns and relationships among the characteristics and outcomes of a large group of people*”. Data are analyzed to identify the statistical significance of study variables and the interpretation of this helps in originating the finding/s of a study. This approach was chosen for this study because this is confirmatory approach for addressing an investigation. It is not used for explanatory purpose. It seeks to confirm or decline an identified hypothesis about a phenomenon. It is relevant as data are relatively obtainable in numbers as it even asks closed ended questions that provide quantifiable answers and it is highly structured using ratio scale.

This study adopted the use of the quantitative research paradigm. The variables under study were “frequency of facebooking” (volume of Facebook use recurrence) and “academic performance”. The first variable, the use of Facebook (i.e. frequency of facebooking) was linked with the fact that Facebook is the largest online social network amongst social media (www.statisticbrain.com, 2014).

The methodological features forming the setting to be followed by the study are provided below.

4.1 Research design

The research design for the study is quantitative. The survey method of data collection was implemented using a structured questionnaire. The criteria provided by Vogt et al (2012) on when surveys becomes a suitable choice are instructive in choosing the survey method. The authors listed the following as the criteria.

Vogt, et al (2012) indicated that the approach is best when...

- data are best obtained directly from the respondents.
- data can be obtained by brief answers to structured questions.
- respondents are expected to give reliable information.
- how to use the answers is known.
- an adequate response rate is expected.

The questionnaire was determined by the literature reviewed, the aims and the research questions of this study as well as by the theoretical positions. Data were collected based on the structured questionnaire made available to the undergraduate students selected as sample. The data collected were managed using the Statistical Package for Social Science (SPSS). The data from the study were analysed using Pearson's formula for correlational co-efficient. This analytical formula was selected for this study because Pearson's correlation co-efficient or Pearson's product moment correlation is an analytic measure used to determine the linear dependence (correlation) between sets of data (variables). It is generally used within the pursuit of quantitative approach to research.

Each of the theories will be tested by respectively using the following aspects:

- a) Gratifications for facebooking or expected personal outcomes of facebooking (i.e. for the Uses and Gratifications Theory) and

- b) Fulfillment of personal commitments required for studying (involvement) along facebooking (i.e. for the Student Involvement Theory).

4.2 Study population

The research was carried out, in the English language, at three universities in the western part of Nigeria. The universities selected for the study were: University of Ibadan, Ibadan, University of Ilorin, Ilorin and Obafemi Awolowo University, Ile-Ife (see why in section 4.3 below). As indicated already, the respondents for this study consisted a sample of the undergraduate social sciences students at the three universities within the age range of 19 and 35 years.

The selection of the three universities was centered on three considerations. These are:

- a) diversity in students' economic and cultural backgrounds (representativeness)
- b) randomness
- c) study limitations (geographical movement and financial requirement)

4.3 Selection process of the Universities

Nigeria administers the federal system of government with different geographical delineations called states. The country runs its education system under federal and state ministries. This, in turn, determines the separation of universities into federal and state universities along with private universities which are comparatively new in the education system. There are 36 federal universities in Nigeria with seven of them in the western part of the country.

Based on random sampling method, the researcher chose three of the seven universities in the western part of the country by using the online random number generator at www.mathgoodies.com/calculators/random_no_custom.html. The researcher arrived at the selected universities by taking the following steps:

- a. Randomly listed the seven universities and numbered them sequentially.
- b. Entered 1 and 7 respectively as the lower limit and upper limit numbers into the calculator.
- c. Picked the first set of three numbers sequentially from the random numbers generated and selected the names of the universities corresponding to the selected numbers.

The instance of limiting the number of selected universities to federal universities is to take advantage of the waiver aspect of the university admission system used in Nigeria (i.e. catchment area admission system). The system limits a potential student to seek admission to the universities within the confine of the geo-political zone (comprising certain number states) to which he or she belongs. However, there is a waiver in the system for all federal universities. This waiver allows every potential student in Nigeria to apply and be admitted to any federal university without limitations. This is an advantage for the researcher for choosing from the federal universities in the western part of the country for reducing costs for the study and, at the same time, to maintain the chance for representative samples from these universities. The availability of the academic clusters (undergraduates and faculty) in the universities was also used as an opportunity for conducting simple random sampling. The term faculty as used here means an administrative unit comprising academic departments or colleges. An example of this relating the selected universities is the Faculty of Social Science.

The institutions randomly selected are amongst the largest in the western part of the country and are relatively scattered. The faculties of social sciences chosen, are among the largest faculties in the selected universities as well.

4.4 Administration of the questionnaire

The sample target of 300 undergraduate students was followed by allotting a sample of 100 respondents from each university. The researcher personally distributed the questionnaires before and after lecture sessions. Prior to handing over the questionnaire, the researcher pointed out the need to have their consent (i.e. by signing the consent form) before participating in the survey. The researcher also

educated the students about the purpose of the survey. Along this, the need for them to be active users of Facebook and to be between the age range of 19 and 35 years, in order to participate in the study, was emphatically stated.

The follow-ups undertaken by the researcher during the period of administering the survey instrument contributed to obtaining the overall positive response rate of 95% (i.e 284 out of the 300 targeted students who participated). The missing responses (16) included 14 questionnaires that were not returned while two questionnaires were discarded because of the indication on them that those who submitted them were not Facebook users.

4.5 Sampling

Sampling is the process undertaken to choose the research participants from a study population (also called the universe). The research methodology a researcher uses informs the process to be applied to select the sample. Wethington et al (2010) mentioned the main reasons for the use of the sample rather than the whole universe for research. It makes the selection of the respondents and the study procedure efficient and effective when the costs of time, money and efforts are considered (ibid.). It also enables focus for the researcher. He maintained that a sample must be duly chosen just as the data must be appropriately analyzed.

From the highlights given by Barriero and Albandoz (2001) on the importance of random sampling, it is noted that this type of sampling helps to minimize sample bias. It also maximizes the level of representativeness and how far the research results, based on the sample, can be generalized over the whole population. This research takes into cognizance, the authors' contributions mentioned above. The highly referenced classical recommendations of Krejcie and Morgan (1970) in the publication titled *Determining Sample Size for Research Activities*, shows that a sample size of 335 is appropriate for a population of 2,600. This recommendation was adapted for this study. This led to selecting a sample of 100 students from each university - having noted that the total number of targeted undergraduate students in the three selected higher institutions were suitable for using the sample.

The respondents were expected to be able and willing to participate as well as be active users of Facebook. By this criteria, the study initially was based on purposive sampling method. As generally known, purposive sampling (also known as judgmental sampling) is based on utilizing the researcher's knowledge of a population or cases to determine the sample for a research. Facebook users among the undergraduates targeted for this study was purposively chosen for the study.

Also, the sampling procedure followed a multi-stage cluster sampling to identify suitable and representative respondents that will make the study valid (see section 4.8 also). The first stage has already been undertaken in identifying three Nigerian Universities for the study. The next stage was acquiring a list of all undergraduate social science courses and, with the administrative permission at the three identified universities, a list of all the registered undergraduate social sciences students organised into clusters of departments and levels of study was obtained for undertaking a random sampling from the lists. Then, the students were contacted to participate only as active users of Facebook.

4.6 Data collection instrument

The data collection instrument is a questionnaire (Appendix I). It contains questions formulated based on the research questions (main and sub-questions), literature review and the theoretical positioning presented in this study. The questions were set in a way that examines the connection between facebooking with academic performance of the respondents. Collected data were quantified, for instance, with regard to time spent on Facebook use compared to time spent on studying and other academic activities per day.

The instrument was pre-coded for the purpose of data entry and copies of it were distributed on the campuses of the selected universities after obtaining authorized accesses to the students from the administration units of the universities (i.e. Registrar's/Faculty Officer's office). The researcher was informed of the possibility for administering the questionnaire online in one of the selected universities. Getting needed access to using the students' email list was sought after the submission of a

letter from UNISA introducing the researcher. However, the idea was put off due to privacy issues.

4.7 Data processing and analysis

The Statistical Package for Social Scientists (SPSS) was used for data entry and analysis. Pearson's correlation tool was used to establish applicable relationships among the identified variables.

4.8 Reliability and validity

Ensuring these two aspects of a study are very important. While reliability shows the need that a study produces results that will be affirmed consistently by subsequent similar studies, validity or trustworthiness of a study requires that the instrument applied correctly obtains the type of data that it is meant to be gathered. The researcher was committed to work objectively and diligently to ensure the actuality of these two aspects of research by following applicable scientific method. Initially, the tool was pre-tested with up to ten randomly selected students in the University of Ibadan, Ibadan, Nigeria. Doing this was viewed as a way of helping the researcher to ascertain the validity of the tool.

4.9 Ethical considerations

Undertaking studies that involve human subjects requires taking cognizance of ethical or legitimate and professional standards (Graziano and Raulin, 1993). Ethical standards require that people who choose to participate in a research have the basic rights to personal privacy and to protection from physical and psychological harms. Additionally, it is expected that human subjects of a research should be provided with sufficient and clear information to help them decide on their participation (or otherwise) in a research.

The researcher applied the ethical guidelines relating to this study as specified by the University of South Africa. Due ethical processes indicated by the targeted Universities or as stipulated by professional bodies responsible for such outside the

targeted universities were ensured.. Necessary permissions and ethical clearances, therefore, were taken prior to undertaking the research at the targeted universities. Responses to the requests made by the researcher on access to the research field indicated that there was the need to obtain introduction letters to be presented to the administration units of the three selected Nigerian universities. The need was met by the researcher.

Also, care was taken to ensure that the participants are kept anonymous during and after the study. This is to assure them of their protection from disclosure of personal information and general respect for their privacy. In this regard, the researcher ensured that the data from the respondents were treated purely as academic and confidential for the safety, social and psychological well-being of the respondents. Information on ethical obligations was prioritized.

Concerning the integrity requirement, the researcher performed to the best of his knowledge and capability, faithful and thorough work and adhere to accuracy of the methodology and treatment of the data as well as other forms of information throughout the research process.

Chapter 5

ANALYSIS AND PRESENTATION OF DATE

5.1 Preliminary

This study was set out to investigate the influence of Facebook use (or “facebooking”) on academic performance of undergraduate social science students at three universities in Nigeria, West Africa, using the survey method for data collection.

The investigation carried out through this study was guided by the aims to identify and examine the influence of the use of Facebook (based on the social media activities engaged in, usage time and time of study engagement) of targeted undergraduate social sciences students on their academic performance measured by their given CGPA.

The study addressed four research questions:

- a) What are the social activities students engage in on Facebook?
- b) What are the academically oriented activities students engage in on Facebook?
- c) What is the frequency or amounts of time the students spend on social and academic activities, respectively, within a particular period?
- d) Is there any connection between facebooking (or social media use in general) and students’ academic performance?

This chapter provides the demographic information about the respondents and the results of the data collected with the questionnaires administered to and completed by the selected undergraduate university students. This chapter also presents the analysis of the research questions taking into consideration the data collected through the self-administered questionnaire. The chapter also relates the relevance of the theoretical frameworks chosen for the study, and the statistical tests undertaken in relation to the main hypothesis and sub-hypotheses.

5.2 Survey responses per university

Each university was allotted a sample of 100 respondents. From the University of Ibadan, 98 responses were obtained. This approximately formed 34% of the overall responses. While the University of Ilorin produced 90 responses, the Obafemi Awolowo University produced 96 responses. Their respective percentages, 32% and 33% plus that of the University of Ibadan summed up to the total of 99.9% responses from the expected total responses of 300 sampled. The survey responses are as presented in the following table:

Table 5.1: Survey Responses per University

Institution	Total sample of respondents	Total of returned responses	Percentage (%) of total sample
University of Ibadan, Ibadan	100	98	34
University of Ilorin, Ilorin	100	90	32
Obafemi Awolowo University, Ile-Ife	100	96	33
Total (N)	300	284	99%

5.3 The respondents and responses

The respondents' characteristics are presented below in Table 5.2. The final sample of 284 respondents were composed of 46.5% males ($n = 132$) and 53.5% females ($n = 152$). Respondents' ages ranged from 19 to 35 years. However, the limit of 35 years was not made absolute as the phrase "and above" was added to maximally effect the randomness applied in the selection so that the respondents of over 35 years would rightly be included in the sample.

There were originally 286 undergraduate students who responded to this survey. Aside from the preliminary information given to the respondents about the criterion of being Facebook users for participating in the survey, two of them indicated that they were not members of Facebook, and so they did not qualify to participate and their counts were discarded earlier, before the data analysis stage.

As shown in Table 5.2, the total number of the respondents was 284. Thirty seven percent (37%) of the respondents were in their first year in school (100 level), 27.5% were in the 200 level of study while 20.4% and 15.1% were respectively in 300 level and 400 level of study. This shows that all the respondents were undergraduate students across the selected universities and across study levels. As indicated before, the respondents were selected from the social sciences faculty/departments in the three targeted Nigerian tertiary institutions.

Table 5.2: Biographical data of the respondents

Characteristics	Frequency (284)	Percentage (100%)
Gender		
Male	132	46.5
Female	152	53.5
Age		
19-22	168	59.2
23-26	35	12.3
27-30	37	13.0
31-34	23	8.1
35 and above	21	7.4
Study Level		
100 Level	105	37.0
200 Level	78	27.5
300 Level	58	20.4
400 Level	43	15.1

In answer to the questions probing the respondents about their membership of social media (i.e Facebook, LinkedIn, Twitter, Google+ and others), 284 respondents positively indicated that they were members of Facebook. As indicated above, this sample total excluded two students who did not show in the questionnaire that they were members of Facebook. The two respondents were excluded from the 286 responses collected from the survey. This resulted into 284 responses that were finally considered for analysis. As depicted by Table 5.3 below, 284 (100%) respondents for the study were members of Facebook.

In order to know how regularly the respondents used social media, they were asked to indicate this. Besides noting the regular use of Facebook by all the sampled members (that is, the whole sample), it was also noted that there were respondents who were concurrently members of other social media apart from Facebook: LinkedIn 27 (9.5%), Twitter 61 (21.5%), Google+ 68 (23.9%), WhatsApp and others 182 (64.1%). All these are shown in the Table 5.3 below.

The requirement for being a member of Facebook (in regard to this study) was being an active user of this social networking platform. Being active members means owning and sustaining a membership and presence performing different activities everyday (facebooking) on the website.

The respondents were asked to indicate the average time they used, daily, for facebooking. The results were that 45 (15.8%) of the respondents used under 30 minutes daily on Facebook, while 67 (23.6%) used between 30 and 60 minutes daily and 63 (22.2%) used between 61 and 90 minutes . Furthermore 30 (10.6%) of the respondents used between 91 and 120 minutes daily, and 79 respondents (27.8%) had more than 120 minutes of facebooking on daily basis. It can, therefore, be concluded that the majority of the respondents were on the Facebook website for 2 or more hours per day.

A set of Facebook activities were identified and the respondents were asked which of the activities they frequently performed on Facebook. The activities were set into three categories which are reading, posting and communicating. They were further asked if the activity of reading was ever involved using Facebook groups for

academic purpose. To check the possibility of randomly doing any of the activities, the respondents were *additionally* asked to indicate such. As shown in the 4th main row in Table 5.3, the results of most commonly chosen activities on Facebook were: posting updates and links or sharing posts 25 (8.8%), communicating by chatting 33 (11.6%), reading from academic related Facebook groups 36 (12.2%), reading on the Facebook wall 63 (22.2%), randomly doing several of the identified activities 127 (44.7%).

Table 5.3: Social media use among undergraduate social science students
in Nigeria (2016)

Characteristics	Frequency (284)	Percentage (100%)
Are you a member of one or more social networking websites?		
Yes	284	100
No	0	0
If yes, check the one or those you use regularly		
Facebook	284	100%
LinkedIn	27	9.5%
Twitter	61	21.5%
Google+	68	23.9%
WhatsApp and Others	182	64.1%
Average time daily on [Facebook]		
Under 30 minutes	45	15.8
Between 30 and 60 minutes	67	23.6
Between 61 and 90 minutes	63	22.2
Between 91 and 120 minutes	30	10.6
More than 120 minutes	79	27.8
What do you usually do on the website?		
Reading on your wall	63	22.2
Posting updates and links or sharing posts	25	8.8
Communicating by chatting, etc.	33	11.6
Reading from academic-related Facebook groups	36	12.7
Randomly doing any of the above	127	44.7

Based on the question asking for the average time used daily by respondents on Facebook and what they frequently did on the website (that is, as shown in the last two main rows in Table 5.3), the table below represents the breakdown of the time used for each activity that respondents performed on Facebook.

Table 5.4: Time used for each Facebook activity per day

Characteristics	Time spent on each activity per day on Facebook				
	Under 30 mins	30 to 60 mins	61 to 90 mins	91 to 120 mins	More than 120 mins
How many hours each activity takes you per day?					
Reading on your wall	6 (2.1%)	15 (5.3%)	17 (6.0%)	5 (1.8%)	12 (4.2%)
Posting updates and links or sharing posts	6 (2.1%)	11(3.9%)	3 (1.1%)	4 (1.4%)	8 (2.8%)
Communicating by chatting, etc.	5 (1.8%)	7 (2.5%)	10 (3.5%)	5 (1.8%)	8 (2.8%)
Reading from academic-related Facebook groups	8 (2.8%)	10 (3.5%)	7 (2.5%)	4 (1.4%)	12 (4.2%)
Randomly doing any of the above	20 (7.0%)	34 (8.5%)	26 (9.2%)	12 (4.2%)	39 (13.7%)
TOTAL	45 (15.9%)	78 (23.7%)	63 (22.3%)	30 (10.6%)	68 (27.7%)

The respondents were requested to choose from the list of devices shown in Table 5.5 below. Seven (2.5%) used desktop computer, 100 (35%) accessed social media by laptop and 152 (53.5%) used mobile phone. With Kindle/Nook and tablet, 6 (2.1%) and 19 (6.7%) respondents accessed social media websites respectively.

To discover the possibility of indiscriminate browsing of social media websites during study time, the respondents were asked if they spontaneously and often checked the websites. The data gathered were both positive and negative; 114 (40.1%) indicated ‘yes’, 38 (23.4%) said ‘no’ and 132 (46.4%) formed the set of respondents who did not use mobile phones to access social medial websites. All these are as presented in Table 5.5.

Table 5.5: Devices used to access social media websites

Characteristics	Frequency (284)	Percentage (100%)
Device use to access social media		
Desktop Computer	7	2.5
Laptop	100	35.2
Mobile phone	152	53.5
Tablet	19	6.7
Kindle/Nook	6	2.1
If you access social media websites on mobile phone often, do you spontaneously do that during lectures		
Yes	114	40.1
No	38	13.4
Missing	132	46.4

The next sets of questions in the questionnaire relate to the Table 5.6 below. To distinguish the levels of agreement of respondents with the view that the time spent on social media activity usually infringes on planned study time, they were requested to choose how close or far they agreed with this view. The responses comprised 24 (8.5%) declining either agreement or disagreement with the view, 26 (9.2%) in strong disagreement, 50 (17.6%) in strong agreement, 99 (34.9%) in agreement, and 85 (29.9%) in disagreement.

Overall 149 respondents were in agreement with, and a total of 111 respondents disagreed with the view that time spent on social media impinges on planned study time. The students themselves identified through this question the use of time and its place in study performance and social media use.

On the question of procrastination, because of being busy on social networking sites in the use of time (question 11 in the questionnaire instrument), 164 (57.7) respondents agreed with the experience. The other 120 respondents (42.3%) negatively answered the question meaning that they did not forego carrying out their academic activity or any other activity because of being engaged by facebooking or on another social media website. See the table below (Table 5.6) which displays the responses both in numbers and percentages.

The respondents were asked if they, at times, felt distracted from their study when they were on any social media websites. This was to identify if the respondents could see that the use of social media, at times, negatively affected their study time. As indicated in the table below, 155 (54.6%) answered 'yes' and 129 (45.4%) did not feel distracted from their study when using social media and answered 'no'. In relation to question 11 on possible procrastination on and distraction from their study based on the use of social media websites, question 13 asked the respondents to provide answers regarding the tactics they used to managed their time daily. The results showed that 70 (24.6%) respondents employed the time management method of a to-do-list. Forty-seven (16.5%) respondents used mobile phone alarm method as a reminder for the time to study, and 12 (4.2%) preferred using a computer based browsing timer as a reminder. Seventy-six (26.8%) relied on other time management methods (such as asking a friend as a reminder) while 79 (27.8%) respondents indicated not using any method of time management.

As shown by the responses received, 211 (74.3%) respondents affirmed that they could give up using a social media website for one day or more. On the other hand, 73 (25.7%) revealed that they could not give up accessing a social media website for one day or more.

Table 5.6: The time spent on social media

Characteristics	Frequency (284)	Percentage (100%)
Time spent on social media always takes away from the time I plan for studying		
Strongly Agree	50	17.6
Agree	99	34.9
Don't Know	24	8.5
Disagree	85	29.9
Strongly Disagree	26	9.2
Have you ever procrastinated because of being busy with social networking sites		
Yes	164	57.7
No	120	42.3
Do you feel distracted from your study, at times, when you use social media		
Yes	155	54.6
No	129	45.4
What tactics do you use to manage your time daily		
To-do-list	70	24.6
Alarm on your mobile phone	47	16.5
Computer based browsing timer	12	4.2
Others	76	26.8
I don't use any	79	27.8

Table 5.6: The time spend on social media (cont'd)

Characteristics	Frequency (284)	Percentage (100%)
Can you give up using social media website for one day or more		
Yes	211	74.3
No	73	25.7

About using Facebook for academic purposes, a significant number of the respondents, 97 (34.2%), confirmed that they have used Facebook to access study materials or class assignments. Twenty-four (12%) shared course information or materials with their peers, and 17 (6%) discussed their courses with other students on social media. Other forms of reported Facebook use for academic purposes included watching educational videos or listening to educational audios. 79 (27.8%) respondents used 'other' ways of using Facebook for academic aims. The remaining result of this question was 57 (20.1%) that did not use Facebook, in any way, to access academic materials, assignment or study resources.

It was noted that a higher number of the respondents belonged to one academically focused Facebook group or the other. Two hundred and eight (208, that is, 73.2%) were members of Facebook academic groups and 76 (26.8%) of the respondents did not belong to any Facebook academic group at all.

As self-reported by the respondents, minimum expected score (CGPA) was 60% for 137 respondents (48.2%) and 55% for 147 respondents (51.8%). The respondents expected performing academically with pass marks ranging from 60% and up to and above 70%. For the CGPA at 70% and above, 151 (53.2%) showed their expectation. One-hundred-and-seven (107, or 37.7%) looked forward to the passing score of 65% and 26 (9.2%) hoped to passed with a 60% mark.

Table 5.7: Facebook use for academic purposes

Characteristics	Frequency (284)	Percentage (100%)
In what way do you use Facebook regarding your courses		
Access study materials or class assignments	97	34.2
Share course with other students	34	12.0
Discuss courses with other students	17	6.0
Other (e.g. watching educational videos/listening to educational audios, etc.)	79	27.8
Don't use any because my courses are not integrated with Facebook	57	20.1
Do you belong to any Facebook group dedicated to academic objectives		
Yes	208	73.2
No	76	26.8
Looking at your course, what minimum score will equate with good academic performance in terms of CGPA*		
60%	137	48.2
55%	147	51.8
What is your current CGPA?		
Above 80%	78	28.6
At 60%	167	61.2
Below 40%	28	10.3

Table 5.7: Facebook use for academic purposes (cont'd)

Characteristics	Frequency (284)	*Percentage (100%)
What is your expected CGPA score on graduation from your course		
Above 70%	151	53.2
At 65%	107	37.7
At 60%	26	9.2

5.4 Research questions

The main research question is to know what the relationship, if any, is between the social media website – Facebook – and undergraduate students' academic performance. The main question, therefore, sought to determine whether the use of Facebook as a social media website affects the academic performance of the selected/participating undergraduate Nigerian students.

To explore the answer to the question, the following hypotheses were formulated.

Does facebooking (that is, the use of Facebook) by Nigerian students have any influence on their academic performance? In other words, is there any relationship between facebooking and academic performance of the selected university students in Nigeria?

**The grading point system of the three study areas (the selected Nigerian universities) were not the same. Using percentages as marks was, therefore, applied.*

H₁: The use of Facebook as a social media website has effect/s on the academic performance of students at Nigerian universities?

H₀: The use of Facebook as a social media website has no effect/s on the academic performance of students at Nigerian universities.

The investigation on the main research question was undertaken by considering the following variables and possible relationships between them:

- Average time spent daily on social networking sites.
- Device used to access social media
- Spontaneous use of mobile phones during lecture hours
- Effects of time spent on social media on study time plan
- Membership of Facebook academic groups
- Current CGPA
- Most regular activities undertaken on Facebook

Using the “SPSS” statistical package, the Pearson’s correlation analysis was applied to ascertain the possible linear relationship between the dependent variable and the independent variables. The result of the analysis is as presented in Table 5.8 below.

Table 5.8: Application of Pearson's correlation of dependent and independent variables

		If you use Facebook regularly, what is the average time you spend daily on this social networking website	Which device do you use to access social media	If you access social media websites on mobile phone often, do you spontaneously do that during lectures	The time I spend on social media always takes away from the time I plan for studying. Do you agree?	Do you belong to any Facebook group dedicated to academic objectives	What is your current CGPA?	If you use Facebook, what activity do you do MOST on the website
If you use Facebook regularly, what is the average time you spend daily on this social networking website	Pearson Correlation Sig. (2-tailed) N	1 .129* 284	.129* .029 284	-.224** .000 284	-.017 .770 284	-.057 .340 284	-.034 .578 272	-.054 .362 284
Which device do you use to access social media	Pearson Correlation Sig. (2-tailed) N	.129* .029 284	1 .029 284	.012 .841 284	.094 .113 284	-.164** .006 284	-.061 .314 272	-.085 .151 284
If you access social media websites on mobile phone often, do you spontaneously do that during lectures	Pearson Correlation Sig. (2-tailed) N	-.224** .000 284	.012 .841 284	1 .000 284	.240** .000 284	.096 .107 284	.198** .001 272	.166** .005 284
The time I spend on social media always takes away from the time I plan for studying. Do you agree?	Pearson Correlation Sig. (2-tailed) N	-.017 .770 284	.094 .113 284	.240** .000 284	1 .000 284	.121* .042 284	-.041 .503 272	-.026 .660 284
Do you belong to any Facebook group dedicated to academic objectives	Pearson Correlation Sig. (2-tailed) N	-.057 .340 284	-.164** .006 284	.096 .107 284	.121* .042 284	1 .000 284	.112 .066 272	.092 .123 284
What is your current CGPA?	Pearson Correlation Sig. (2-tailed) N	-.034 .578 272	-.061 .314 272	.198** .001 272	-.041 .503 272	.112 .066 272	1 .000 272	.289** .000 272
If you use Facebook, what activity do you do MOST on the website	Pearson Correlation Sig. (2-tailed) N	-.054 .362 284	-.085 .151 284	.166** .005 284	-.026 .660 284	.092 .123 284	.289** .000 272	1 .000 284

To find the relationship between the time spent daily on Facebook by the surveyed students (that is using Facebook) and the CGPA they attained (academic performance), these two variables were correlated. This revealed $-.034$ as the coefficient of correlation and $.578$ as the p-value. The relationship indicated by this correlation is statistically non-significant (at the $.05$ significance level). The small magnitude of the correlation coefficient produced by the analysis indicates, therefore, that there was a weak relationship between the time spent daily on Facebook (use of Facebook) and the CGPA (academic performance) as reported by the surveyed students. In other words, academic performance is negatively related to facebooking (use of Facebook) at $r(272) = -.034, p = .578$, two-tailed.

This weak relationship was deduced based on the correlation guideline that when the coefficient of Pearson's correlation (r) falls between -4 and $+4$, the relationship is not strong enough, negative or positive direction of relationship notwithstanding. Given the weak correlation between the two variables and with the p-value more than $.05$ level of significance, it was assumed that the use of Facebook did not have significant impact on the academic performance of the respondents under this study. It is necessary to state here that the sample for this study represented a cross-section of Nigerian students. As mentioned before, admission to Nigerian federal universities (which include the selected universities for this study) are not based on the criteria of state, gender or economic class or background. Any Nigerian citizen seeking university admission is eligible to apply for admission and attend a study in any federal university. Following this, it is viewed that the statistical outcome shown above is not as a result of divergence in the characteristics of the population under study.

However, from within the sample ($n = 284$) for the study, a total of 149 ('strongly agreed' – 50 (17.6%) - plus 'agreed' – 99 (34.9%)) respondents (question 10 in the survey instrument) felt that the time they spent on social media always encroached on the time they planned for studying. According to the correlation between time spent on social media (facebooking) and CGPA (Table 5.9), the result was $r(284) = -.041, p$

= .503, two-tailed. This means that the relationship or association between them was weak and not significant statistically.

Table 5.9 Correlation: Time spent on social media and current CGPA

		The time I spend on social media always takes away from the time I plan for studying. Do you agree?	What is your current CGPA?
The time I spend on social media always takes away from the time I plan for studying. Do you agree?	Pearson Correlation	1	-.041
	Sig. (2-tailed)		.503
	N	284	272
What is your current CGPA?	Pearson Correlation	-.041	1
	Sig. (2-tailed)	.503	
	N	272	272

5.5 Tests of the hypotheses

The hypotheses for the study are:

H₁: Use of Facebook as a social media website has effects on the academic performance of students at the 3 Nigerian universities.

H₀: Use of Facebook as a social media website has no effects on the academic performance of students at the 3 Nigerian universities.

Focusing the main research question, the hypotheses derived from it were tested for statistical significance. As Table 5.8 depicts, facebooking has a negative relationship association with the CGPA of the respondents at $r(272) = -.034$, $p = .578$, the relationship is considered weak in strength and not statistically significant. The alternative hypothesis (H_0) is, therefore, not supported under this study.

5.6 Adaptation of social media tools to teaching and learning, positively influences the academic performance of students

The social media tools observed under this study were categorized as listed below:

Component 1 – Tools used directly on the Wall: accessing study materials or class assignments, sharing course information between or discussing courses by lecturers and students, using educational audio-visual media on Facebook walls as well as being active members of academically related Facebook groups

Component 2 – Membership of Facebook (academically related) group

Table 5.10: Correlation: Membership of Facebook learning groups, use of Facebook and current CGPAs

		What is your current CGPA?	In what way do you use Facebook regarding your courses	Do you belong to any Facebook group dedicated to academic objectives
What is your current CGPA?	Pearson Correlation	1	.043	.112
	Sig. (2-tailed)		.483	.066
	N	272	272	272
In what way do you use Facebook regarding your courses	Pearson Correlation	.043	1	-.053
	Sig. (2-tailed)	.483		.374
	N	272	284	284
Do you belong to any Facebook group dedicated to academic objectives	Pearson Correlation	.112	-.053	1
	Sig. (2-tailed)	.066	.374	
	N	272	284	284

The correlation made of the use of Facebook tools for sharing, teaching and learning (that is, the components shown above) and the academic performance of the respondents revealed that there was positive but not strong relationship between the two variables: $r(272) = .0423$, $p = .483$. However, as the p-value shows, there is a moderate statistically significant relationship between them.

The correlation made of the use of component 2 referred to above (membership of academic Facebook learning groups) and academic performance of students appeared positive in terms of their relationship. The relationship discovered from the correlation done was positively moderate between the two variables. However, the p-value (.066) showed that the relationship was non-significant in statistical terms. This suggested that the adaptation of social media tools, especially academic Facebook groups and being active members on them, can help improve the performance of students. In other words, it can be assumed that the more educationally relevant social media tools are made available and used by the targeted students, the more they will tend to support in improving the academic performance of the students.

The following hypotheses were considered regarding the adaptation of social media tools in teaching and learning:

H₁: Adaptation of social media tools to teaching and learning positively influences the academic performance of students in the 3 Nigerian universities.

H₀: Adaptation of social media tools to teaching and learning does not positively influence the academic performance of students in the 3 Nigerian universities.

Based on the statistically non-significant status of the correlation made between being academically involved in the use of Facebook group and academic performance, the alternative hypothesis (H₀) is, therefore, not supported under this study.

5.7 Research Sub-Questions

5.7.1 What are the socially oriented activities students engaged in on Facebook?

This study investigated the activities students engaged in on Facebook in the time they used per day. Based on the options provided in the questionnaire, it was found that the respondents engaged in both social media and academic activities on Facebook.

Although some activities might concurrently be categorized as both social and academic such as commenting on class assignment, the following list particularly shows the socially-oriented activities performed on Facebook by the surveyed students:

- a. Reading on Facebook wall which includes memes, photos and videos, comments
- b. Posting updates and links or sharing posts
- c. Communicating by chatting with Facebook messenger

The table below gives more details of the engagement of students in socially-oriented activities on Facebook.

Table 5.11: Engagement of students in socially-oriented activities

Social Activities	Time spent on each activity per day on Facebook				
	Under 30 mins	30 to 60 mins	61 to 90 mins	91 to 120 mins	More than 120 mins
Reading on your wall	6 (2.1%)	15 (5.3%)	17 (6.0%)	5 (1.8%)	12 (4.2%)
Posting updates and links or sharing posts	6 (2.1%)	11 (3.9%)	3 (1.1%)	4 (1.4%)	8 (2.8%)
Communicating by chatting, etc.	5 (1.8%)	7 (2.5%)	10 (3.5%)	5 (1.8%)	8 (2.8%)

As shown by Table 5.11 above, (for periods spent ranging from under 30 minutes to more than 120 minutes) 55 (19.4%) respondents indicated that they read on their Facebook wall daily. Thirty-two (32) (11.3%) indicated that they were engaged with social activities on Facebook on a daily basis with the posting of updates and links to sharing one post or another. Thirty-five 35 (12.3%) were also engaged in communicating in different ways including chatting. All these are apart from the

number of respondents who were indiscriminately involved daily in socially oriented activities on Facebook.

5.7.2 What are the academically oriented activities students engaged in on Facebook?

Table 5.12: Academically oriented activities

Academic Activity	Time spent on each activity per day on Facebook				
	Under 30 mins	31 to 60 mins	61 to 90 mins	91 to 120 mins	More than 120 mins
Reading from academic-related Facebook groups	8 (2.8%)	10 (3.5%)	7 (2.5%)	4 (1.4%)	12 (4.2%)

As shown by Table 5.12 above, (for periods spent ranging from under 30 minutes to more than 120 minutes) 41 respondents indicated being engaged on Facebook with reading academic-related materials.

5.7.3 What is the frequency or amount of time students spent on both social and academic activities within a particular period?

The table below presents the frequencies for both social and academic use of Facebook. For the social media activities of reading on the Facebook wall and the activity of posting updates (these are two different activities – reading and posting), the respective highest frequency showed 17 (that is, using between one hour and one and a half hours) and 11 (that is, using up to one hour) for each of these, while the highest frequency for communicating with others on Facebook by “chatting” was 10 (and used up to one and a half hours).

For academic activities, the highest frequency was 12 (that is, using more than two hours) and for the activity involving indiscriminate engagement of the respondents in both social and academic activities, the highest frequency was 39 (that is, using more than two hours).

Table 5.13 Frequency of Facebook Social and Academic Use

Time Spent per Day	Social and Academic Activities			Academic Activity	Random Social and Academic Activities
	Reading on the wall	Posting updates and links or sharing posts	Communicating by chatting, etc.		
Under 30 Minutes	6	6	5	5	8
31 to 60 Minutes	15	11	7	10	34
61 to 90 Minutes	17	3	10	7	26
91 to 120 Minutes	5	4	5	4	12
More than 120 Minutes	12	8	8	12	39

5.8 Summary

This chapter presented the descriptive data and the findings of this study based on the correlation between Facebook use and undergraduate students' academic performance. Data for 284 participants who were active Facebook users and who

completed the questionnaire fully were analyzed using the statistical package, SPSS and Pearson's analytical scale. The results showed a negative correlation between Facebook use and academic performance of the respondents. This meant that the time used by the participants on Facebook did not significantly affect their academic performance outcome.

However, there was a moderate positive correlation between membership of academic Facebook learning groups [i.e. learning activities on Facebook).

In the next chapter the discussion of the study findings will be presented. The connection of the findings with the selected theoretical frameworks will also be discussed, along with final recommendations for different stakeholders involved in the interplay of social media and education.

FINDINGS, DISCUSSION AND RECOMMENDATIONS

6.1 Overview

This chapter presents a discussion of the information and analyses undertaken in the preceding chapter. It concludes this study with findings regarding the relationship between facebooking (i.e. using Facebook) and academic performance of undergraduate social sciences students at selected universities in Nigeria, West Africa. Furthermore, the chapter presents the recommendations which were found relevant to this study by the researcher.

Based on the assumption that the use of social media (with particular focus on Facebook) positively or negatively influences the personal involvement of students in their study or curricular pursuance, the main drive of this study was on gaining necessary understanding of the possible influence(s) that time spent on Facebook, instead of on studying, can have on the cumulative grade point average (CGPA) of undergraduate social science students who are generally required to swot and read large amounts of texts and information in their formative undergraduate years at university.

The main research question identified was to explore the possibility of facebooking (i.e. using Facebook) in how it may or may not impact on academic performance of students. This was stated as:

What is the relationship between the use of the social networking website - Facebook - on undergraduate students' academic performance (using the case of undergraduates in selected Nigerian Universities)?

The study also entails sub-questions which were drawn from the main research question to enable further exploration about the relationship between the variables under study. These included:

- a) What are the socially oriented activities students engage in on Facebook?
- b) What are the academically oriented activities students engage in on Facebook?
- c) What is the frequency or amounts of time the students spend on both social and academic activities, respectively, within a particular period?
- d) Is there any connection between students' facebooking engagements (or time on social media, in general) and their academic performance (i.e. CGPA scores)?

6.2 Key findings of the study

The key findings of this study are presented according to the research questions listed above?

The research sample of 300 participants finally produced 284 participants who completed the survey (except for the question on current CGPA which then totaled to 272 responses). The sample for this study was largely male (53.5%), with female participants comprising 46.5% of the sample and the modal age range was between 19 and 22 years old. All the participants were enrolled for full-time, four-year social science degree studies.

After performing the demographic analysis, the hypotheses (mentioned in chapter 1, section 1.5 and stated in chapter 5, sections 5.5 and 5.6) were tested by using SPSS to perform the Pearson's orrelation analysis. For the main research question aimed at establishing any relationship between the use of Facebook by students and their academic performance, the correlational data indicated no statistically significant relationship between them. Overall, one can infer from the results of the study that the use of Facebook by the undergraduate students surveyed by the study did not affect their academic performance significantly. This inference is the same with the findings of few previous studies. For example, as previously mentioned by Ogedebe et al (2012), and as depicted in the literature review, there are further mediating variables that must be factored in before holding up the findings.

6.3 Juxtaposition of Study Findings

Social media use among students is attracting more interest in investigating its implications on different academic angles. In section 2.4 of chapter 2, some studies relating to the impact of social media (specifically, Facebook) were presented to get background insights from previous studies relating to whether students' academic performance is negatively or positively affected by the use of Facebook by students. Checking back on these studies is of necessity here to articulate the findings of this study with them.

A few of the background studies focus on the dichotomy of Facebook users and non-users. Alloway (2013) found that Facebook users reported lower GPAs than non-users due to fewer hours of studying caused by extensive use of Facebook. In their own study, Fano and Pellizzari (2015) found no significant difference between the academic performance of active users and non-users of Facebook. Junco (2012) indicated that Facebook use was negatively related to overall scores of the students since there was a negative correlation between grades obtained and the time used on social media, especially, on cell phones and tablets. Miller (2014) found that among the undergraduate students surveyed, the increase in the use of Facebook was associated with lower academic performance. Although there are instances pointing to other factors that must be further considered along with the findings, they have the insights that Facebook use has its own ways of affecting the performance of students.

This study mainly found that there was no significant impact of Facebook use on the performance of students. Even though, the study is limited in some aspects, it is believed that the finding will spur the interest of other social researchers. It is envisaged that going in the same line with the findings such as that of Ogedebe (2012) whose study was carried out in Nigeria on students Facebook users along with other related studies will help build the body of knowledge desired now in Nigeria and Africa at large to understand more the dynamics between the use of Facebook and education attainment as a way of contributing to such knowledge in the context of Africa.

6.4 Theoretical explanation

6.4.1 Implications of applying the Uses and Gratification and Student Involvement theories

The predominant proposition of this study is maintained on the notion that the use of Facebook can negatively or positively affect the performance and hence the success of undergraduate university students (that is, their academic performance denoted by their CGPAs). Researchers have through theories, searched for explanations about the relationship as well as the potential direction of the relationship between this phenomenon – social media impact on educational achievement - (factors, scientifically termed, variables). This is to enable researchers, based on the theories, to make relevant assumption and envisage the outcomes of identified relationships (Black, 1999).

As stated in chapter one, the Uses and Gratification Theory (by Blumler and Katz, 1974) is relevant to this study as it provides explanations on what makes users to be ‘active’ unlike when users are described as ‘perceived users’ of mass communication. Apart from these two classifications, the theory emphasizes users’ characteristics or user traits in choosing, among so many options, the media that meet their needs for gratification or goal fulfilment. Choices among diverse options are emphasized in the theory. This helped to arrive at why students choose Facebook above other social media. As a result, it is obvious why they prioritize even the activities (such as listed below) for which they prefer to use Facebook:

- information/updates of information
- entertainment
- discussion
- connection
- product inquiry
- commerce
- impression management

Among the gratifications sought by Facebook users, these activities were as shown as popular in the following list:

- a. Filling up free time (diversion or passing the time when one is bored)
- b. Keeping in touch with previously established relationships
- c. Meeting people
- d. Doing what everyone is doing (critical mass effect)
- e. Sharing media
- f. Escaping other social situations
- g. Exploring things randomly
- h. Interpersonal utility
- i. Personal status seeking

The application of the Uses and Gratification Theory has thus helped in understanding that there are always diverse choices available when one looks to meeting one's gratification need and that this is done in order of preferences.

Another relevant theory for this study is the Students Involvement Theory. The theory provides five postulates. The first one is the requirement for the involvement of psycho-social and physical energies which demand suitable application to get envisaged achievement. The second inclines that: *involvement is continuous and students invest varying energy*. The third entails considering involvement as having qualitative and quantitative measures or features.

Then, postulate number 4 and number 5 stated that:

1. *development is directly proportional to quality and quantity of involvement.*
2. *educational effectiveness is related to the level of student involvement.*

Gratification (that is, fulfilment of social needs) combined with academic fulfilment is found with Facebook users as shown by this study. How these fulfilment needs interact spells out the possible scope of the relationship between using Facebook by

the respondents of this study and their academic performance. The Students Involvement Theory emphasizes the importance of allowing commensurate commitment to be applied, with intention, to their performance as a matter of accountability. Within the background of these theories lies the guidance for future researchers who may want to delve into similar studies as this one.

Referring to the Uses and Gratifications Theory, one can infer, based on the finding stated above that the surveyed students mainly find gratifications in the use of Facebook for personal outcome reasons rather than focusing on the benefits available to them in enhancing their study with Facebook. As mentioned before, the proponents of the theory postulated that people, by personal choices, adopt a media based on their needs for gratifications. On this note, it is observed that even with their personal interests in facebooking, the fulfilment of their personal commitments to studying remain consistent as their performance appears unaffected by their use of Facebook (i.e. according to the finding stated above). This view relates to the Student Involvement Theory as applied in this study.

6.5 Revisiting the research question

This main question provided the information below it:

Does facebooking (the use of Facebook) by students have any influence on their academic performance? In other words, is there any relationship between facebooking and academic performance?

The central research question focused on how the selected undergraduate college students (study participants) use Facebook (i.e. regularity of use), the time usually spent daily and the possibility of facebooking having effect on their study – to be specific, the academic scores they obtained during the period when they frequently used Facebook. Regarding this study, the findings show that facebooking did not significantly affect self-reported academic performance of the respondents.

The variables connected to the above three areas of focus were correlated together:

- Average time spent daily on social networking sites.
- Device used to access social media
- Spontaneous use of mobile phone during lecture hours
- Effects of time spent on social media on study time plan
- Membership of Facebook academic groups
- Current CGPA
- Most regular activities undertaken on Facebook

6.6 Revisiting the research sub-questions

These also yielded further information.

6.6.1 What are the socially oriented activities students engaged in on Facebook?

This first research sub-question focused on the activities that had the highest level of involvement by the participants for social purposes. The activities noted in this dimension included time spent on:

- a. Reading on Facebook wall which includes memes reading, photos viewing and video watching and comments reading.
- b. Posting updates and links or sharing posts.
- c. Communicating by chatting with Facebook messenger.

Facebook social use was much higher than academic use. This is particularly shown by the high level of involvement in reading on personal Facebook walls and usual checking of notifications followed by chatting with Facebook messenger. It was noticed that chatting would always be performed along with sending private messages even when friends were offline. Reading of Facebook pages or groups were also categorized under social use of Facebook.

As observed, the attractiveness and popularity of using Facebook much more for social activities cannot be separated from ensuring social sense of belonging (social status) channeled through social media platforms. The attractiveness and popularity could be due to access everyone now has to the technology devices (desktop computers, laptops, tablets, smartphones) which enable the social connections among people as well as the fact that owning the devices has symbolically been accepted as representing one social status or the other.

Also, highly using Facebook and other social media mostly for social activities corresponds with the national trends of Facebook usage by Nigerians as earlier stated in the literature review (Chapter 2).

6.6.2. What are the academically oriented activities students engaged in on Facebook?

The second research sub-question examined the academically related activities students engaged in on Facebook. Looking into this will help in substantiating or rejecting the assumption that Facebook tools are already been adopted by students as educational tools.

According to Table 5.12 (in chapter 5), the academic activity mostly engaged in by the participants was reading from the academic-related Facebook groups. By pairing this with the details that Table 5.3 presents, it is clear that the respondents have already been using Facebook for academic purposes. One important fact about this is that they spent extensive period of time using the tools. Table 5.4 shows that the majority of the respondents used more than 120 minutes (more than two hours) daily on Facebook undergoing one academic activity or the other. Table 5.7 presenting the responses to the question: “*In what way do you use Facebook regarding your courses?*”, specifies the academic activities done by the participants which were:

- a) Accessing study materials or class assignments
- b) Sharing courses with other students
- c) Discussing courses with other students

- d) Performing other activities (e.g. watching educational videos/listening to educational audios, etc.)

6.6.3. What is the frequency or amount of time students spent on both social and academic activities within a particular period?

The third research sub-question considered the period of time that the participants used on both social and academic activities on Facebook. According to the frequencies already noted in Table 5.13, the occurrences of both types of activities and the time utilized are explained as follows.

For the social activities of reading on the wall and posting updates et cetera, 17 respondents used between one hour and one-and-a-half hour and 11 respondents (used up to one hour) while the highest frequency for communicating by chatting was 10 respondents (who used up to one and a half hour).

The highest frequency for academic activities was 12 (who used more than two hours) and for the activities involving unselective engagements of the respondents regarding both social and academic activities, the highest frequency was 39 (who used more than two hours).

This study indicates regular use of Facebook with the use fairly distributed between both the male and female respondents. Also, it shows that both sets of respondents used Facebook as a social media tool for social activities and partially for academic activities.

6.7 Other key issues and their implications from the findings

6.7.1 Risks or threats

Under chapter 5, some of the presented data spotlight some issues for discussion. Noting the implications of the issues would be of essence in contributing to the needed body of knowledge about social media use in education and even beyond.

The question “*If you access social media websites on a mobile phone often, do you spontaneously do that during lectures*” was asked. Regarding the access the participants made during lectures for social reasons, 114, out of the 152 responses, indicated that majority of the respondents accessed social media during lectures. This is indicative of related risk behaviors of distraction, preoccupation and excessive multitasking.

To check on possible obsession with social media websites, the respondents were asked if they could give up using a social media website for one day or more. Even though only 73 (25.7%) of the respondents indicated that they could not, the number, as viewed by the researcher looks suggestive of moderate obsession among the surveyed students. Two hundred and eleven respondents (74.3%) showed that they could give up a day or more for not using a social media website. However, it is agreeable that the risk of obsession is related to or is a real factor in using social media.

6.7.2 Privacy/Disclosure

Alongside the advantages of sense of community, communication and collaboration which are offered by the use of social media, the risk of losing one’s privacy abounds and privacy critically matters on the Internet. While it is possible not to disclose one’s private data on so many websites, the case of social media is the inverse. There have been heated debates about the extent of private data that should be required or one should release on websites and this is much more core to the use of social media

websites. Though this study did not consider the issue of privacy but found it is relevant to a study like this and it is regarded as very important for social researchers to delve into, especially in Nigeria where there is still the dearth of such research.

6.7.3 Implications of mobile access to social media

One of the findings of the study was that the use of mobile phones to access , social media websites and, therefore, the Internet is prevalent. The study shows that 152 (53.5%) were using mobile phones to access social media websites. This was apart from the 19 respondents (6.7%) who also used mobile platform of tablets to access social media websites. This was followed by the use of laptops (100, 35.2%). The examination of this situation can help in projecting what the impacts of accessing social media websites through mobile channels can bring about in the future and how will reflect on their study in general and their academic performance outcome in particular. For example, the use of hybrid or flipped classrooms, continues to expand. This indicates how study classes are now transformed. Hybrid class denotes partly running a study using classrooms and partly using online modules (e-learning) which, most often, students are expected to undertake out of the lecture rooms. Flipped class involves students in attending (watching) the teaching of a course in a video prior to physically meeting in the class to discuss it with a lecturer.

6.7.4 Why procrastination?

Furthermore, a little above 50% of the respondents agreed that the time they spent on social media always encroached on the time they planned for studying. This portrays the time management dilemma that they faced. Of course, 164 respondents agreed that they have procrastinated due to being busy with social media websites and 155 felt distracted from studying by being on social media websites. This is despite the fact that majority of them made use of time management tactics to avoid distraction or procrastination during study. This is one of the latent problems that emerged during the study as envisage earlier supposed that this study would unfold. Another one is the seeming addiction to checking Facebook while lectures were ongoing.

6.7.5 Widespread use of the WhatsApp mobile application

As noted through personal observation of the researcher, the use of WhatsApp mobile application has become a sweeping trend in Nigeria. Whatsapp, like Facebook is also a social media tool for instant messaging and texting or communication in general. The Nigerian public tends to use it more and more particularly because of better flexibility of its phone and video calling features. In Table 5.3, the participants were asked to show other social media platforms to which they belonged and used regularly. 182 (64.1%) participants indicated their membership and use of ‘WhatsApp and others’ (i.e. excluding Facebook, LinkedIn, Twitter and Google+). This percentage was next to 100 percent Facebook membership and it was, therefore, viewed that out of the 64.1%, WhatsApp would be a major part since the other popular social media websites have been excluded.

This place of the WhatsApp application in the daily lives of Nigerian students can no more be overlooked in terms of their time management, curricular engagements and academic performance. Looking at the growing pattern of mobile applications (software) needing no access to a website before using and the rising penetration of mobile technology and mobile devices in the country, research attention is needed on WhatsApp use in Nigeria for studies looking at the convergence of social media, academic performance and similar research themes.

6.8 Recommendations

The purpose of this study was to better understand whether or not, today’s technology (social media with the focus on Facebook under this study) positively or negatively affects the academic achievements of undergraduate students in Nigeria (as represented by the social sciences undergraduates in three selected universities). The purpose, therefore, was to observe the ways to abate any possible negative effects or, on the other hand, the ways to leverage the technology for improving the academic performance of students.

There are issues in the academia over which debates are yet to broach. One of these is the issue about the need for incorporating social media into formal educational processes and teaching or, using a specific term, the curriculum, even with the understanding of the challenges that doing so is already bringing about. The challenges are to the higher education administrators just as they are to students, researchers and government policymakers. With this view, the researcher felt the need to provide some recommendations that emerged from this study for administrators of higher educational institutions, the faculty (meaning lecturers here), policymakers, educators, academic researchers and students.

The recommendations are as itemized areas below:

6.8.1 Policy-making

The study reveals that the use of social media, with a focus on Facebook, among university students is widespread and continues to grow with tendency on their educational performance. Thus, the penetration of information and communication technology into nations, now at a far-reaching rate, has informed the prevalence of social media use among students. Since social media are now being leveraged, more or less, as instructional technology, it is highly relevant that more policy avenues be developed by government policy makers to boost social media leverages. An example of this recommendation is the development or revision of curriculum for the incorporation of new content that will interpret into teaching with beneficial modern technologies. It is recommended that such revision could be as punctual as the related technologies emerge.

6.8.2 Academic learning

The recommendations here are for the students and the foremost recommendation is on how they should try and constructively manage the risks/threats associated with the use of social media. The risks meant here are in the dimensions of those listed in sections 6.6.1 and 6.6.2 above.

Other recommendations relate to:

a. transfer the hands-on skills or aptitudes they apply while using social media for social purposes to using these for academic purpose. As shown in this study, students share videos, chat, send private messages and the likes. They can share, chat about or, generally, share academic-related resources.

b. make use of Facebook facilities such as Facebook groups and pages. These have become popular and how instrumental they have become in creating community bases can be leveraged. Students have access to create academic related Facebook groups and pages dedicated to classes and to share information on assignments, notices, schedules and study materials in different file formats.

c. make use of educational mobile applications that can facilitate their learning. An example of relevant application, Mixable, which was cited earlier in this dissertation.

d. collaborate within the students community on academic projects using social media as their communication or interactive online base.

e. engage productively in using social media to facilitate their study and their life-long learning.

f. communicate with faculty members as necessary through social media.

6.8.3 Involvement of the administration/faculty

Administrative policies and decision making or management in the general term, are the backbone of students' campus lifestyle or experiences. To enhance these, with reference to social media, and their deployment into education, the administration of institutions should provide updated technological resources for the classrooms and the support of the faculty in this area should be ensured. Educational technologies continue to change. Administrative supports, therefore, is expected follow to reflect

the implementation of the changes for the benefits of the students. ICT training supports for technical staff as well as for the faculty (academic) members is of utmost importance. These are also expected to measure up with changing needs.

The administrative body of institutions can also implement more dissemination of information, notices and other informational resources via the use of social media. Of course, educational institutions are already using social media to engage with students in constructive ways. It is noted how such engagement is working effectively between the authorities of educational institutions and students.

6.8.4 Academic research

This study is suggestive of future research consideration that will examine intermediate factors having implications regarding the explanation of the relationship between Facebook use and its relationship with curricular pursuance of undergraduate students preferably with more than three university settings in Nigeria. As a recommendation, this may also involve considering the use of other social media website such as Twitter and WhatsApp that is used on mobile phones/

6.9 Limitation of the Study

This study and the results obtained from it were limited to three universities in Nigeria. The universities are federal institutions. This means that students are admitted to the universities from across the whole nation of Nigeria. While it might be quick to rely on the representativeness of the sample to generalize with the results of this study regarding all Nigerian students, doing so may not be quite appropriate as there is the need for more researchers to similarly explore the impacts of the use of social media on academic performance with other necessary factors put under consideration.

The CGPA data utilized by this research were self-reported by the participants. It is believed that this might have entailed some level of deficiency regarding valid or true scores. These were not obtained from the relevant administrative departments due to a

protection clause of students' privacy as well as the fact that the study was undertaken at a time before the release of students CGPA scores. Looking at the number of students who did not declare their current CPGAs in the study, it is believed that this shortfall should have had its own effects on the overall result of the study. This is a limitation that can be avoided with a study of larger scope.

During the data collection phase, one of the study fields was closed unexpectedly for weeks due to a non-academic staff strike. The participants in the concerned university could not be reached, so the inability for the researcher to administer the questionnaire early added a delay in-between the study period.

6.10 Conclusion

There was no difficulty in getting Facebook users listed up straight away for the random selection performed. It is noticeable that university students highly embrace the use of Facebook for social purposes and may increasingly do so for academic needs in the near future provided that educators include or make use of this platform to reach, communicate with and instruct learners.

Looking at the study from the angle of general information and communication technology to that of social media and to the angle of Facebook as a networking tool, modern technology are certainly having different effects on the ways in which we relate socially and on the ways we do other things including how we undertake academic studies. It has appeared so imperative that we need to harness these technologies for the sake of now and the future and to put it to good use. This is the theme from which this study evolved.

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Appendix 1

CONSENT FORM

STUDY TITLE:

Influence of Facebooking and Social Media Use on Academic Performance among Nigerian Undergraduate Social Sciences Students

Researcher: OYETUNDE, Joseph Oye (Mr.)

I am a student of the University of South Africa (UNISA). I am currently pursuing the Master of Arts degree in Sociology. I am to carry out a research which is entitled "*Influence of Facebooking and Social Media Use on Academic Performance among Nigerian Undergraduate Social Sciences Students*". This study was carried out among selected Nigerian undergraduate students of the University of Ibadan, Ibadan, Obafemi Awolowo University, Ile-Ife and University of Ilorin, Ilorin.

As the topic shows, the purpose of this study is to explore how the use of social networks (particularly, Facebook) positively or negatively influences the performance of Nigerian undergraduate social science students using student samples in the selected universities.

The appropriate authority of your university has granted the approval to conduct the study in your department. The researcher have shown that there would be no risk or harm to your participation in the study. Only the information on your experience as a student user of Facebook is requested by the questionnaire for this study.

If you are willing to participate in the study, you are expected to respond to the questions in the questionnaire in your free time. The questionnaire will take around 20 minutes to complete. Your participation in this study is voluntary and you are under no obligation to participate. You have the right to withdraw at any time. However, your participation is highly appreciated.

You are not required to write, in the consent form or questionnaire, any personal information (such as your name or your ID number) that can be used to identify you. Your identity will not be revealed during the study, during reporting or in the publishing of the research findings. Please be assured that no signed consent form will be linked to any completed questionnaire in order to ensure the anonymity of the respondents. The consent form will be collected separately from the completed questionnaires by me at the time we will agree upon.

In case you need any clarification, you can kindly contact me (Oyetunde Joseph Oye) on Tel: +234 09090373987 or via my email address: oyetundejoseph@hotmail.com.

I have read this form and voluntarily consent to participate in this study.

Participant's Signature:..... Date:.....

Appendix 2

Questionnaire

STUDY TITLE:

Influence of Facebooking and Social Media Use on Academic Performance among Nigerian Undergraduate Social Sciences Students

1. What is your age?
 - a) 19-22 [1]
 - b) 23-26 [2]
 - c) 27-30 [3]
 - d) 31-34 [4]
 - e) 35 and above [5]

2. What is your gender?
 - a) Female [1]
 - b) Male [2]

3. What is the level of your study?
 - a) 100 level [1]
 - b) 200 level [2]
 - c) 300 level [3]
 - d) 400 level [4]

4. Are you a member of one or more social networking websites?
 - a) Yes – One or more [1]
 - b) No - None [2]

5. If your answer to the question No. 4 is Yes, check the one or those you regularly use.
Check more than one if applicable.
 - a) Facebook [1]
 - b) LinkedIn [2]
 - c) Twitter [3]
 - d) Google+ [4]
 - e) WhatsApp/Others [5]

6. If you use Facebook regularly, what is the average time you spend daily on this social networking website?
 - a) Under 30 minutes [1]
 - b) Between 30 and 60 minutes [2]
 - c) Between 61 and 90 minutes (1-2 hours) [3]
 - d) Between 91 and 120 minutes (1-3 hours) [4]
 - e) More than 120 minutes (1-3+ hours) [5]

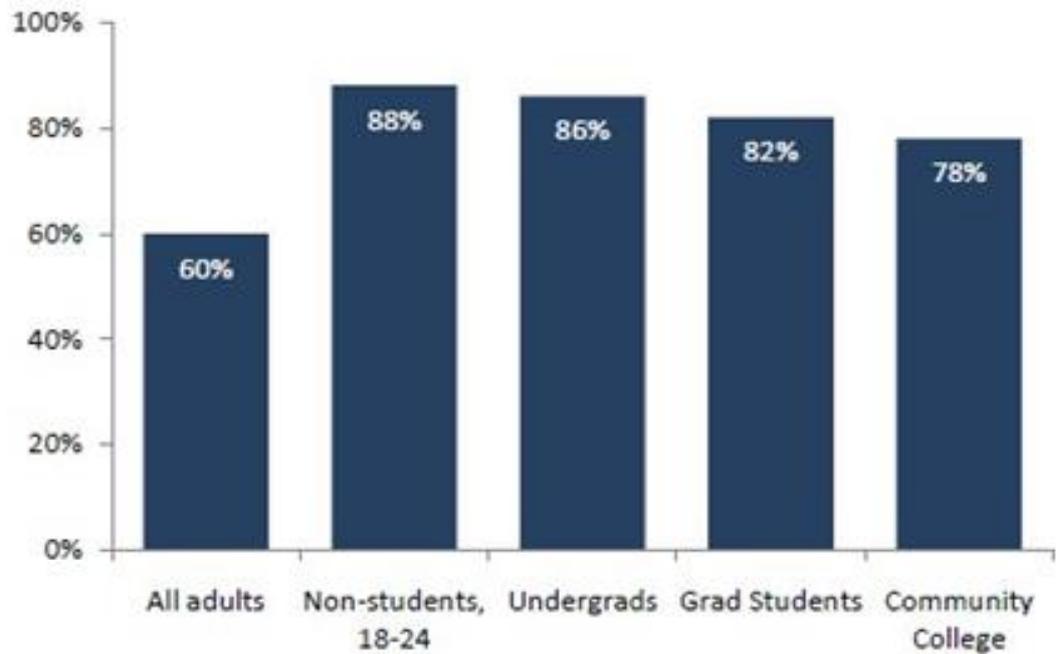
7. If you use Facebook, what do you usually do on the website? (*Choose those you do most*) and indicate approximately how many hours each activity takes you per day.
- a) Reading on your wall [Hours: _____] [1]
 - b) Posting updates and links or sharing posts [Hours____] [2]
 - c) Communicating (chat, Private email, video-call) [Hours____] [3]
 - d) Reading from academic-related Facebook groups [Hours____] [4]
 - e) Randomly doing any of the above [Hours____] [5]
8. Which device do you use to access social media? (*Check more than one if applicable*).
- a) Desktop computer [1]
 - b) Laptop [2]
 - c) Mobile phone [3]
 - d) Tablet (including iPad) [4]
 - e) Kindle/Nook [5]
9. If you access social media websites on mobile phone often, do you spontaneously do that during lectures?
- a) Yes [1]
 - b) No [2]
10. The time I spend on social media always takes away from the time I plan for studying. Do you agree?
- a) Strongly Agree [1]
 - b) Agree [2]
 - c) Don't Know [3]
 - d) Disagree [4]
 - e) Strongly Disagree [5]
11. Have you ever procrastinated because of being busy with social networking?
- a) Yes [1]
 - b) No [2]
12. Do you feel distracted from your study, at times, when you use social media?
- a) Yes [1]
 - b) No [2]
13. What tactics do you use to manage you time daily?
- a) To-do-list [1]
 - b) Alarm on your mobile phone [2]
 - c) Computer-based browsing timer [3]
 - d) Others [4]
 - e) I don't use any [5]

14. Can you give up using a social media website for one day or more?
- a) Yes [1]
b) No [2]
15. In what way do you use Facebook regarding your courses?
- a) Access study materials or class assignments [1]
b) Share course with other students [2]
c) Discuss courses with other students [3]
d) Other (e.g. watching education videos/ listening to educational audios, etc.) [4]
e) Don't use any because my courses are not integrated with Facebook [5]
16. Do you belong to any Facebook group dedicated to academic objectives?
- a) Yes [1]
b) No [2]
17. Looking at your course, what minimum score will equate with good academic performance in terms of CGPA?
18. What is your current CGPA score and what is your expected CGPA score on graduation from your course?

Appendix 3

College students and social networking sites

Percentage of internet users in each group who use social networking sites



Source: Pew Research Center's Internet & American Life Project 2010 tracking surveys. All include landline and cell phone interviews. N for all adults=9,769; n for 18-24 year old non-students=717; n for four-year undergrads=246, n for grad students=112, n for community college students=164.

Appendix 4



Source: www.topuniversities.com/blog/social-media-usage-global-statistics