A Study of University Students' Perceptions and Usage Behaviour of Mobile Media Technologies in Nigeria

Thesis submitted for the degree of
Doctor of Philosophy
University of Leicester

By

Oghogho Uyi OSAZEE-ODIA
BA (Hons.) Glamorgan, Wales
MA, City University, London
M.Phil. Benin, Nigeria

Department of Media and Communication
University of Leicester

September, 2015

i

ABSTRACT

A Study of University Students Perceptions and Usage Behaviour
of
Mobile Media Technologies in Nigeria

By

Oghogho Uyi OSAZEE-ODIA

The emergence of mobile media technologies has changed the social fabric of Nigerian society, with every segment of the populations now users of the technological devices, from mobile phone to smart media. This development necessitated its investigation with a view to determine how students in Nigeria perceived these new technologies in their midst and what these technologies do for them. In order to handle the inquiry, a mixed methods approach based on qualitative and quantitative procedure was undertaken. The methods were focus group interviews of thirty two students at two universities: Benson Idahosa University and Delta State University, selected through the convenience sampling method. The respondents' data were transcribed, coded by hand and analysed using the constant comparative method. The findings revealed a number of usage benefits of mobile phone to the students. To complement this study further, a quantitative based survey of 600 students, 350 from DELSU and 250 from BIU was carried out using the heterogeneous sampling procedure and questionnaire design to collect data on the students' attitudes towards smart media device and functionalities to users. The self-completed questionnaire data was subjected to statistical analysis, based on Chi-Square test, One-way ANOVA and Bonferronni test of multiple comparisons. The results yielded a number of significant outcomes bordering on smart and social media use for socialising, relationships building through which social capital of bonding and bridging social relationships, with significant resource benefits to respondents in both platforms. The use of simple percentages underscore gender differences in smart and social media usage behaviour, relative to men and women students in smart and social media arena. This thesis contributes to the advancement of theories that are relevant to the study of mobile media technologies and research philosophy: inductive and deductive on which this PhD thesis was hinged.

Acknowledgements

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

Introduction

1.1:   Background

The development of the mobile phone has been driven by the communication needs of people around the world, with the resultant transformation in human communication and interactive relations in society. As Iosif (2010) explains the mobile phone has become a critical component of contemporary society and a useful communication device that constitutes a vital part of daily life for billions of people around the world. Thus, mobile phone, as an advanced form of communication technology has undergone a series of technological innovation designed and configured to meet the need of modern society.

Campbell and Russo (2003) described mobile phone technology as consisting of hardware (i.e. handsets) software, network systems and services that supports their use as portable wireless devices with digital convergence, many-to-many communications, and interactivity protocol (See also Silverstone 1999; Flew, 2003:17-25).

As Rippin, (2005) wrote the coming of mobile phone has presented an exciting opportunity to establish how technology developed to enhance the process of human communication behaviour and a symbolic technological tool that give meaning to daily life of users.

It is generally said that mobile technology has become part of every society worldwide and the number of users is on the increase day-to-day (Hakoama and Hakoyama, (2011). Figure from International Telecommunications Union (ITU), (2013) shows over 6.8 billion mobile phone subscriptions worldwide, with an estimated 7 billion at the end of 2014, (Pramis, 2013; Naphtal, 2014).

Figure 1.1: Global Mobile Phone Subscriptions: Thousands of Subscribers 2007-2014

Source: ITU World Telecommunication /ICT Indicators database
Note: * Estimate
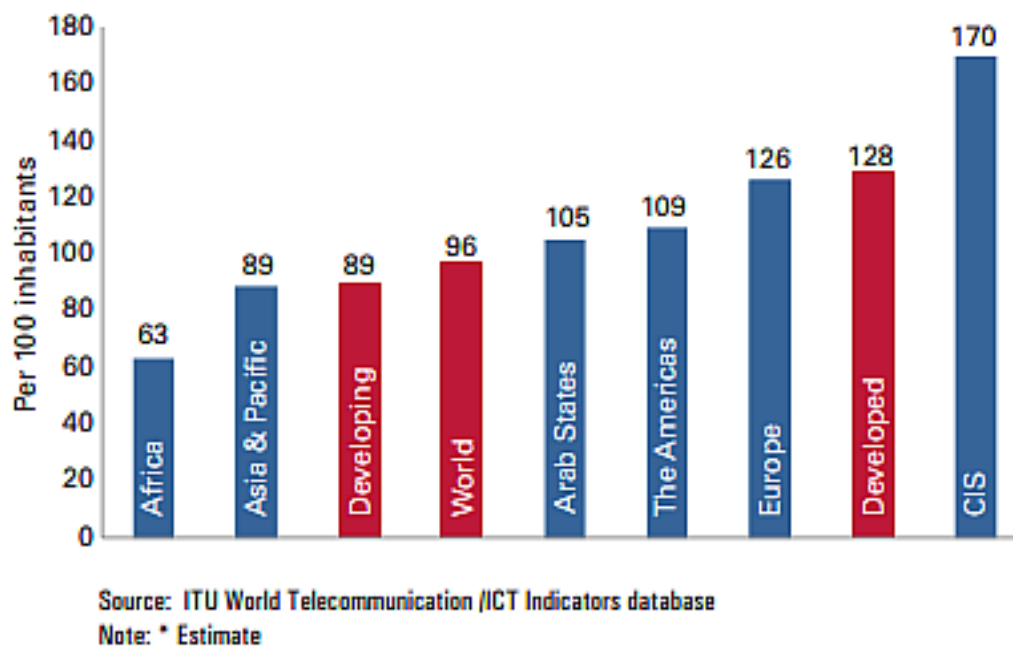
Source: ITU, 2010; 2013, Jagdish, 2010,

The reason for the accelerative growth of mobile phone subscriptions around the world has been discussed by scholars, researchers and observers alike. The A.T.Kearney Mobile Economy Report, (2013) identifies a number of factors to including falling prices and rising disposable incomes which together have enabled more people to own and use mobile technology-along with the creation of business models such as pay-as-you-go plans, micro-top up and the availability of low cost handsets. Another factor, according to this report, is the lack of economically viable alternatives (i.e. fixed line communication) in a number of emerging markets especially in Africa. A third reason is that mobile operators have led the way in developing and implementing new technologies with significant investment in building infrastructure to serve rural communities.

AL Basheer, (2010) explained that the growth has been driven by the innovativeness in adapting mobile technology to meet the particular needs of society coupled with the benefits of its usage features. Okonji, (2013) and Pramis, (2013) also observed that there is a number of users with multiple devices or subscribers with more than one subscriptions and that this trend continue as more and more people are given secondary phones for work purposes.

In Africa, mobile phone diffusion has spread to Africa including Nigeria and as a result prompted a new paradigm of communication and accessibility to the system's technologies throughout the continent. Available data revealed that Africa had 781 million active mobile phone subscriptions in 2013 with projections to 930 million by 2019 (Ericcson Mobility Report, 2013; Mzekandaba, 2013; Adepetun, 2013; Perry, 2015).

The acceleration of mobile phone adoption has also been driven by the flow of internet-enabled mobile phones in the continent. According to Sambira (2013) there were 84 million internet-enabled mobiles in Africa in 2013, which was projected to increase by 69 percent by the end of 2014. This progression is seen as a blessing to the continent and to those who never had access to landline telephones because of poor telecommunications infrastructure (Mafirakurwa, 2009). The Pew Research Canter, (April 2015) reported that in a few short years, the proliferation of mobile phone networks transformed communication in Africa, and has allowed Africans to skip the landline stage of development and jump right into to the digital age (see also Samii, 2015).

The reasons underlying the growth are five:
1. Young people constitute the largest group users of mobiles and their software applications.
2. Many subscribers possess several subscriptions due to decreasing traffic costs.
3. The maximization of coverage and the fact that more and more people have multiple subscriptions because they have different ones for mobile PCs, tablets, and mobile phone.
4. Mobile operators' investment profile in terms of financial and human resources flow.
5. The rising markets of moving away from so-called feature phone with limited data access to low-cost smartphone with access to the internet, and of technologies deployment in mobile phone base stations infrastructures (Sambira, 2013; Ericcson Mobility Report, 2013; Sotunde, 2013). Furthermore, the diffusion of smartphone throughout the continent has accelerated the growth of the mobile technologies platform by opening up access to internet usage opportunities. El-Khalili, (2015) notes that smartphone now have reached 360 million users while Naphtal, (2014) explained that internet usage in the continent rose over 19 years from 1% in 1995 to 40% in 2014.

Nigeria in particular has also benefitted from the diffusion of mobile phone with 145.4 million Nigerians are on a mobile platform. This represents teledensity of 103.91 percent penetration as of the first quarter of 2015 (Nigerian Communication Commission, 2015 cited in

Adepetun, 2015). This development has been seen as a major improvement in the country's telecommunications infrastructure. Okonji, (2010); Gbenga-IIori and Ibiyemi, (2010) notes that the adoption of mobile phone has turned around the poor telecommunications infrastructures through which the majority of the populace had no access to telephone lines.

As Ntui and Edem, (2011) explains, in Nigeria today, mobile phone are part of our lives and as a means of communication, are now more used more than fixed lines phones. They provide telecommunications to people without the constraints of needing a fixed line telephone, providing more freedom for people to communicate with one another from virtually anywhere. Thus, the benefit of mobile phone technologies adoption in Africa as a regional bloc is that more people and more are now accessible to means of communication and usable features in the system device. Furthermore, the coming of smartphone has open-up accessibility to mobile device technology. As Ericsson Consumer Lab, (2013) explained that smartphone possesses the potentials to increase access to the communication device in the continent which could provide universal access and connectivity to a wider citizen (see also Anugwara, 2013). The increase in mobile devices' ownership and internet usage becomes critical to pinpoint. Furthermore, Perry, (2015) notes that mobile use contributes over 6% of Africa's Gross Domestic Product (GDP) and this percent has been projected to rise to over 8% by 2020.The ongoing discussion provides a unique case through which to understand the emergence of mobile phone which have now become an integral part of African society including Nigeria. The study therefore aimed to investigate why Nigeria specifically has embraced mobile phone, as a new paradigm of communication and for other usage forms. The reason for selecting Nigeria as a case is that mobile phone adoption has been tremendously wide spreads in this country and due to the proximity of the researcher to users in this society. The study is a step forward in the research on the new media technology and society. The results obtained from this study help shed light on the perceptions about and usage of mobile phone in Nigeria society. Furthermore, the study was undertaken through the use of qualitative focused interviews as a basis for exploring the university students' views on mobile phone and what this technology meant to them.

1.2. The Selection of students as respondents

This study focused on young people, specifically university students. Students have access to the resources in a society. Young students are therefore crucial to understanding the perceptions and utility value of mobile phone. The focus on young students was influenced

by the study of Ito and Daisuke (2010) who observed that although mobile phone has become common in all age groups; the younger demographic has a higher volume and unique patterns of usage which differentiate them from older users. ITU, (2004 has also provided useful documentation to underscore the relationship between youth and mobile phone. According to ITU, the youth constitute the bulk of mobile phone adoption and usage behaviour, with the disposable income to exploit the usage features of the device.

Studying university students helps provide a clear picture of young people's use of mobile phone technologies within the context of Nigeria society. Students' reasons for their usage might differ from those of the population and besides they represent the next generation of mobile phone users and network subscribers. The points being made are:

1. university students are group of young people that might be interested in new technological devices
2. they are more likely than other segments of the population to adopt new technologies and therefore, studying them might enable us to predict future trends.

1.3   Study Problem

The study investigated the perception and usage behaviour of mobile phone by university students in Nigeria. This was explored in the context of several theoretical dimensions. The first theoretical dimension draws on the social construction of technology theory (SCOT) in which the focus is on the interaction between technology and social world (Carroll, Howard et al, 2001).

The theory sheds light on how the mobile phone is perceived in relation to the societal environment of individual users. The second theoretical dimension is the theory of digital networked society and Fiske's conceptual framework of sociality which was used in this study to explore the how the individual, as social capital engages the sophistication of mobile media device advancement and sustenance of social relationships and other forms of behaviour in the virtual landscape. (Charusmitta, 2012, Sarwar and Soomro, 2013; and 1: Media technology[2]).

Footnote:

[2]Media Technology especially on social construction of media technologies, the internet and emerging virtual   communities, and the Manuel Castells network society in which the explanatory framework on the relations of internet and society has been hinged. www.sagepub.com/upm-data/40857-9.pdf [Accessed27September2013]

1.4. Previous Studies on Mobile Phone Technology in Nigeria

Mobile phone technology is a new area of research in the field of new media and society about which academic publications have already emerged (Campbell and Russo 2003; Al Qudah, (2008); Chen, and Katz, 2009). In the Nigerian context, research on mobile phone use' is still in the nascent. Due to the limited number of studies in this area, they are difficult to locate. Those that were available are cited as follows:

Iwhiwhu, Oghenero and Aroghene (2010) studied the use of mobile phone for library services in Delta State University, Abraka and found that there was no positive relationship between the students and the library delivery services. Elegbeleye (2005) studied mobile phone use in Nigeria and found that interpersonal relationships were the most vital reason for using the device. Onwuemede, (2011) conducted an investigation into mobile phone usage and the likelihood of assets of rural communities in Nigeria in which a sample of 177 respondents were randomly drawn from ten selected areas of Edo state. The selected respondents were 69 percent males and 39 percent females. The researcher detected the following: First, mobile phones usage was influenced by the level of education, income, and the social network and membership groups. These were also seen as major determinants of mobile phone ownerships patterns. Second, the uses of mobile phone had a significant impact on some aspects of rural likelihood such as social capital and human capital. These studies however, are generalizations of how mobile phones are used in Nigerian society.

This present study aims to go deeper in looking at the perception and use of mobile phones for specific segment of Nigerian society which was the focus of the investigation. This segment is the young generation. This study differs from the previous studies because it specifically focused on the university students who are generally between the ages of 18-24 years. Thus, the study was develop from the standpoint of technology and society, and social constructivist theory has been applied to determine the relationships between their perceptions of mobile phones technology and their utilization of it. This was a major gap in the existing research on the adoption and use of mobile phones in Nigeria and in a developing society.

1.5. Significance of the Study

Mobile phone as the newest of the new media platform is playing decisive role in people's lives and its uniqueness has become a major interest for investigation, with a view to understand how people used the device and with what benefit in today's society. Generally, the

use of mobile phone serves different purpose and functions for users, with usage control and freedom, in terms of mobility and time (see Oksman, 2010; May and Hearn, 2005).

The importance of mobile phone has been isolated in five key areas of functions revolves around voice and non-voice differential applications. These are; First, the use of mobile phone to symbolically sustain sense of self through brand of handset, colour, shape, ringtones, and ornaments of adornment. Thereby become symbolic form of expression.

Second, the use of mobile phone in two distinct forms viz: use of mobile phone to enhance personal arrangement or management for beneficial purpose such as using clock, alarm, calendar and phonebook, and expressive interaction and social relation such as chatting with family members and friends via short messages provide useful illustration.

Third, use of mobile phone publicly, communal or shared space without being private. Fourth, they prompt a new culture of social interaction and networking. Thus the phrase mobile culture or mobile youth culture have become expressive form of social change in society (see Campbell and Yong's (2007).

The uniqueness of mobile phone has been exemplified by its entertainment features capabilities, usually regarded as mobile entertainment media. Mobile content entertainment such as playing games, downloading images and life styles, listening to music, watching videos, watching mobile television, photo taking and photo sharing have been identified as entertainment platform for which mobile users can fulfil their needs for relaxation, fun, pleasantries, share jokes, among others (Nurullah, 2009; Furlong and Cartmel, 2007).

Furthermore, the coming of smartphone technology, as advanced mobile device has raised the importance of the system technology, thereby facilitating its utility dimensions in all aspects of social lives and social relationships. For example, the smartphone has opened up access to the internet, facilitating communication interaction and friendship connections, building relationship management of bonding and bridging social capital and much more enabling people to engage the use of social media sites, as a platform for relational advancement and identity building and self presentation in social sphere. Similarly, Park and Lee, (2014) notes smart media use influences communication behaviour and personal relationships in today's society. The author's use of smart media social relationships and social support exemplifies the system capacity in meeting the needs of users, emphasising that Koreans college students use of smart media allows them to have access to social networking sites for constructive and

sustenance of bonding and bridging social relationships irrespective of time and place as well as derivation of social support, refer to this as resources students derive from their social networks by way of emotional expressions.

As Kennedy-Eden, (2014; Ali, (2013) comments, smartphone is growing in popularity because they offer to combine social media, internet, communication and mobile applications (apps) into one device and have quickly integrated into the fabric of society. The author therefore concludes smartphone acts as a conduit between immediate family members, and to friends, family and social networks and information beyond.

Rahmati and Lin Zhong's, (2010) study on smartphone usage provided useful indication on the importance of the system device in society noting four area of utility which can be ascribed and are:

i). Communication with text messaging (SMS), instant Messaging as key platform;

(ii). Recreational with media player, games, camera, Internet Explorer (IE) as facilitative internet access and social networking as major users needs;

(iii.) Work /Educational on which word mobile, excel, power point, acrobat are critical to education support, and iv. Personal Information Management (PIM) with address book, calendar, task list as crucial in self supportive needs.

The interplay of mobile phone technologies and young people is important to highlight. This is because they are the most prolific users of the devices and social media sites, helping them in all forms of socialisation. They are becoming what scholars and commentators refer to as the digital natives or net generation or millennium genres (Bennett and Kervin, (2008).

In Nigerian society, mobile phone technologies have engendered a new communication environment, thereby changing the way people interact among themselves. The youth in particular have embraced the technological device, leading to the emergence of a new culture, usually referred to as specific values and beliefs related to the use of mobile technologies based on the system application and functions. (Castells, Fernandez-Ardevol and Qiu, 2007:127-169).

Castells, Fernandez-Ardevol; Qiu and Grave, (2007) have identified different characteristics of mobile youth culture including the use of mobile technology for personal and social

interaction, for safety and security, for the expression of identity and as a status symbol as well as mobile entertainment. These varied functions of mobile functions help underscore how youth construct their everyday live and affairs through the use of mobile technology.

Furthermore, the youth's engagement of the internet to advance their sociality and social relationships has extended the benefits of the system utilization and personalization in society. Academic interest in and research on how youth utilize mobile phone technologies as ways of life and influencing the formation of social capital and social relationships has are emerging, especially about Western societies.

Thus, the present study has advanced this research further by looking at how young people in a non-Western context and Nigeria in particular are using mobile phone technologies to build social relationships, acquire social capital and sustain their social lives. This adds more understanding to the growing accumulation of research by way of empirical findings on the perceptions and usage of mobile phone technologies by university students in Nigeria. The findings from the study, therefore, are relevant to various stakeholders in Nigerian society: university students, parents, educators, researchers, and policy-makers. University students will understand the nature of mobile phone which has become essential to their lives. On the other hand, parents and related institutions interested in youth and mobile phone research will find the information gleaned by the study useful for increasing their knowledge about how university students in Nigeria relate to mobile phone technologies applications and functions.

Moreover, the Nigerian Government and policy-makers will find the information helpful for planning policies and programmes that concern the youth and mobile phones and functions for society; especially now that its service applications have become another means of poverty reduction, skills development and empowerment.

Furthermore, the study contributes to the advancement of academic literature and the theories about the social construction of technology, network societies and social capital that were adopted for the study of young people's perceptions and usage of mobile phones technologies in Nigerian society. This is expected to make researchers and academics to understand the connection between the theoretical framework and the research.

This study also advances the significance of the case study strategy in new media research, to which the investigation of young people's attitudes towards mobile phones technologies in

Nigeria adds as a contemporary issue of real life situation. Researchers and academics can benefits from the mixed methods approach of this study, in which both qualitative (exploratory) and quantitative (survey) methods were adapted to justify the investigative direction of this study.

In sum, all of these discourses demonstrate the importance of mobile phone technologies in today's society and the importance of studying its adoption in Nigeria will provide a much understanding on Nigerians has taken-on the system technologies for use and the benefit being derived in the new mobile environment for which desirable objectives to guide the inquiry have been set up in the next discussion.

1.6.   Objectives of the Study

Going back to the discourses on the importance of mobile phone technologies in today's society, the study about the Nigerian university students' perceptions and usage of mobile phone technologies became necessary in order to unravel what the system technologies hold for users in Nigerian context. This was achieved by looking at the following objectives and on which the first set are:

1.   To know whether the socio-economic status of university students influence their perceptions and ownership of mobile phone.

2.   To ascertain how the university students use mobile phone applications.

3.   To find out whether the university students believe that the use of mobile phone influences others perceptions of the users class and socio-economic status?

4.   To find how university students use mobile phone in Sociality?

5.   To ascertain whether university students perceptions of mobile phone influences their personal communication and mobility.

6.   To find out how the university students use mobile phone for entertainment consumption?

7.   To know whether the socio-economic orientations of the university students influences their access to smart media device.

8.   To find out why university students own smart media and with what usage experience.

9.   To evaluate how university students uses social media sites for socializing

10.   To examine the role social media sites play in the university students social relationships and social capital.

11. To find out whether there is any gender differences in smart and social media use among university students.

The rationale for this engagement lies on the aspiration to have deeper knowledge on how Nigerian university students use the mobile gadget for personalisation, sociality and functionalities relative to the theoretical paradigms the research expect to sit. The next discussion provides the research questions that will guide the study.

1.7   Research Questions

Following earlier discussion on the significance of mobile phone technologies in today's society and as a result its crucial nature requires inquiry in order to underscore its benefit in Nigerian society. Thus, eleven research questions have been advanced to assess people's attitudes to the technological device. Below are the research questions which were addressed in the study. The first set of the questions are on perceptions of mobile phone ownership and use and these are;

RQ1: Does the socio-economic status of university students influence their perceptions and ownership of mobile phone?,

RQ2: How do university students use mobile phone applications?

RQ3: Do the university students believe that the use of mobile phone influences others perceptions of the users class and socio-economic status?

RQ4: How do university students use mobile phone in sociality?

RQ5: Does university students' perceptions of mobile phone influences their personal communication and mobility?

RQ6: How do university students use mobile phone for entertainment consumption?

The second set of the research questions seven to eleven focuses on people's attitudes towards smart and social media for sociality and social relationships of social capital. .

RQ7: Does the socio-economic orientation of the university students influences access to smart media?

RQ8: Why do university students own smart media and with what usage experience?;

RQ9: How do university students use social media sites for sociality?

RQ10: What role do social media sites play in the university students' social relationships of social capital?

RQ11: Are there any gender differences in smart and social media use among university students?.

1.8   Thesis Outline

This thesis consists of two main parts, which are divided into e i g h t chapters. The first chapter explores the development and growth of mobile media technologies, as an emerging technological platforms around the world, with evidence of statistical data to support its growth; Global, Africa and Nigeria. It presents the direction of the study: youth as study focus, the study problem, significance and objectives. It also presents the rationale for the research questions and the statement of the research questions.

Chapter Two discusses Nigeria, as a society with vast geographical landmass, thirty states structure and the Federal capital territory, Abuja, and the system of governance based on democratic principles and values, and economic practices based on deregulation, domestic market liberalization and competition. It introduces the state of the media environment and the account of mobile phones development since 2001 with further focus on the five nationally licensed mobile network providers: MTN, Globalcom, Etisalat, Airtel and Visafone. It also presents the growth and accessibility of mobile media to Nigerians. The role of Nigerian Communications Commission (NCC) in steering the operations and market behaviours of mobile networks and service providers is also discussed.

Chapter Three discusses the theoretical framework of the study and the literature on mobile technologies usage behaviour. This was done in two phase. The first phase of the theory focuses on social construction of technology (SCOT) which was used to interpret the participants' usage perceptions of mobile media. It reviews research that has been done mobile m e d i a around the world. Concerns about critique of SCOT and its methodological application are then discussed. The second phase of the theory looks at the digital networked society and how mobile media contributes to the enhancement of sociality, looking also the cultivation of social capital and on which the formation of networked individualism and social relationships has emerge in social media sites. Fiske's conceptual framework of sociality was advance to provide a more understanding on the relationships of mobile media technologies with users of the system device in social reality. It reviews the research on mobile media and social media sites relative to users' sociality as well as the nature of social relationships being formed on social media sites and the resources derived from it.

The study discusses critique of the networked society and its methodological orientation of networked society as well as factors that influences the perceptions and use of mobile technologies in society.

Chapter Four describes the research methodology and fieldwork approaches which was of mixed methods strategies an in which data collections were obtained in two stages. First, the qualitative interviews (focus groups) with thirty two University students, drawn from two study locations: Benson Idahosa University and Delta State University. A semi-structured questionnaire was used as a basis for the interviews. It provides details about the rationale for adopting the focus group interviews for the first part of the study. Second, data collection for the quantitative based were obtained through a semi-completion questionnaire. Detailed discussion on the rationale for adopting survey method for the study was given, with focus on the questionnaire design, the study locations and the statistical analysis of the research being provided. Both data collection procedures constitute the basis of mixed method data collection strategies- qualitative versus quantitative for the study.

Chapter Five presents the findings of the focus group discussions on the students' perceptions and usage behaviour was drawn from constant comparative analysis of opinions and theorization of discursive results on Fiske's (1992) paradigm of sociality. Indication of results was evidence in identifiable key areas of usage benefits.

Chapter Six presents the second part of the research: the quantitative. It explores the research question (RQ6) about why University students own mobile media device. A number of issues were advanced to address the question and survey data derived from respondents' questionnaire were presented in crosstabs tables and analysed with descriptive statistics. The findings reported the reason for adoption and usage experience, usage features of the system devices and its relations for sociality and social relationships of respondents.

Chapter Seven examines the RQ7 about how University students use social media sites for sociality. The findings reported the usage behaviour of social media sites usage with specific regard to social network and size of friendships connection, the device used for accessing social media sites. It also reports how University students meet their network of friends either offline or online and the frequency of contacts with social groups. The nature of University students' social relationships was examined to ascertain the kind of relational ties of the respondents: bonding and bridging social relationships in relations to the benefits

derivation usually known as the social capital resources of individual benefits. Furthermore, gender-related differences on the usage patterns of smart and social media sites within a view to know the extent of difference s between men and women on the use of these platforms.

Chapter Eight reviews the main findings of the study, re-visits the main research questions and examines the results of the in the context of the theoretical frameworks reviewed earlier. The limitations of the study, suggestions for further study and contribution to knowledge were provided.

CHAPTER TWO

NIGERIA STRUCTURE AND MOBILE PHONES DEVELOPMENT

2.1   Introduction

The rationale of this chapter is to present the development of mobile phones in Nigeria society relative to the policy framework that have engendered its emergence and subsequent advancement. This aspect of the discussion highlights the involvement of the nationally licensed networks: MTN, Globacom, Airtel, Etisalat and Visafone which are engineering the pace of mobile networks development, and their competitive market behaviour that has influenced the increase in service subscriptions.

The role of the youth as a distinctive segment of mobile society is examined as well as the regulatory frameworks that have protected the mobile phones environment and consumers and the role of the country's National Communications Commission in this is explained.

The chapter begins with the discussion of the political and economic orientation of the country.

2.1.   Political and Economic Orientation

2.1.1.   Political Profile

Nigeria is a developing society with a landmass of 923,768 sq. km (356,700 sq. mile). It is bordered in the South by approximately 800 kilometres of the Atlantic Ocean, in the West by the Republic of Benin, in the North by the Republic of the Niger and in the East by the Republic of Cameroon   (http://www.state/gov/r/ei/bgn/2836htm) Accessed 03 November 2010: Nigeria-Unesco: Country Programming Document, 2012 - 2013).

The country's political system is currently a federation of thirty six states and Federal Capital Territory (FCT). There are 774 local government areas nationwide. The mode of governance is based on democratic principles and values with institutions that reflect on democratic procedures and policy frameworks. The nation's democratic terrain involves collective involvement and responsibilities between the Federal Government, the State Government and the Local Governments. The responsibilities are constitutionally defined for each tier to observe (Federal Republic of Nigeria Constitution 1999, Nigeria – Unesco: Country Programming Documents 2012 - 2013). The overall economic policy for the country rests squarely on the Federal Government. The telecommunications sector constitutes a major thrust of Federal Government policy interest and governance, and by extension, this includes mobile

communication. The next discussion focused on Nigeria's economic status in relation to the take up of mobile phones.

2.1.2. Economic Status

The 1999-2004 economic reforms pursued by the civilian regime introduced fresh dimensions to the national economic affairs. The home grown policy mechanism, called National Economic Empowerment Development (NEEDS) spelt out the direction of the nation economy with "market-oriented" disposition for which deregulation, liberalization and competition were embraced to promote economic growth and service performance. Remarkably, the mobile phones market has been a major sector in the new economic direction and advancement. The granting of licenses to five G.S.M. operators, namely MTN, Globacom, Airtel, Etisalat and Visafone consolidated the Nigerian Government policy effort. The mobile phones market currently amount to 4% of the country's GDP and attracts both local and foreign investment. Besides, it is argued that a free market economy is one of the cornerstones of the Nigerian Government's democratic pursuance. This influences direct foreign investment in the country as well as indigenous participations in G.S.M. network development and service delivery (NEEDS, 2005, N.C.C. 2010)

2.1.3. Traditional Media Environment

It is significant to highlight the adoption of mobile phones in the midst of the wider media environment, as they have becomes the seventh medium of communication in Nigeria society. Ahonem, (2005, 2008) described mobile phones technology as the seventh medium of communication, with the others being: print, recording, cinema, radio, television, and the internet. Specifically, Ahonem sees it as the first mass media that can do everything each of the six previous mass media can do, in terms of being able to replicate all of the traditional media in a single device to provide richer utility performance.

On the other hand, Rajesh, (2005) refers to the mobile phones as a device of many uses that can deliver information in many different ways. Such remarks clearly make it of interest to look at the multiplicity functions of mobile phones technology in Nigerian society. The necessity is to investigate this issue has been influenced by two significant observations. First, the notion of new media has extended media enrichment and outlets for news and information in contemporary society. Second, Nigeria is a society with a large number of media outfits, with both public and private ownership. The available data indicate that the media fare comprise the following; newspapers with 143 titles in circulation, 29 weeklies and

54 magazines, 233 radio and television stations, 46 cable channels and three satellite television stations[3]. These along with new media such as mobile phones have placed Nigeria in the new multi-platform media environment with applications and functionalities like that of Western nations.

2.2   Mobile Phone Development

Prior to 2001, fixed telephony was the medium of voice communication with 400,000 million lines with functional capacity available to the population of 140 million people. This financial investment from the nation's treasury that span from the 1962-1968; 197-1974; 1975-1980; 1981-1984; 1985-1990; 1991-1999 National Development Plans (Ekwu, 2008).

This unproductive performance of the fixed lines coupled with poor accessibility to them by many Nigerians, a weak equipment procurement policy and bureaucratic bottleneck all played an influential role in the Nigerian Government's decision to formulate a new telephony development policy for the country. The 1999-2004 Federal Government administration played a major role in ensuring mobile phones technology came-on board as an alternative telecommunications platform. The development of the market has been sustained through the deregulation of the telecommunications sector and the liberalization of the domestic market. These steps were consistent with telecommunications policy frameworks around the world (ITU, 2004; Fink, Mattoo and Rathindin, 2003).

Since 2001, the Federal Government has provided mobile phones operational license to five networks for investment in mobile phones development, infrastructure capacity building and services delivery throughout Nigeria. The GSM networks are: MTN, Globacom, Airtel, Etisalat and Mtel. Visafone operate in Code Division Multiple Access (CDMA) technological platform. The landscape of mobile telephony development and services became a reality in 2001 following the decision of the Nigerian Communications Commission to license three network operators. The three license holders successfully went through the Digital Mobile Auction selection process and had the ability to pay the stipulated license fees of $285 million dollar to the treasury.

Footnote:

[3] 402 radio, TV stations licensed in Nigeria: http://pmnewsnigeria.com/2012/08/23//402-radio-stattions- licenced- in-nigeria. [Accessed 19, October, 2013]

In 2007, Etisalat Nigeria and Visafone Nigeria secure operational license via the Digital Mobile Auction process with payment of the $400 million dollar licence fees been the development of network infrastructure to enhance effective growth and their reach in society. According to National Communication Commission figure, as cited by Yemdel Mobile Partner, Nigeria has 27,000 network base stations nationwide with a projection of 60,000 by 2018[4,5]

The equipment technologies being put in place determine network traffic capacity, services penetrations and the accessibility of applications. In other words, the equipment necessarily affects the products and services offered by mobile operators to Nigerians. (See Table 2.1 on Mobile Technologies Adoption and Service Platforms)

Footnotes:

[4]Nigerian Communication Commission Report, 2013.

[5]LTE to Record 2 billion Subscription by 2018.
www.yemdelmobile.com/archives/category/......mobile- news/trending-new. [Accessed 15August, 2013]

Table 2. 1: Mobile Operations Technologies adoption and Service platforms with Spectrum Band.

Network Operation	G.S.M	Products and Service	Spectrum Band
MTN, Nigeria	2.5G (GPRS), 3G and 3.75G	Voice, SMS, WAP/ GPRS, Voice chat Video calling, Video camera, Music, Games, Movie Downloads, Video Conferencing, Mobile T.V., Ringtone, Funlink	1900MHz/2100MHz Band
Globacom, Nigeria	2.G, 2.5G, (GPRS), 3G and 3.75G	Voice SMS, Ringtone Voicemail, Video mailbox, Voice chat, Caller Tunes, MMS, Magic Plus(News, Entertainment, Information, Business services, Glodirect (GPRS), Glomobile Internet, Glomobile games, Gloconnect, GloRadio,	1900MHz/2100MHz Band
Etislat, Nigeria	2G, 3G and 3.75G	Voice, SMS, Video Ringtones, Cool wall WAP/Internet access, Music, Entertainment, Sport, Faith (Religion	1900MHz/2100MHz Band
Visafone, Nigeria	1XCDMA, 3G	Voice SMS, WAP (Internet access), visa (Ringtones)	800MHz Band
Airtel, Nigeria	2G, 3G and 3.75G	Interactive services (SMS, Chat, Web 2 SMS, SMS2, Email, WAP (GPRS), MMS, (Picture messaging), Ringtones, Entertainment, Graphics, Downloads lifestyles services, Information services.	1900MHz/2100MHz Band

Source: http://www.gloword.com, (http://www.mtelngeria.com)
http://www.mtnonline.com/index.php/prod.htmlhttp://www.visa.com/valueaddedservices

My assessment of the mobile network infrastructure revealed the following: The trend of mobile technologies generations, namely: G.S.M.2G, 2.5G, 3G, 3.75G and 1xCDMA has been embraced by mobile operators in Nigeria. This implies that they strive to achieve broad network coverage spurring to the motivation to keep abreast of network infrastructural expansion. The frequency spectrum space for mobile phones services on qual-band (850/900//1800/1900MHZ shows that Nigeria is benefitting from the allocation of frequency spectrum from International Telecommunications Union (ITU). This has enables Nigerians to benefits from the use of mobile phones. Mobile phones are wireless devices for connectivity in communication and other usage forms.

It is significant to highlight the competitive behaviour of the five mobile service providers which is reflective of their business orientation. This has increased the competitive market environment and service delivery capacity for which promotion strategies and price reduction tactics are being use to win the heart and soul of the consumer. According to the Business Monitor International Report on Nigeria mobile phones market (2010) promotions, competition and special offers have created attractive options for potential customer subscriptions to network service. For example, the MTN offer market promotions to win new subscribers or retain current ones, based on free talk time or reduced price for calls during certain periods of the day. The same marketing strategies are used by other operators as well.

Besides, a flexible pricing structure[6] i.e.pre-paid and post-paid package is a market policy to sustain services. As Business Monitor International reported (pp.24) 98% of the mobile market is comprise of pre-paid subscribers and this has contributed to a further increase in subscriptions to networks. Similarly, the broadband service market is based on pre-paid USB modem service. For example, MTN, Globacom, Airtel, Etisalat and Visafone offer broadband service on pre- paid USB modem package with affordable tariff plan. (See also Business Monitor International pp.24-25).

_____
Footnotes:
NCC 2003 Regulatory Intervention, NCC 2004-17-Policy and Regulatory Intervention
 http://www.wisegeek.com/what-is-the-difference-between-gsm-and-cdma.htm [Assessed 18 August 2010]
-cdma.htm [Assessed 18 August 2010]

Onwuemede's (2011) observations helps sum up the emergent platform of mobile phones technologies in Nigerian society. According to him, the deregulation of the mobile phones market in the country has led to the introduction of the Global System for Mobile Communication (GSM) network providers who operate on the 1900/2100 MHz spectrum band, to the benefits of the telecommunication infrastructure and Nigerian society as a whole (See Nigerian Communications Commission October, 2014).

2.2.1: Mobile Phone Subscribers

The term 'mobile phone subscribers' implies those who subscribe to the services of mobile networks providers either through pre-paid or post-paid subscriptions or internet subscriptions and the acquisition of a modem. (Generally in Nigeria, individual users of mobile phones subscribe to mobile network of choice and this becomes the basis for subscriptions data collected by mobile service providers, each of which possesses a different rate of subscriptions. Figure 3 show the number of GSM subscriptions to mobile networks

Figure 1.2: Subscribers to Mobile Network (GSM)-April, 2015

Pie chart: Subscribers to Mobile Network (GSM)-April, 2015
- MTel, 258,520
- Etisalat, 22,444,198
- MTN, 61,281,803
- Airtel, 29,291,114
- Globacom, 30,040,119
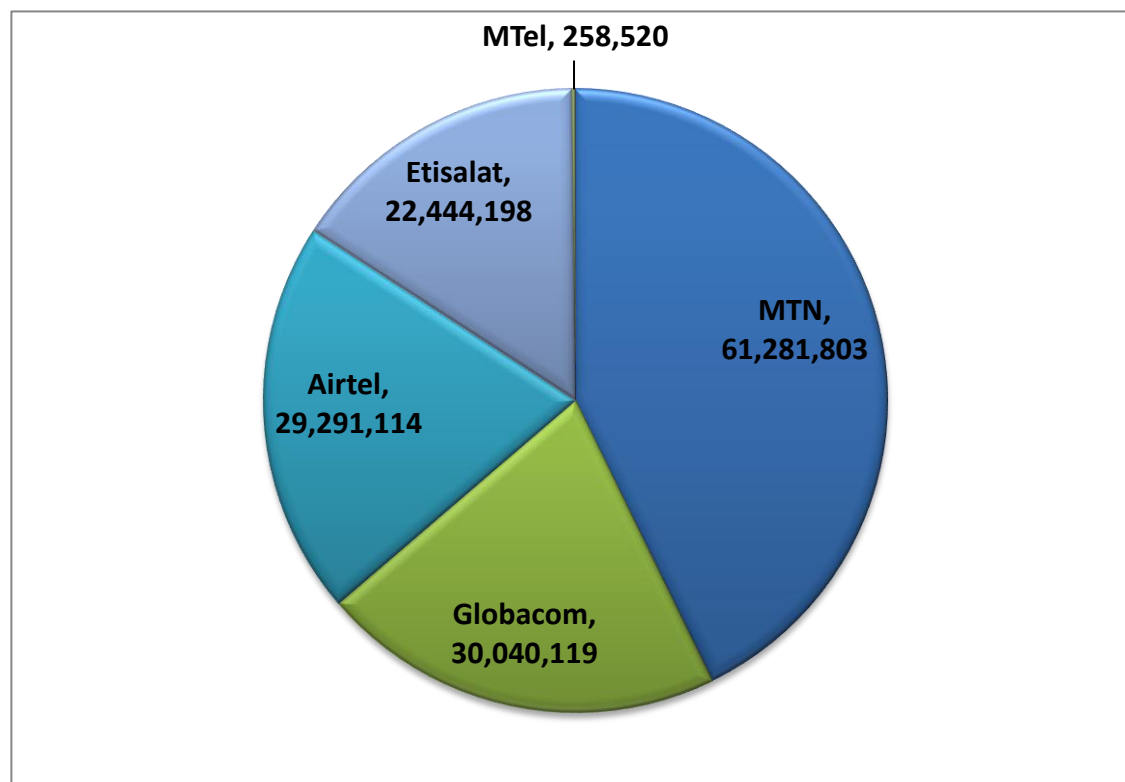
Source: Nigerian Telecommunications Sector: *Q1 2015 Summary Report*

National Bureau of Statistics, 22 June, 2025

Further, Visafone and Multilinks networks are on the CDMA technological platforms and service delivery, each with subscribers' penetration.

Figure 1.3: Subscribers to CDMA Mobile Network- April, 2015

Subscribers to CDMA Network
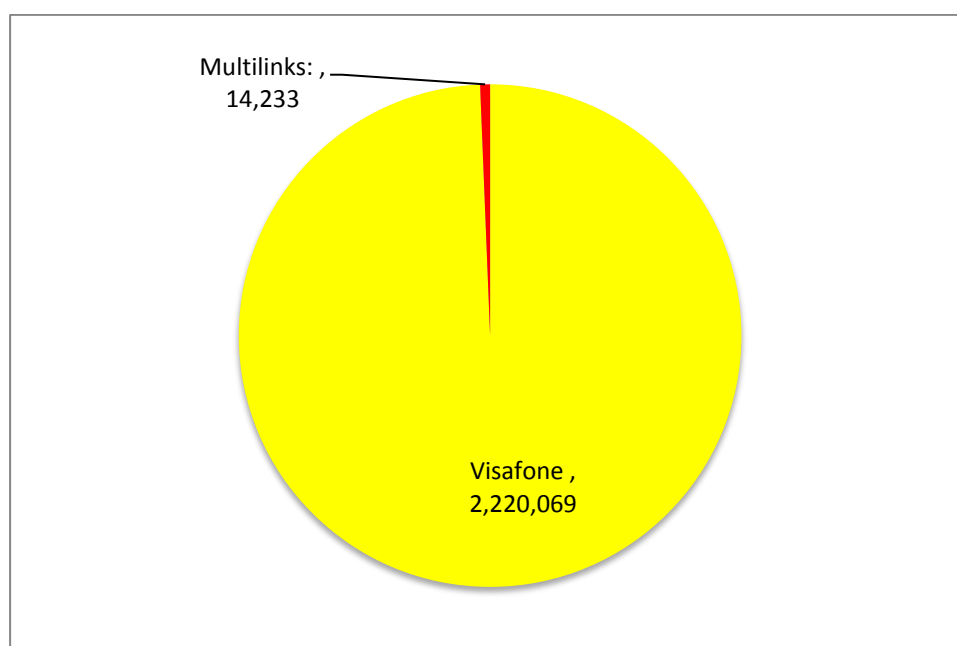
Source: Nigeria Telecommunications Sector *Q1 2015 Summary Report*.

National Bureau of Statistics 22nd June, 2015

This indicates that the country has a total of 143,315,754 subscribers in GSM network: MTN, Globalcom, Airtel and Etisalet, and total of 2,214,302 subscribers to Visafone and Multilinks networks (National Bureau of Statistics, 2015).

2.2.2: Smart media and Internet Access

Smart media and internet access refers to the number of people who uses smartphone as an advanced mobile technology for benefits to themselves and freedom of usage behaviour while internet access implies the number of individuals who engages in online, internet-based activities in Nigerian society. The Pew Research Canter, (2015) notes that 27% of Nigerians have smart media to which the internet and applications are critical, and that the devices are mostly popular in the age group of 18-34 years. The report also indicates that one-third of English-speaking Nigerians own smartphones (see Aginam, 2015; Nowalk, 2015). Earlier study by the Pew Research Center, (2011) indicated the internet access as being valuable to students both undergraduate and graduate students in mobile device ownership.

Figure 1.4: Internet Subscribers to Mobile Networks (GSM)

Internet Subscribers to Mobile Networks (GSM)
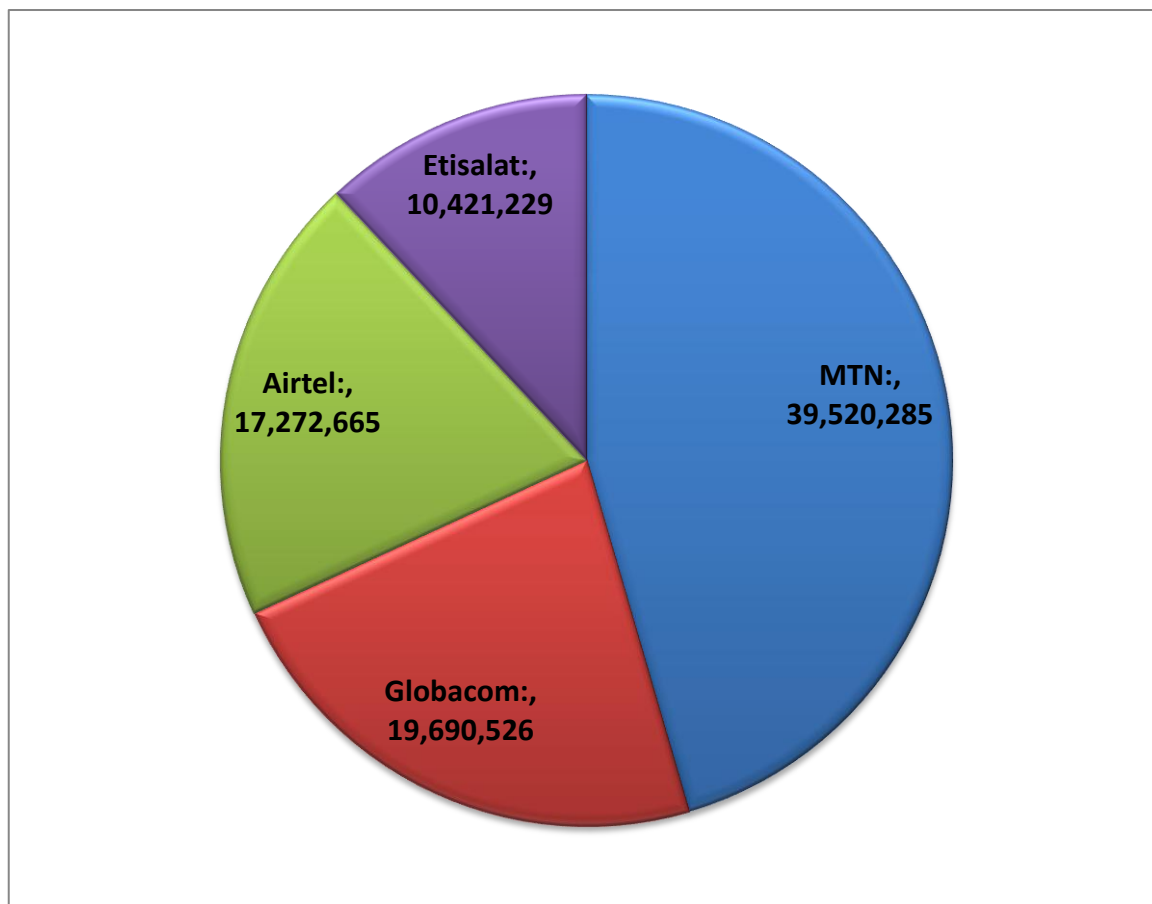
Source: Nigeria Telecommunications Sector *Q1 2015 Summary Report*.

National Bureau of Statistics 22nd June, 2015

Moreover, the CDMA networks: Visafone and Multilinks have a different share of internet subscribers as shows in figure 5 below.

Figure 1.5: Internet Subscribers to Mobile Networks (CDMA)
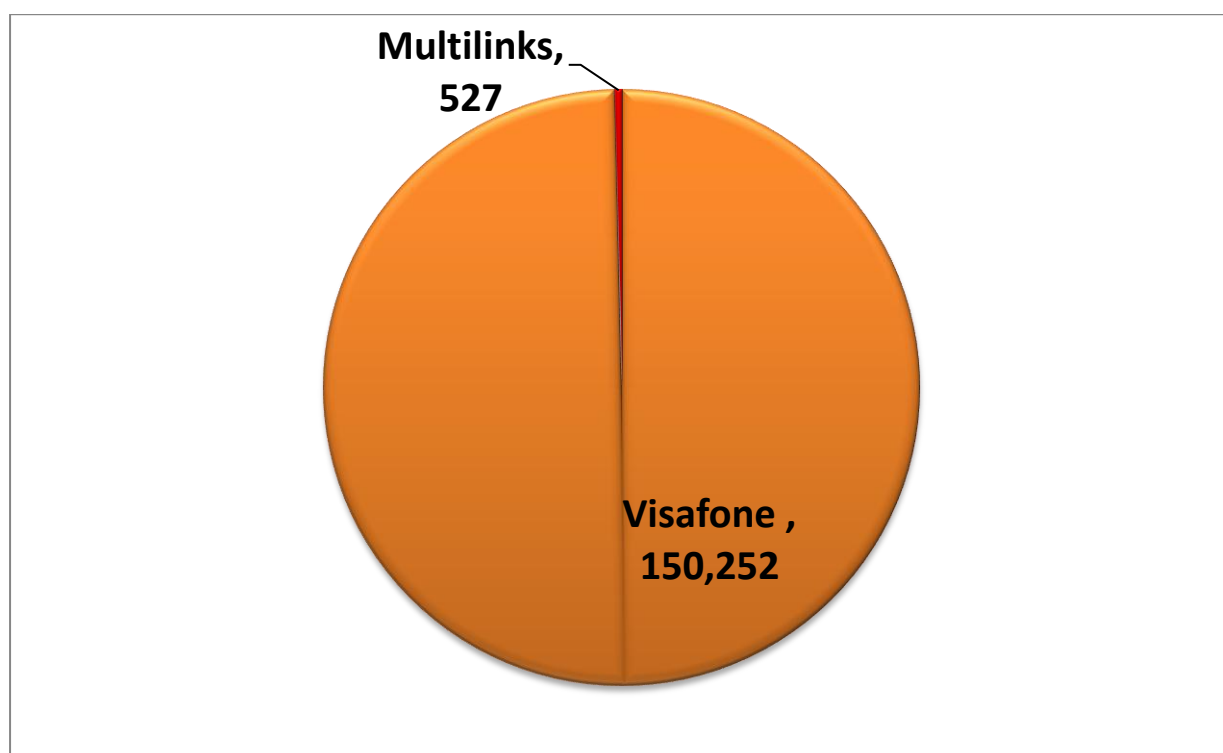
Source: Nigeria Telecommunications Sector *Q1 2015 Summary Report*.

National Bureau of Statistics 22nd June, 2015

The subscribers to mobile networks, both for GSM and CDMA services and subscribers access to the internet are indication that the digital divide that existed prior to 2001 has been reduced due to the appreciable geographical spread of mobile telecommunications. This suggests that more and more Nigerians are able to access mobiles and the internet. Amobi, (2011) reported that access and usage of the new media of internet has considerably reduced the Nigeria's digital divide, with 60.2% of young people now being able to access the internet.

As the Pew Research Internet and American Life Project, (2010) reported mobile has been the final front in the access revolution and has nearly erased the digital divide, and a mobile device means internet access for many people. It is worthy to note that, internet access is growing but not geographically spread, as most rural communities are still without it due to a number of reasons namely,   virtually all private cybercafés operate in urban towns where

potential users are readily accessible, the disposable income of the rural populace is low and therefore the possibility of internet subscriptions would be limited and even more so, the high cost of a network modem and a personal computers or laptop (see also Umezuruike, Oludele, Kuyoro and Izang, 2015).

Furthermore, the contribution of the mobile telecommunications sector to the country's GDP is worthy of being mentioned. According to the Nigerian Communications Commission (2014) the sector's contribution to GDP rose from 0.62 percent in 2001 to 8.53 percent in 2013 and 9.25 percent in 2014 (see also National Bureau of Statistics, 2015). This suggests that mobile telecommunications has substantially contributed to the nation's revenue base and economic growth.

2.3   Youth and Mobile Phone in Nigeria Society

Youth constitute major segment of every society around the world. They are often regarded as the coming generation with a distinct character formation. Livingstone and Bovill (2001:308-309) isolate reasons for the importance of young people in society. These are first; that they represent a sizable segment of the population with the ability to hear, see and expressed their experiences and their cultures relative to their sense of community and place. Second; the youth represent a distinctive and significant cultural grouping and citizen right i.e. a sizable market segment. Third; young people are the subject of specific policy intervention premised on the assumption that they constitute a distinctive category of media audiences or users. It is meant here to specify the age categorization of youth. In this study, youth is defines as people aged between 15-35 years which is in line with the Nigerian constitution and 2006 African Youth Charter (AYC?)

Recent studies have shown that young people are crucial consumer of mobile phone and a potential target for the mobile market in terms of handset sales and subscriptions to mobile operator services (ITU, 2004). In Nigeria, the young people between the ages of 18 to 35, number 80 million people. This represents 60 percent of the country's total population of 173.6 million (National Manpower Board and Federal Bureau of Statistics as cited in Ajufo, 2013, Nigerian Communications Commission, October, 2014). This signifies a huge potential market for mobile service providers. According to Uzor, (2012) the youth segment is key to the success of the nation's telecommunications sector and indeed the bulk of telecommunications operators' advertising and promotional campaigns are obviously targeted

at the youth market segment. Akintaro, (2013) also notes that the competitive drives of the country's mobile network operators are directed at the youth population. In his words, 'All the operators have spotted a gold mine in the youth population and this has opened a new chapter in the struggle for market share.

The reason why the youth have become so involved with or addicted to mobile phones use is unclear. This is highly contested issues that this study investigated with a view to revealing young people's perceptions and uses of mobile phones in their society.

2.4 Regulation and Mobile phone Services in Nigeria: The Role of National Communications Commission (NCC)

The Nigerian Government embraced mobile phones for the country in 2001 followed by the establishment of a regulatory body to sustain this industry's development and services to Nigeria. According to the Nigerian Government policy document on the National Communication Act of 2003, the Nigerian Communications Commission (N.C.C.) was established via Decree 75 of 1992, as amended by the 2003 Nigerian Communications Act. The Act set out this body's responsibilities to include:

- Promoting the market liberalization of the telecommunications sector.
- Facilitating investments in telecommunications network development, and service delivery through local and foreign stimulation.
- Promoting fair competition in the telecommunications industry, guide service providers away from anti-competitive behaviour and unfair practices
- Ensuring licensees are implemented and operated consistently through the most efficient and accurate billing system.
- Protecting and promoting consumer interests against unfair practices relative to tariffs and charges for the availability and quality of telecommunications services
- Managing and overseeing the administration of the frequency spectrums for the telecommunications industry and collaborating with National Frequency Management (N.F.M) Council in the development of a national frequency plan.
- Conducting the implementation of the Federal Government's universal telecommunications access strategy and program of action. (N.C.C. 2003; N.C.C 2004; N.C.C.2005; Nnama, 1999).

Today, the regulatory body handles the affairs of mobile phone behaviour in relation to the national interest and expectations, and is responsible for the standardization of operational practices which requires all mobile networks to observe and ensure good conduct in mobile phone service delivery.

2.5 Summary

This chapter discussed the emergence of mobile phones in Nigerian society and the subsequent direction of development. The accelerated acceptance of this new product was necessitated by the failure of the fixed telephony system from 1962 -2000 to meet the demands of Nigerians. Since from 2001, mobile phones have been playing a key role in the lives of the Nigerian populace, and for this reason, five mobile operators, MTN, Globacom, Airtel, Etisalat, Visafone and Multilinks have been engineering mobile base stations nationwide.

The growth profile of subscribers to mobile networks has undergone a progression to 139.1 millions in 2014 with a teledensity of 99.39% and further to 145.4 million by the first half of 2015, with a 103.9% (National Communication Commission, 2013, 2015). The establishment and role of the country's regulatory institution, the Nigerian Communications Commission (N.C.C.) was also described in this chapter. The body is steering the nation's mobile phone development landscape in line with its legislative mandate.

This discussion concludes that Nigeria as a developing society is on the brink of completely becoming an information society and is also reaping the benefits of globalization. The cornerstone of both the former and the latter is for all countries to adopt and develop mobile communication for the good of their societies. (WSIS, Geneva, 2003) and subscribed to policy reforms based on telecommunications deregulation, domestic market liberalization and competition. Such reforms serve to accelerate the pace of mobile telecommunications development and facilitate access to technologies transfer. This has been the core rationale of globalization principles and this policy thrust has encouraged the flow of mobile telecommunications technologies from the developed world to Nigeria as well as foreign participation in the mobile telecommunications infrastructure, development and services platform. (Obodi, 2011).

Given the increasing popularity of mobile phone technologies and widespread penetration, the interest of this study therefore was to investigate how young Nigerians feel about the technology and what it does in their life affairs. The attempt to examine this issue necessitated

attention to the youth in Nigerian society and as an investigative stance.

Further clarification of mobile media was undertaken in order to position the theoretical exploration in a proper discursive dimensions. Therefore, the concept of mobile media in this research refers to two main classifications of the mobile devices. The first of this is feature phone (standard mobile) and it provides basic functionality like calling, internet access, social networking, camera, music player, games and few others, lacking however, highly integrated app and multitasking capabilities. (see Lee, 2015; Microsoft Devices Team, 2012)

Figure 1.6: shows example of feature phone with internet connectivity used by some of the students in the focus group discussion. For the purpose of consistency, the term mobile phone will apply in the thesis.

The second is the smartphone also refer to as smart media, and of advance technological design and computer configuration, with wide range of applications including the internet as a major feature in the system applications (multitask capabilities). Smartphone are high cost device compared to feature phone which is of low price (see Microsoft Device Team, 2012). Fig.3.2: show another student mobile device used by some of the students in the focus group discussion. Both Figure 3.1 and Figure 3.2 formed the basis on which the students' perceptions and use of mobile media technologies are the focus of investigation.

Footnote:

Microsoft Device Team (2012) Mobile phones, feature phones and smartphones: the differences
HTTPS://BLOGS.WINDOWS.COM/DEVICES/2012/07/24/MOBILE-PHONES-FEATURE-PHONES-AND-SMARTPHONES-THE-DIFFERENCES/ [ACCESSED 13 MARCH, 2016]

Figure **1.7: examples of smart media (smart phone)**
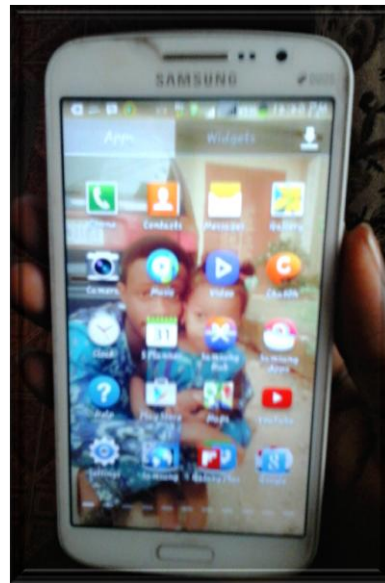
Carmichael, (2012) reported that feature phone allow internet access, but don't have the full array of applications available to smartphone. This summed up the distinction between feature phone and smartphone. Further, Luthar and Kropivnik, (2011) explain that mobile media technologies are physical materials objects with expressive uses and meanings, and in which different social groups have varied opinions. As the authors explain differences in the meaning of mobile media in everyday life and in aspects of how the phone is used can be also be identified along generational lines, referring also to young people as generation who prolific users of the system technologies.

Worldwide, the features phones and smartphones (smart media) are the usable mobile media technologies owned by different segment of the populace in society. However, available data has shown that young people appear to be the most active users of the system devices. For examples, Nelson (2010) reported that young people in developed societies embrace mobile phone (feature phone) with young people again as the leading smartphone users. As Nelson puts it, of all the countries examined, Italy leads in smartphone penetration with 47 percent of young people ages 15-24 owning a smartphone. Smartphone penetration among European youth averages 28 percent in the countries surveyed while young people in the United States exceed the population average smartphone penetration by 5 percent (see Orikinla, 2011).

Furthermore, the 2014 GSMA report has shown that the 40 percent of the young people in Nigeria aged 15-34 uses feature phone with possibility to access internet while less than 30 percent are on smartphone with multiple applications including the internet. These observations

point to the ownership patterns of mobile phone technologies in Nigeria society. Thus, the feature phones and smartphones were used in this study to explore the theoretical backgrounds and related studies in the next chapter. The uses of mobile phone (feature phone) and smartphone (mobile media device) formed the focus of reference in the research.

CHAPTER THREE

THEORETICAL BACKGROUNDS

3.1   Introduction

This chapter describes the theoretical framework under which study of university students' perceptions and usage behaviour of mobile phone in Nigeria context sits. These theoretical positions were explored differently in relations to respective mobile device adoption. First, students' perceptions and use of feature phone denoted in this thesis mobile phone was examined in relations to the social construction of technology (SCOT) and on which related studies were conducted. Second, the students' attitudes towards smartphones denoted mobile media were explored in relations to the theory of digital networked society as well as its influence on sociality and social capital of users. Third, Fiske's (1992; 2001) four paradigms of sociality was discussed to add comprehension to the analytical value of mobile media devices and social media sites, and as medium which have made contributions today's social platforms of people in digital network society. These discursive frameworks were explored in the thesis to gain insight into the significance of smart media and online social media sites in the context of respective framework. The discussion therefore was explore in two sections; The first section examines the social construction of technology theory and the studies relating to feature phones and the second, the digital networked society, social capital, Fiske paradigms of sociality relatedly to smart media, sociality and social capital of smart media device users. The first section of this chapter begins with.

3.2   Social Construction of Technology Theory: SCOT

The interaction between technology and society has been discussed in previous literature. For instance, Ardalan, (2008) argues that this interaction can be understood from the context of four paradigms of evaluation and research. These are: functionalism, the social construction of technology, radical humanism and radical structuralism. The author goes on to conclude that research into the relationship between technology and society can be handle on the perspectives of this paradigm depending on the researcher's direction of investigation.

Given the line of investigation in this study, the social construction of technology (SCOT) approach was deemed most appropriate to explore the links between feature phone and society. The SCOT theory provides a more in-depth understanding of how users of feature phones define the system utilization in their society. Some scholars have discussed the usefulness of the SCOT theory in new media technologies research, based on its potential for characterizing

the relationship between technology and society (Carroll, Jannie et al, 2001, Karanasios, 2010, Klein and Kleinman, 2002, Westland, 2009, Peia, 2009). Specifically, Klein and Kleinman (2002), Peia, (2009) and Jones and Bissell (2011) discussed the importance of the theory of the social construction of technology for shedding more light on the relation between technology and society, for which three conceptual frameworks were identified. The first of these is, interpretative flexibility- which is the notion that technological artefacts or products are subjective based on the users' interpretation or negotiation to arrive at a specific value and meaning. For instance, what feature phones mean to users depends on his/her perception, utility experience and benefit derivation or gratification from using the system. The second of these is a relevant social group which refers to a group of individuals or members of certain groups sharing the same interest and value orientation. For instance, this could be a specific segment of the populace in a society, who are users of a particular technological artefacts or product, sharing the same attachment to its usage and benefit to them. Naturally different social groups may attach different meaning to the use of a particular technology. The third of these is the socio-cultural environment of technological users which could potentially shapes the use of technology implying that the socio-cultural environment in which technology lies need to be understood (see Bijker, 1992: 2001).

As Xia, (2012) explains a mobile phone is often viewed as an artefact whose effects can be pre-figured and pre-determined on different cultures adding that majority of researches evaluate the mobile phone either as a decisive agent that exerts homogeneous impact on different cultures across the world or as an artefact whose meanings and effects are socially negotiated and "thus inherently malleable.

3.3   Conceptualising Students Perceptions of Mobile Phone: The Role of SCOT Mobile

Mobile Phone adoption has become a new paradigm of communication in Nigerian society and students are becoming users of the system technology, potentially serving different needs for them. Understanding how students perceive the devices as an object of domestication in everyday life requires three conceptual framework of SCOT. These are first interpretative flexibility suggesting that students in developing context have different views about the mobile phone. Second, the students are specific social group in Nigeria universities with educational orientation and lifestyle, and they are likely to possess the ability in using the devices for self benefits. Third, the wider context of the students indicate that their socio-economic status and cultural orientation could influence individual interpretative positions regarding owning and using the mobile phone either on or off campus.

Furthermore, the relations of SCOT to the understanding of mobile phone in society has been drawn from the work of some scholars, citing for instance, Wong, (2008) and Karanansios, (2010) who provided useful insight into the perceptions and use of mobile phone in society. As Wong, (2008) explains individual users of mobile phones define the device usage behaviour in relation to the peculiarities of their utilization experience while Karanansios, (2010) point out mobile users present more experience for analysis in terms of what the system technology means to him/her and what benefits are being derive from its usage. The view of both scholars on linkage of social constructivism for research on mobile phones centres on the issue of the individual user as the key player in the evaluation of the use of mobile phone in society. Oksman (2010) also noted that mobile phone can be considered from the viewpoint of symbolic articulation, cultural meanings and interpretation. She went on to say that individual perceptions and usage experience plays a useful role in the overall assessment of mobile phone applications and functions. Similarly, Campbell and Russo (2003) noted from social-constructivist perspective on the perceptions and uses of the mobile phone among individual users belonging to the same personal communication network (PCN) than those outside. The researchers observed that the use of mobile phone cut across six main areas of usage: safety/security, perceptions of cell phone as a means of display, attitudes about use in public, micro-coordination (using mobile phone for logistic purposes such as making plans), hyper-coordination (using mobile phone as a form of self-expression and social relations maintenance) and comfort with the devices as a new technological entity.

Thus, the discourse on SCOT provide good ground for its relevance in this research and as conceptual framework to gain insight to students' feelings and use of mobile phone in society. The next sub-heading examined the importance of mobile phone in society.

3.4   The Importance of Mobile Phone in Society

Mobile phone constitute the most important technological device of modern life and of the 21st century 'mobile world' which has enable users to interact, communicate and socialize in virtual communities (Ganguin and Hobliz,2012; Jerpi, 2014). As stated by Rosen, (2004) the mobile phone is now a dependable gadget, simplifying communication, offering convenience and facilitating new forms of social behaviour. Furthermore, Arminen, (2007) notes that mobile device allow newly emerging types of communication that enable or contribute to the development of new forms of social activity, thereby having an impact on the patterns of the establishment and maintenance of social networks. He then submits that mobile

communication is now part of the development of mobile society in which everyone is expected to be available all the time everywhere.

Studies have emerged to demonstrate the relationship between mobile phone and society. For example, Bolin and Westland (2009) describe the functionality of mobile phone in society with voice and text messages serving as channels for interpersonal communication. Nurullah, (2009) regard mobile phones as a unique technological gadget that has been embrace society by every demographic groups in society, with young people as the upcoming generation who are deeply involved in the system utilization. In his words, the exceptional popularity of mobile phone among the young can be linked to their need to forge an individual identity, maintain friendships networks and emancipate themselves from family ties. Similarly, Campbell, (2005) noted that the mobile phone has become a status symbol for young people, and their ability to communicate unrestricted, and without physical constraint has added to the flexibility of the system usage. Moreover, young people are able to arrange or rearrange social functions extremely quickly which leads to a more fluid culture of informal social interaction. Moreover, Green and Singleton, (2009) point to the importance of mobile phone in the cultivation of friendship and that young people are at the heart of the system usage. As the authors explain, today, young people's friendships are now being formed and maintained through the use of digital media, and that this enables them to stay in touch with friends both locally and globally. The concept of friendships are voluntary relationships, largely free of structural constraints and based on equality, see Shklovski, Krant and Cummings, (2008)

The entertainment functions of mobile phone in society have also draw the attention of scholars and researchers. For examples, Frenzel, (2006) and Anderson, (2007) explained that mobile phone is becoming portable entertainment device through which users access varieties of entertainment. The Pew Internet and American Life Project, (2011) reported that 70% of cell phone owners use their phone for entertainment interest as well as needs. Stald, (2008) posited a two-prong argument to sum up the importance of mobile phone. First, there is their immediate and ubiquitous use for social coordination and updating. Second, mobile phone-combined in some cases with the laptop-are a personal medium which liberates the users from the constraints of physical proximity and spatial immobility.

This study therefore addresses how university students use mobile phone for their needs and the benefits derived from its utilization.

3.5   Reasons for Using Mobile Phone

Researcher like Puro, (2002) has argued that the main reason why people in Finland obtain mobile phone was due to availability- the possibility that users can be reach wherever they are. Equally, Rosen, (2004) note that convenience and safety was the most important reasons people gave for owning mobile phone and that its sophisticated accessories such displays. playback, a 1.2 megapixel camera, a 256 colour screen, speakerphone removable memory, mp3 player, Internet access, global positioning system, radios, calculators, alarm clocks, flashlights, and mirrored compacts add to the motivation.

Other studies have provided useful documentation on the reasons why young people obtain mobile phone citing specifically instances of university students. For examples, Australian, Watsh, White and Young, (2008) observed that the main reasons university students owned mobile phone is that they offered convenience and ease of contact with others, time and location notwithstanding. Baron and Ling, (2008) notes that talking and texting serve as avenues to keep in touch and that beyond this, the phones are used for other functions as well, such as camera, calculators, alarms clocks or platforms for music or games. The nature of mobile phone has been described as personal, i.e. an individual own as an entity, portable: that is always on, always with you, and pedestrian in the flexibility of use in any situation for communication interaction. These characteristics were suggested as reasons for the system adoption in Japan (Ito, 2004). Moreover, the privacy connection of mobile phone is another reason for the device. As Balakrishnam and Raji, (2012 cited in North, Johnston and Ophoff, 2014) explain the privacy that mobile phone provide gives university students more freedom in their day to day lives.

Further, Haddon, (2002) reported reasons why British youths aged 15-24 years possessed mobile phones, namely that for safety and because they make it easier to talk to friends and the discarding of fixed lines for mobiles. Furthermore, Katz and Aakhus (2002) made useful compilation of research publications from different cultures to understand how mobile technologies are influencing social value and social lives of users to which some are cited for their significance to this research. For examples, Puro, (45-55) noted that people in Finland are influence to obtain mobile phone due to availability through which they can be reach wherever they go as well as privatisation of public spaces − moving away from the presence of others when talking on phone. Robbins and Turner reported cost effectiveness, safety (communications in an emergency), social and convenience as reasons why people own mobile phones in USA. Ling and Yttri, (139-193) identified two ways through which mobile phone

has become crucial to young people's social behaviour. The notion that mobile phone has engender a new forms of interaction by young people, referred to as micro-coordination (expressive use of mobile phone from emotional and social communication in facilitation of social interaction, coordination of social activities with SMS as expressive contact with friends, chatting) and hyper-coordination (use of mobile phone to enhance the presentation of self in which the design and the visual impact of mobile device become crucial and as status enhancement). Reflecting on all published works, three main observations are obvious. The first of which is that it is qualitative and of focus groups, as well as inductive in terms of interpretative analysis. The second is that mobile phone usage has different value and meanings to users in different cultures and third, the notion that young people are influential factor in mobile phone ownership citing for instance Finland, Italy - where it was said the use of mobile helps young people defend and develop young people's sense of autonomy and identity, and allows them to escape the social control of others (members of the family) and Korea.

Furthermore, Tucker, (2011) conducted a survey of 400 university students to find out what influenced their decision when selecting mobile phone. He found that, in addition to the media of communication, friends and family members were responsible for respondents' decision. He noted them as influencers who are likely more experienced or knowledgeable about the system features and functions.

Other studies on the importance of mobile phone in the context of developing society are emerging. For examples, a study carried out by Oyewole, (2014) found that the reason Nigerian students own mobile phone lies with the urge for communication which includes sending and receiving text messages and making and receiving calls to parents, guardians and loved ones. His finding was derived from focus group discussion, made up of eight University students in Australia, four males and four females, aged from 19-27 years, through which investigated the reasons for mobile phones ownership and how the participants use mobile services. McClatchey, (2006) identified three reasons for students usage behaviour of mobile phone. First, mobile phone has utilitarian functions in terms of allowing students to contact friends and family, offering a bit of personal safety, helping students to manage their time, and offering mobility and freedom. Second, students use mobile phone for hedonic reasons that is to say text messages for fun and social interests. Third, McClatchey found that students used of mobile services to develop a sense of belonging and maintain a good image with their peers, and he found these aspects to be crucial to student use and value

of mobile phone. Oksman, (2006; 2010) point to safety and security as mostly connected to mobile phone use by young people in Finnish Information society which was also conceptualised as micro-coordination.

Furthermore, Utulu and Emmanuel (2010) noted from a random selection of 532 students in three private Universities that students' reason for using mobile phone lies in their needs to sustain personal communication, interact with others, obtain information, and browse the internet and exchange knowledge with their colleagues.

3.6   Benefits of Using Mobile Phone Usage Behaviour

he increasing benefits of mobile phone to society have drawn the attention of scholars and researchers (Vats, 2009 and Pew Internet and American Life Project, 2011; 2012). Specifically, the word 'benefits' is derived from these previous studies and used in the current study to denote the usage applications of mobile phone in relations to users' needs and functionalities. Four main areas were identified in which to examine the benefits of mobile phones to society; they are: 1. personal communication, 2. self-organization and coordination, 3; social relations and identity expressions, 4, social interaction and 5, news flow and audience consumption, and entertainment (Kreutzer, (2008). These areas are subsequently examined.

3.6.1   Personal Communication and Mobility

It is said that the progression toward personal communication in society has been driven by the emergence of mobile phone with mobility of use as a means of extending the value and benefits of the system gadget. Generally, mobile phone is now seen as a common artefact in both private and public settings, and for which the device's symbolic meaning is linked to conversation and dialogue in the system utilization (Campbell and Park, 2008). The use of mobiles for personal communication according to Kreutzer, (2008) includes making a phone call, sending text message, giving someone a missed call, and sending a free 'please call me' message. These uses constitute the basis of mobile phones usage activities and benefit to users or individuals in a society.

Scholars have pointed to the increasing role of voice communication (talking on the phone) and textual communication (text messages) in mobile phone usage behaviour (Vats, 2009; Pew Internet and American Life Project, 2010; Xia, 2012). As reported by the Pew Internet and American Life Project (2010) voice calling and text messaging are the two main uses of mobile phone. Specifically, Xia, (2010) explained that the popularity of text messages is

influenced by three main factors: immediacy, convenience and low cost, and variety of uses for different users in society. The author cited the experience of China where texting is widely used to chat, exchange greetings, pass- on jokes and flirt. Similarly in the USA, the Pew Internet and American Life Project (2010) reported that the voice calls and text messages serves an identical interest for users, and in a comparison of the two, the report stated that text messages are more preferred because of their relative advantage stemming from users ability to silently create and send text messages.

Furthermore, the benefit of using mobile phones for voice calls and text messages in personal communication cuts across demographic groups in society, with young people constituting major users of these communication medium (Pew Internet and American Life Project, 2011b). The designation of young people includes students in colleges and universities. Previous research on mobile phone use shows students connective usage of voice calls and text messages (Dresler-Hawke and Mansvett, 2008, Kamran, 2010; Balakrishnan and Raji, 2012). Evidences of students' utilization of mobile phone for voice calls and text messages have been found in different countries. For examples, Hemmer, (2009) organized two focus group discussions with university students in the USA; each comprised five males and five females to find out the impact of text messaging on communication text messaging and as a mean of sustaining intimacy and connection with family and friends.

In Western countries, Grinter and Eldridge, (2001) reported similar findings from their study of mobile texting among full-time secondary school students. These students used their mobiles to coordinate of times for communicating, making plans with friends, chatting and gossiping, coordinating with family, for their ease of use (quicker to construct message, cost benefits) and inexpensively. Similarly, Green and Singleton (2009) reported that texting and calling to connect with friends in many places and enhances social connections, and have therefore become valuable medium of personal communication through mobile phone. Harley et al. (2007) carried out a study on text messaging by students and reported that their respondents send text messages to sustain emotional distance (a feeling of closeness) and maintain social support networks. They also reported that was texting was within the confines of an academic environment serves as a means to make sense of university expectations in relation to academic work. According to Harley et al, students' use of texting involves communication of basic information such as lecture times. The study therefore implies that mobile phone applications are cantered on the use of SMS texting as a crucial form of personal communication. Another study conducted in New Zealand provides further

evidence about voice calls in mobile phone use. According to Dresler-Hawke and Mansvett, (2008) mobile phone calls by university students serves largely to maintain friendships, keep in contact with family and, most commonly to make social arrangement.

Studies have been carried out in Asia on the use of mobile phone for voice calls and text messages. Zulkefly and Baharudin, (2009) survey 386 students (209 male and 177 female) in Malaysia regarding their perceptions, finding that students' preferred SMS for sustaining interpersonal relationships (e.g. with friends, and parents) while voice calls were rarely used due to the cost of services (cheap to text and save money). Furthermore, Kamran, (2010) investigated why college students between the ages of 17 and 21 years in Pakistan use mobile phones for calling and texting. The study found that the participants frequently used SMS communication for the purpose of sharing information, love messages, religious messages and greeting, amongst others. In addition, Al-Qudah's (2008) study on the personalization and use of mobile phone for which a survey of 993 students aged 18-23 was carried out in nine universities, noted the use of voice calls and text messages to sustain personal relationships and most social needs.

Given the importance of voice calls and text messages in mobile-driven personal communication, Chatterjee, (2014) remarked that mobile devices are an object of communication which plays a decisive role in social connection while Hyman, (2014) and Corbett, (2009) point to the significance of text messages as a platform that are changing the nature of social interaction. Furthermore, scholars such as Campbell (2007) and Yang, Kurnia, Lee and Kim, (2008) identified the mobility attributes of mobile phone based upon which the use of device in public places or indeed in any location or any vicinity is viewed as a common phenomenon in mobile utilization behaviour.

Humphrey's (2005) study on how people use cell phone in public spaces has yielded a number of observations and themes, noting that cell phone have become markers of users' response behaviour. She identifies a number of themes on which users were found to use their cell phone in public space. The first of these was dual front interaction occurs when respondents on the phone were observed to engage in various nonverbal behaviour to maintain interaction with their co-present user (iconic illustrators, rolling of the eyes. This shows how mobile use may create situations where participants must simultaneously manage their relations across multiple distinct speech events. The second was caller hegemony in which caller determines the beginning of the interaction and in which the answerer must respond implying that 'the caller is expected to *acts* and person being call is require to *react*' The tendency is that caller A knows

receiver B depending on the social interaction occurring in a given situation. The third is disruption of hegemony- the choice to respond to who is calling is at discretion of the person to whom the call is being directed. The decision lies on either to response immediately or withhold the call and response later and the fourth is maintenance of hegemony- the action here is one of control decision whereby calls can be answer and the option to talk back is discretionary and on the ground of politeness to call latter could be ultimate decision. All of these are different ways mobile phone are use in public spaces. As Humphrey remark mobile phone allow for greater mediated contact between persons due to their flexibility and mobility of public and private spaces.

Furthermore, the relation of mobility and mobile phone use, as a facilitator of user communication behaviour has been discussed. Arminen, (cited in Haddon and Ling, (2001) note that mobile communication devices are location free and usable anywhere and at anytime, and does not require the parties to know where the other were. This submission demonstrates the mobility nature of mobile phone' utility functions in society, regarding which studies are emerging, specifically on how people use mobile phone in interactional communication.

The work of Ishii (2006); Yang et al, (2011); Haddon, Leslie et al, (2002); Kakihara and Sorensen, (2002) provides insight into usable patterns in the relationship between mobility and mobile phone use. These scholars identified contextual mobility as a factor which explains the utilization of mobile phone in public and private spaces, based on freedom and control decisions. As Ishii (P.347) explains contextual mobility is the key to understanding the social consequences of the introduction of mobile phone in society. The author went on to add that contextual mobility provides mobile users with more freedom to control incoming calls or communication transactions by themselves.

As Puro (2004) explain mobile phone has engender privatization of public and private spaces, and in which people's behaviour in communication interaction appear to represents dilemma in terms of closeness and openness in a mobile phone usage engagement and of social efficiency relative to the norms and rules of interaction. This implies the culture of mobile phone users may influence the usage of their device in public and private spaces.

3.6.2 Self-Organization

The coming of mobile phone has enhanced individual's capacity to conduct his or her life affairs and organises almost all daily activities. This possibility is driven by a number of applications in the system configurations which serves users' needs and have a variety of

functions. The word 'users' referred to those who owned mobile phone as an entity or artefact while self-organization involves the linkage of applications such as the calendar, clock, alarm, the three of which are classified as time management tools and contact, reminders, diaries, the calculator, camera and the information access via web browser, all of which are classified as co-ordination. Thus, the term time management and co-ordination are applied to indicate the self-organizing functions of mobile phone usage. In the conceptual framework of Ling and Yuri (2002), using these features constitutes another form of micro coordination or logistics based on mobile phone utilization.

A number of studies have reported the usage of mobile phone for self-organization that is for time management and coordination by university students (Campbell and Russo, 2003, Aoki and Downes, 2008, Walsh, White and Young, 2008), information and reminder (Faulker and Culvin's 2005) and for time coordination through the use of clock, calendar and reminder (Srivastava, 2005:113; Taipale, 2009). Further, Simay, (2009) noted from a survey of 642 students (270 men and 372 women) at the Corvinus University of Budapest, to find out the mobile phone usage and device selection. The students were aged between 18 and 28 years. The author found that the students use clock, alarm and calendar regularly. However, sound recorder and internet was most rarely used. The findings also reveal the importance of look and shape as the most decision for mobile phone selection. Important to note here that mobile phone usage for self-organization varied widely depending on an individual user's choice of applications and functionalities at given time.

3.6.3 Social Relations and Identity Projection

There is mounting evidences that the use of mobile phone has transformed the physical social relations of human society into virtual social relations, whereby individual users of the mobile device interact with each other without face to face contact. They have also created a new way of expressing identity in public and private places through self projection, based on one's mobile phone (Yuan, 2012). Thus, the term 'fashion or wearable or worn on the body or electronic clothing technologies' have been used to described the way mobile phone for users project their identity or a particular image of themselves through their mobile phone (Campbell, 2005; Katz and Sugiyama, 2005; Campbell and Park, 2008).

The revolutionary impact of mobile phone has been in creating new forms of pursuing social relations and friendships connection (Yuan, 2012; Miklas, Golliu, Cahan and Saroiu, 2007). As Campbell, (2005) explained the impact of mobile phone on today's society has to do with the

way they connect people of different demographic groups. The author emphasizes that young people are the most prolific mobile users.

A number of studies have indicated the role of mobile phone in both relationships formation and identity projection. For examples, Campbell and Russo, (2003) surveyed 194 undergraduate students in Midwest university, U.S.A. (60% female and 40% male) and carried out a follow-up focus group interview with 30 undergraduate students to ascertain their perceptions and use of mobile phone. They found that the students 'usage of mobile phone serves as a means of self-display and identity expression, and safety and security. They also noted from the focus interviews with the students that social interaction with family and friends influenced their interest to obtained mobile phone as well as serving as a collective social resource for them. Furthermore, Chen and Katz, (2008) noted from a survey of 40 students and three focus group discussions on perceptions and pattern of mobile phone use among college students and their family that the use of the system technology is a necessity to ensure regular contact with their families, that the use of the system technology was essential to ensure regular contact between the students and their families as well as to share experiences, and receive emotional and physical support.

The linkage of social networking sites as online communities for self presentation and identity performance has drew the attention of scholars. For examples, Dwyer, and Passerini, (2007) explain that people are into social networking sites to create a profile and make connections with existing friends and those they meet through the sites. They therefore refer to the profile as a list of identifying information. Similarly, Ghosh, Pallas (2013) reported that social networks such as Facebook are changing people's view of who they are and of their place in the world. The author therefore submits future identities will continue to subsist through continuous use of mobile device.

3.6.4   Social Interaction: The Goffman Paradigm

Social interaction relate to individuals' behaviour which are externally open and notice by other individuals or people around. It can mean social processes by which individuals' action and reaction takes and on face to face contact. This definition indicates individuals as the core of social interaction in social life and on which individuals understanding of interaction in everyday situations becomes crucial. Better way of understanding how individuals' social interaction occurs in a given social reality has draw attention to Goffman's (1959) work '*The presentation of self in everyday life'*. The term self presentation defines the nature of a social situation of individual social interaction. Goffman claim that if people are physically "co-

present" in a space, some information will be mutually sent and received regardless of their intentions [2]. The human body exhibits and emits various types of signals, such as height, gender, race, look, line of sight, hair, clothing, footwear, belongings, voice, tone, language, loudness, scent, and body action, and "co- present" people receive such signals even if they do not intend to receive voluntarily. Goffman [2] referred to such continual and unavoidable communication "face-to-face interaction." which also involves verbal communication; the human body perpetually emits nonverbal signals (Nakamura, (2015).

3.6.5   Goffman Paradigm and Mobile Phone Usage Behaviour

Concern for Goffman principles in understanding the nature of mobile usage in society has began to emerge, with scholars' interpretation of how the system device influence users' social interaction and identity performance. Mobile phone is a life object visibly display that most often is seen by users and as physical object with attribute of value and connotation. Thus, in face-to-face interaction, users hold their device for others to observe and for immediate perception in terms of what the users are, in relation to socioeconomic status. The users' display of mobile device connote Goffman claim of self expression and of good impression in the eyes of others, implying that the notion of mobile phone as fashion and status device is relevant to indicate. In other words, the aesthetic value or the iconic appearance of mobile phone has made it fashionable and wearable by users (see Fortunali, 2004; Katz and Sugiyama, 2005, Srivastava, 2005:115).

Campbell, (2008) sees mobile phone as an extension of their physical selves and of fashion, and on which young people are strongly linked. The author cited studies to indicate mobile phone-fashion-relationship and drew on the study by Green (2003) who found that all teens interviewed had extensive knowledge of handset styles and designs, and that the youngest individuals were most interested in the fashion of the technology. Similarly, Hjorth, (2006:8) notes mobile phone as a marker of tastes, values and status, and of social and cultural artefact.

Furthermore, Goffman's self presentation paradigm has extend to the analysis on how people interact with each other on social media sites and his conceptualisation of front stage- where a people's performance is within the presence of others implying that people need to conduct themselves to meet the social expectations and of cultural values. This implies that people can use social media sites to project themselves to reflect the expectations similar users could have about him and the back stage where only the performer exists with the audience and where other aspect of personal identity might be realised implying that individual user of the social

media sites responsible for the content of personal identity being put online. (Zhao, Salehi et al, 2013).

Zhao, Salehi et al, (2013) build on Goffman's paradigm of self presentation to suggest that social interaction on social media sites specifically Facebook undergo three processes of user identity performance and are: First; performance region, where user present personal data or information and as impression management are created for friendship network and contact. Second; exhibition region where user provide visual profile (photos, videos) to enhance other user or friendship perception about his person and Third, personal region where personal information are provided for other user knowledge (Timeline) The authors therefore submit that the combination of these functional region accommodate diverse functions for users of facebook.

Relatedly, Keenan and Shari's, (2009) study of sociability and social interaction on social networking websites identified two groups of online users in social interactive process; the people focused are those who developed their personal content to support interaction with others implying that that nature of information disclose on online rest on the user. This suggest that university students are focused people who write about themselves and put online for other users to access and advance meaning on who they are as well as activity focused in which social interaction of user is based on specific sites usage for friendship network and maintenance. The researchers also noted that Facebook is the most sites for focused people. All of these studies relating to Goffman and other researchers are expected to inform the line of thought on social media use within the context of university students in Nigerian society.

3.7   Entertainment Behaviour

The most defining characteristic of mobile phone is the convergence nature of the system's technological platform in which six media are integrated forms:-printing, recording, cinema, radio, television, and internet, making the device a multimedia entity (Ahonen, 2005). This is why the words 'multimedia in mobile phone' are used to describe this development (Rasmusson, Jim and co-authors, 2004). By implication, mobile phone has become the focal medium of entertainment devices or gadgets as they are capable of providing a wide range of entertainment content including games, music, taking or downloading pictures, movies, videos and personalization content such as wall papers, ringtones and logos. All these have expanded the leisure activities of mobile phone users (Aguado and Inmaculada, 2009; Chachei, 2013). Specifically, Chachei described mobile phone as a leisure-time

appliance that plays the role of mobile stylers/fillers, in reference to those who use their system device for entertainment.

Researchers have demonstrated the use of mobile phone for entertainment, with young people as the major users of the system's entertainment potentialities (Haddon, 2008; Kreutzer, 2008) and the use in-phone camera and picture messages as an extension of entertainment (Scifo, 2003; Villi, 2007). The Pew Internet and American Life (July and October, (2010) reported that taking pictures, photos or videos, listening to music and playing games constituted entertainment. Another study in U.K. reported that over 90% of people between the aged of 16 and 24 years who had access to mobile phone (Ofcom, 2006 cited in Green and Singleton, 2009) used their device for entertainment related activities such as taking photos and sent pictures messages, playing games, listened and downloaded music, and listened to radio while Taipale, (2009) noted forms of entertainment (gossiping, pass time, and playing games) in the mobile phone usage patterns among young people, aged 15-25 years in Finland. Furthermore, Economides and Grousopoulou (2008) found that taking pictures recording sound, listening to radio were common in their study of mobile phone usage among males and females students in Greece and in India, Matanhellia, (2010) reported the use of mobile phone for entertainment activities. These include listening to music, playing games, and taking and sharing pictures and videos. All of these studies focused on students' usage behaviour of mobile phone.

Furthermore, the connecting relations of mobile phone in news consumption has been strengthen by the convergence nature of the system devices with radio and television as accessible channels (Ahonem, 2005; 2008) As Oksman (2007) explains mobile phone has been evolving into versatile multimedia device they integrate different media forms, channels and delivery services systems and that people are now experiencing personal form of mass media broadcasting. Studies on how the uses of mobile phone are increasing the pace of news flow and audience consumption in society are coming up. For examples, Micheil, Rosanstel and Christian, (2012) reported that 23 percent of US adult now get their news on mobile device. Westland, (2008, 2009, 2010, 2011) provide an inspiring insight into how mobile device are used to keep updates on news. The UK News Media Review (2010:8) reported that listening to the radio via mobile phone is an emerging platform for news to reach for audience consumption. Similarly, Banerjee, (2016) note that millions of people in India use their mobile phone to listen to FM radio programmes.

Further, Wei, Lo, et al, (2013) conducted a survey of college students in Shanghai, Hong Kong, Taipei and Singapore to find out mobile news consumption behaviour. The found that majority of the respondents belief mobile phone generally help information seeking, read news and follow news posted on microblogs. Also, the Chinese college students are most active users of mobile news consumption. The researchers refer to mobile news as news available to mobile device and in terms of news websites.

3.8   Studies on Mobile Phone Usage Behaviour in Nigeria

There is evidence of mobile phone usage behaviour in Nigeria along similar lines as earlier discussed. For examples, Olatokum and Bodunwa, (2005) found students perceived mobile phone as a medium of communication for keeping in touch with friends, colleagues, relatives and associates as well as for time management including personal safety. Similarly, Okafor and Malizu, (2014) examined undergraduate students usage patterns of mobile phone, finding that they used the device as a tool for socializing, staying in touch with parents and relatives as well as to promote interpersonal relationships.

3.9.   Critique and Methodological Application of Social Construction of Technology Theory

The social construction of technology theory has its origin in the work of Bijker and Pinch (1987). The main concern of this theory is the interaction of technology and society (Carroll et al 2001, Klein and Kleinman 2002, Karanansios 2010). The strength of this theory as explained by Cana, (2003) lies in its capacity as a theory and a methodology for handling researchable problem or investigation that could leads to predictable outcomes of findings.   However, the theory has been subjected to criticisms by scholars which Klein and Kleinman, (2002) noted tend to concern two significant aspect of the theory. The first is its excessive emphasis on agency-centric approach and the second is its emphasis on a pluralist view of society in which various social groups are seen as equal. Expressing unease with the latter concern, critics of SCOT theory argue that the power structure as consisting of broad social groups as well as sub-groups are what make society dynamic and productive. Infect, as discussed more later under the methodological strategy, the theory's failure to distinguish between different social groups is what makes it feasible for research. Thus, the 'discussion of group capacity' in this study engaged relevant social groups in order to probe their minds about technological innovation and their use of technology, and the strategy of co-construction' allowed the relevant social groups to be identified in order to discuss what technological innovation or products means to different

categories of users. The overall advantages of the two concepts according to the critics, is to facilitate an understanding of the relationship between technology and social structure.

In today's studies on the use of mobile phone in society, the two conceptual frameworks can be seen to have influenced the research design and data collection in the field. For instance, the discussion of group capacity is identical to focus group interviews which are useful way to explores perceptions and use mobile technology by individual or group of individuals in society. In sum, the social constructivist theory had a strong bearing on this study. The discussion of group capacity formed the nucleus of the research design as a complementary method of data collection.

3.9.1 Factors Influencing Perceptions and use of Mobile Device Technologies in Society

3.9.1.1 Age, Class and Gender

The discussion of mobile device technologies in relation to university students must distinguish between those who use mobile phone without internet and those who have an internet-enabled system protocol. The two categories of users have been investigated separately in the research, as evidenced in the qualitative-based focus group interviews and quantitative-based surveys on using smartphone for internet access or mobile phone with internet connection.

Prior studies of mobile phone have not specifically addressed the effect of class in addition to age and gender on perceptions and uses of the system technology. The studies on the relationships between mobile phone and society appear to focus solely on age and gender characteristics of the respondents. This observation was also made by Campbell's (2007:350) in his cross-cultural comparison of perceptions and uses of mobile telephony. According to him, a number of studies on the adoption of mobile phone technology, and perceptions and uses of it, take age and gender into consideration.

Drotsky et al, (2007) and Ames, Morgan et al, (2011) did look at the importance of social class in relation to mobile phone usage and as a basis for understanding the participants choices regarding technology and their valuation of it. Drotsky et al also noted that the students' social class influences their lifestyles or the way of living, and that their decision to acquire cellular phone citing further the significance of students' personal disposable income was a critical factor for it. They then defined personal disposable income as the amount of

money the students have available after all fixed obligations have been met. Income, education, community, geographic mobility and values were indicated as determinant variables of social class.

This assertion indicates the relevance of social class to this study and therefore, this variable was included to expand on the other variables considered in mobile phone technologies studies. Furthermore, scholars have discussed the linked between social class and mobile devices, stating that the latter are a type of cultural practices and therefore represent for the youth a cultural social capital (O'Connor, Alan 2004; Roy, Tapas 2012). Both of these studies have discussed youth subcultures in relation to social class and everyday experience. They cited parents' occupation and level of education as critical factors that influenced youth sub cultural practices and behaviour.

Furthermore, Van Deursen and Van Dijik, (April, 2015) point to the relations of income, education, age, gender and ethnicity are influential characteristics in access to new media technology. The scholars use of the word '*access*' implies the decision to adopt and purchase a particular technology emphasising also the importance of skills and competencies as additional factors of influence for access and actual usage, with education playing decisive role in technological usage ability and benefits to users They therefore submit that people with higher education perform better in all the skills in technological usage behaviour..

3.9.1.2 Rationale for Age, Class, Gender and Disposable Income Variables in the Present Study

This study's participants were university students in Nigerian society who came from different social class which can be labelled: upper/upper-middle, lower-middle, upper-lower and lower-lower (Gayler, (1980). Naturally, they are likely grown up to have different value orientation, lifestyles and measure of income accessible to them. Thus, the amount of disposable income a student has may influence their perceptions and utilization behaviour of mobile phone and internet-enabled mobile device in their personal and social environment.

Thus, the issue of disposable income was considered in order to expand on the social demographic information of respondents. The relationship between disposable income, mobile phones adoption and utilization has been described by a number of scholars (Partner et al, (2013), Kalba, (2008), Koutras, (2006:108), Tschmuck, (2013), The Qatar ICT report, (2013). Disposable income, as Kalba explain determines the financial capacity of consumers to purchase a mobile phones and associated services and accessories. Thus, the word ''consumer' in the case of mobile

phones means the owners and users of the system technology. Malasi, (2012) also notes that the growth of mobile phones use especially in developing countries is due to the increase in people's disposable income and by implication the increase in their purchasing power of mobile devices.

An available report indicates that the youth are high end customers in the mobile phones market with disposable income for mobile devices procurement and service usage (Koutras, 2006). . As Koutras, (2006:108) put it, the youth in today's society grew up in the era of computer driven technological gadgets and have more disposable income than past generations As a result, their spending power has equally overtaken that of their parents. Evidences have been detected to throw more light on how young people's disposable income has accelerated the pace of mobile phones adoption and usage. For examples, it has been reported that contemporary youth spend one in ten dollars of their disposable income on topping up their phone or have spent the last $10 on topping up their phone. Related data also revealed that youth spend 15 –25 percent of their disposable income on mobile devices and related services[20]. In Kenyan, youth, aged 16-24 years spend a significant proportion of their disposable income on mobile phones airtime, specifically 79% share of their wallet[21]. In Qatar, the disposable income of young people has been linked to their spending power on mobile phones[22]

A study in the U.K.Tschmuck, (2013) revealed that young people invested, nearly a third of their disposable monthly income in their mobile phone. In Nigeria, the youth are said to have high disposable incomes with the ability to buy up-to-date phone. This is where the researcher argued that the youth propensity for mobile technological devices may be linked to their middle class background. According to Nairaland report (2013) Nigeria's middle class has increase by 28 percent since 2009. Thus the amount of funds accessible to them appears to be increasing.

Furthermore, the relation of income and access to smartphones has been discussed by researcher. According to 2015 report on a survey of New Zealanders use of smartphones,

_____

Footnotes:
20 Youth Spend 15 – 25% of their Disposable Income on Mobile Data www.mobileyouth.org\quick-facts [Accessed 23 September 2013]
21 Kenyan Youth Spend Most of their Income on Clothes, Airtime. www.businessdailyafrica.com\...Kenyan-youth-spend-their-income\.....\..... [Accessed 23 September 2013]

22 Qatar's ICT Landscape www.ictqatar.qa/sites/deault/iles/---/Qata%20ICTLandscape-EN-pd .[Accessed 23 September 2013]
File:///1/nigeria-vs-sa-markets.htm. [Accessed 23 September 2013]

23 Nigeria's Middle-Class Increases By 28 percent, http://www.nairaland.com/1453401/nigeria-middle-class-increases-28. [Accessed 23 September

income play greater in the ownership or access to smartphones in New Zealand pointing out that the higher the income, the more likely someone is to own or have access to a smartphones[24]

The above discussion raises the question of how the students fund their use of mobile phones. The majority of the respondents expressed that they received money from their parents, with a few stating that they money from friends, siblings and other family members. In sum, the university students' source of keeping their mobile phone up-to-date can be seen from different funding practices. This suggests an expendable fund for mobile phones usage from sources open to them to exploit. Perhaps, most respondents, if not all, could be regarded as coming from middle class background with disposable income capacity.

Caruana and Magri (1996) refer to these as interaction variables (personal prestige, association and socialization) and economic variables (occupation, income and wealth). The latter are largely dependent on their family or parental background. As Pedrozo, (2013) state the way young people use technologies and the outcomes of their use depend upon their social, economic and cultural frameworks. The author cited parents' income and education as factors which are decisive in the patterns of use and the economic resources available for media related products.

This study therefore was carried out in the context of socio-economic environment of the university students with the study respondents coming from diversity of homes and parental characteristics values, and lifestyles. Besides, university students themselves constitute major segment of the youth subculture with distinct styles, behaviours and interests and shared subculture practices (See Roy, 2012).

The above discussion raises the question of how the students fund their use of mobile phone. The majority of the respondents expressed that they received money from their parents, with a few stating that they money from friends, siblings and other family members. In sum, the university students' source of keeping their mobile phone up-to-date can be seen from different funding practices. This suggests an expendable fund for mobile phones usage from sources open to them to exploit. Perhaps, most respondents, if not all, could be regarded as coming

_____

Footnotes:
24 A report on a survey of New Zealanders' use of smartphones and other mobile communication devices 2015

from middle class background with disposable income capacity. This helped shed light on the respondents' varying perceptions and value constructs regarding their of mobile device usage behaviour with respect to their socio-economic class and their upbringing.

3.10: Summary

This section presents the argument that SCOT provide useful framework to understand human perceptions regarding ownership and use of mobile phone in society. Employing this theoretical position in the study of university students ownership and use of mobile phone was to gain insight to their opinions and on which three research questions: RQ1: does the socio-economic status of university students influence their perceptions and ownership of mobile phone?, RQ2: how do the university students use mobile phone applications?, RQ3: Do the university students believe the use of mobile phone influences others perceptions of the users class and socio-economic status?, RQ4: How do university students use mobile phone in sociality?, RQ5: Do university students perceptions of mobile phone influences their personal communication and mobility? and RQ6: How do university students use mobile phone for entertainment consumption? were set up for investigation. The main advantage of the theory in this study was that the students' viewpoints on each of the research questions enable the researcher tap verbatim - interpretative process, relative to the number of students and as social groups with diverse socio-economic status and cultural orientation whose values and meanings for mobile phone could be obtained.

Furthermore, prior studies on the use of SCOT in mobile phone research earlier discussed provide useful ground to map the processes of exploring the students' engagement with their mobile device and in the context of their society. In sum therefore, the main issues arising from the review of discussion in this section are summed up as follows;

1. The use of mobile phone meets different needs and provides different benefits to each respondents.

2. The use of mobile phone is subjective in that it is an interpretative process for each Individual user with regard to the functional application he or she uses, in what situation and with what expectation.

3. Mobile phone is frequently used as a means of enhancing and easing personal communication enhancement and for fostering relationships.

4. Mobile phone is frequently used for self organization, i.e. time management and the co-ordination of personal activities.

5. The use of mobile phone for fostering social relationships and for projecting the

user's identity was described.

6. The use of mobile phone as a multimedia resource for leisure and entertainment was identified by many previous studies.

The next section of this chapter deals with the theory of the digital networked society which was expected to be one of the major themes established in the study.

3.11   Theory of Digital Networked Society

Manuel Castells digital networked society has become a new platform of virtual communities through which people embraced the internet and the new connected technologies to advance and sustain their social life in everyday affairs. The theory of digital networked society therefore helps explain the interaction between smartphone, denoted smart media in the thesis and online social networking sites in the advancement of social connections and social relationships in virtual sphere. The term smart media therefore represent smartphone technologies which are more advance with diverse applications than feature phones.

Castells emphasise on the importance of digital and mobile connectivity in driving the virtual communities for individual users of the new media technological environment to forge and maintain a new paradigm of sociality was a major influence to pinpoint. The emergence of networked individualism has become a new way of understanding the influence of smart and social media sites in modern day social lives of users. . Furthermore, Castells emphasize that the digital networked society is one in which time and distance are meaningless and that the space of flows is what makes the digital networked society dynamic. 'Space of flow' is defined as the 'material organisation of simultaneous social interaction at a distance by networking communication" (Castells, 2005; Kollanyi, Molnar and Szekely, 2007, Charusmita, 2012; Ganguin and Hoblitz, 2012; Wei, 2013).

More critical to the digital networked society is the notion of social capital which has become a building block of individuals' social connections and the advancement of structural social relationships online environment.. The influence of smart media in the instigation of social capital of users is worthy to emphasise in this regard (see Tran 2012). Thus, what is social capital means in this thesis is the next discussion in order to forestall its importance in digital networked society.

3.12   Social Capital and the Digital Networked Society

Academic interest in social capital as a conceptual framework to understand the nature of

today's digital networked society and social relationships came from three main scholars. Bourdieu, (1986:248), Bourdieu and Wacquant, 1992:118-119) defined social capital as the sum of the resources , actual or virtual that accrue to an individual by virtue of possessing a durable network of more or less institutionalised relationships of mutual acquaintance and recognition. For Coleman, (1988:118) social capital is an important resource for individuals, and may greatly affect their ability to act and their perceived quality of life. To Putnam, (2000) social capital consists of aspects of social life (networks, norms, and trust) that allow individuals to work together more collectively to achieve a shared-goal. Moreover, Lin, (1999) point to social capital as investment in social relations with expected returns via social capital resources or social tie resources.

These scholars' positions on social capital influenced subsequent researchers to adopt similar operational frameworks and research postures. For examples, Lawson-Borders, (2011) argued that the development of social capital provides opportunities for those with certain connections to achieve or accomplish their goals based on relationships, and gives them the ability to reach a large network of individuals. Siisiniainen, (2000) n o t e s that there are two sides of social capital and are; First, it is a resource that is connected with group membership and social networks in relations to the size of the networks that can be effectively mobilized. Second, social capital must be based on mutual cognition and recognition in order to become effective in social networks. Third, social capital has two dimensional levels on which smart media users can be positioned in digital network society: the individual and collective levels (see Bourdieu, 1986; Coleman, 1988; Lin, 1999; Brandtzæg, 2012; Xie, 2014). The individual level of social capital is the main focus of the research. Erickson, (1996 as cited in Xie, 2014) sees individual or network capital as how individuals capture and use resources embedded in social networks to achieve personal goals

All of these discourses are insightful in understanding the linkage between social capital and digital networked society. Further understanding of how individuals co-exist in digital networked society was drawn from the work of Fiske's (1992; 2001) paradigms of sociality as discussed next.

3.13   Fiske's Conceptual Framework of Sociality

Fiske's (1992; 2001) four paradigm of sociality was explore to add more understanding and connotation to the process of social life and social relationships, with smart and social media sites playing influential path. These paradigms are therefore examined in relations to digital

networked society. First, the Communal Sharing (CS) indicate that individuals or set of individuals have something in common and that such commonality must be define by the group they belong and share common interest and possible derivation of resources. Thus, in digital networked society, individuals have different aspirations of social life and values which they share in the process of relating with others in the social network and on social media sites which serve as convergence arena in sociality or virtual communities where individuals with common interest or similar identity converge to forge relationships of social capital; bonding and bridging social relationships. The motivation that underlines individuals' social relations in social media sites could be to show others who they are or other individuals in the network to know them. Second, the Authority Ranking (AR) reflects the notion that individuals in digital networked society are of different social categorisation. This bears resemblance to seniority by age, education, cultural orientation, and in relations to this research, university students are individuals with different socio-economic background (age, education, and family income status) and of cultural disposition. These characteristics are likely to influence to influence their social values and social behaviour. Third, Equality Matching (EM) relate to the notion that individuals' relationships in digital networked society are driven by similarity of affection, emotions and communication frequency. Thus, the social media sites are open communities where individuals share emotion with network of friends via comment on their network sites. Fourth, Market Pricing (MP) drive individuals social action in digital networked society on the basis of value-relevant or cost-benefits principle implying that individuals relationships with network friends could be influence by expectation of benefits or resources that come in different forms either in the form of monetary value, moral support and others. The principles of MP as applies to university students translate to derivable benefit or resources they can get through mobile media, and friendship network on social media sites in terms of size of network friends. The four discursive paradigms of sociality serve as a framework to understand how people construct their social life; generate sequence of action and co-ordinate with others (Fiske, 1992).

Fundamental to digital networked society, social capital and Fiske's paradigms of sociality lies the role of gender, referred to as the individual men and women interacting and using the mobile media for self needs and benefits. Here lies the relationship of gender and technology as a major thrust in digital networked society and again examine in order this relations.

3.14   Gender and Technology

The relation of gender and technology has become a major concern to scholars and researchers (Bray, 2007; Yates, and Lockley, 2008). As Bray explain one of the fundamental way in which gender is expressed in any society is through technology and that technical skills and domains of expertise are divided between and within the sexes, shaping masculinities and femininities. This assertion is thought provoking to suggest that there is gender connective relation with mobile media in digital networked society implying that gender is becoming a major determinant in mobiles and social media use, as evidenced by researchers who have examined this connection. For examples, Park and Lee, (2014) reported that men are more likely than women to make calls on their mobile media application whereas women tends to use camera on their mobile media more frequently than men do. Furthermore, Goudreau, (2010) reported that men and women use social media differently. In her words, women are more inclined to share things about their personal lives and are more likely to make connections through social networking, whereas men use online social networking sites to gather information and increase their status. Christina, (2013) made a similar observation that men and women use social media differently and that generally women use SNSs more with 71%, compared to 62% of men. In addition, Maikaslivilli, Ujmajuridze et al, (2013) noted that in using facebook, women gives preference to meeting existing friends and sharing pictures while men prefer making new relationships and passing time. A study by Shen and Khalifa, (2010) on usage behaviour of facebook among Arabic college students also indicated the importance of gender differences with women more likely than men to use facebook to use for sociality and self-perception. Even, PerlRoth and Miller, (2012) reported that the majority of Facebook's 845 million users are women and that women are responsible for 62% of activity on the site in terms of status updates, message and writing comments. The authors also said that women have 8% more Facebook friends than men, on average, and spend more time on the site.

Even, Boyd, (2007) noted the influence of gender on participation in social network sites and illustrated the usage differences between young boys and young girls. According to him, young boys are more likely to participate than young girls (46% vs 44%). Conversely, older girls are far more likely to participate than older boys (70% vs 57%) Body (ibid) therefore remarked that gender differences do exist in the use of social network sites and these therefore which should be ignored. All of these studies provide clear a picture of the influence of gender on new media usage patterns. As Palmer (2012) explain gender roles mirror the expectations of the societies the new media users represent emphasising that men

and women are different people in networked society driven by individuals' usage interest, sociability and benefit.

In sum therefore, the conclusion arising from the three discourses are; First, the technological environment under which the digital networked society drives and mobile media has become a major platform. Second, online social capital in the digital networked society and networked individualism has given rise to freedom of sociality and social relationships. Third, class differences in which individual are known in networked society. Fourth, gender as expressive users of smart and social media sites mirror the perceptions and cost-benefit of both platforms. All of which point to the key variables that have been identified from the three discourses. The next discussion examines emerging significance of mobile media in the advancement of sociality and online social media sites in building social connections and social capital within the context of existing studies in the field. The discussion therefore begins with smart media and society. Fig. 1.11 depict smart media technological devices that has shape today's digital networked society (see also Ganguin and Hoblitz, (2012). The use of smart media technology in this thesis has been substituted for smartphones technology.

Fig. 1.8 **depict smart media technological devices that has shape today's digital networked society**

 Source: Spence, Ewan, (2014)

3.15   Smart Media and Society

The emergence of smart media in the form of smartphones has drew the attention of researchers and commentators alike, who have been looking at what the system technology means for the global society and in the affairs of individuals who are the ultimate users (Dissinger, 2014; Hyun-Chae, 2014, Housley, 2015). Aguado and Feljoo, (2012) notes that the

development path of smart media began from cell phones to multimedia device, and from voice to broadband multimedia contents of many usable applications. They also emphasise that smart media is of media convergence and digitalization. As Burrus, (2014) and Inam, (2014) observes that today's s m a r t   m e d i a are much more than simply phone in that they are powerful networked multimedia computers and their mobility and wearability are transforming many day-to-day processes including communication and sharing media forms, as an integral part of recent media ecologies (Lee, 2013). Moreover, Ganguin and Hoblitz, (2012) comments on smart media have turned into multi-purpose device and therefore smart media convergence, and on which communication and internet have become active and participatory.

Chen (2015) provided insightful comments on the importance of smart media in society. According to him, smart media is uniquely utilized for communicating, connecting, and engaging social networks, building self-identities as well as for entertainment. Furthermore, Rich Ling (cited in Chen, 2015) argues that many smart media users took their device for granted and therefore emphasise that smart media users could always be connected with their family members and friends on the move, providing security and safety to their users, family and friends always to be available to their calls, texts, and updates, no matter where they were.

Nelson's 2013 Consumer Report; Afalig, (2013); Arthur, 2014 notes smart media are currently playing a very important role in many people's lives around the world. The technology is continuously developing everyday to make the life easier. On the other hand, Arandilla, (2007) further comments that smart media devices have become something of an extension of the individual, like an important limb of the body. They have made owners more sociable and allow them to stay connected to the internet, through that to social networking sites and blogs at every time and in every place. Furthermore, the UK Ofcom report, (2015) on smart media in the UK indicates that these devices have become the hub of people's daily lives in British society and that the vast majority (90%) of young people between the ages of 16 and 24 now own one. The report also mentioned accessibility to the internet and social media as the most important features driving the adoption of smart media.

Moreover, the UK Mobile Insight Report, (2013) highlighted the influence of gender in the adoption of smart media. According to the report, 58% of the women owned smart media device compared to 42% men. Similarly, the Pew Internet and American Life Report (2013; 2015) describe the popularity of smart media among every segment of the US population, the younger generation known as the millennial meaning those between the ages of 18 and 29

constitute the majority of the users. Bailey, Link and Bensky, (2011) also notes that smart media provide portable access thereby facilitating on-the-go behaviour and that more and more people are using the technological devices as a replacement for their laptop computers This study added that smart media are trendy with young people between the ages of 18 and 24 years, who are the most frequent adopters and fashionable users. The researchers isolated three critical characteristics of smart media use: First, people use smart media device all day with most frequent adopters and fashionable users. The researchers isolated three critical characteristics of smart media use: First, people use smart media device all day with most frequent adopters and fashionable users. The researchers isolated three critical characteristics of smart media use: First, people use smart media device all day with unrestricted connections. Second, mobile media are 'time-fillers' in that they enable users to engage in meaningful activities of interest and offer useful functions Third, smart media device are trendy with young generation people. Badger, (2012) noted that smart media have created potable private personal territories for users who are constantly engaged in system usage, both public and private spaces Ali and Rapp's comment (2013) summed up the value of mobile media. According to them:

> Smart media are one of the many devices used to connect to others. They have become popular since its inception in the early 21st century. The handheld device has become integrated in our lives; we use them every functionality. The connectivity that smart media provide helps young people including day to keep ourselves organized, in touch, and entertained. Smart media devices can be found in different countries from the United States, to Turkey to Kenya

Smart media as emergent technology are driving today's digital network society and young people's social behaviour and sociality now by and large revolve around the system applications and students to overcome geographical limitations in terms of distance in their relationships and interaction (Wellman, 2001; Chan, 2013; Yartey and Ha, 2013).

In addition, Gill, (2009) posits that the new technological paradigm is becoming part of everyday life, domesticated by users in their homes and beyond. In his words:

> To this day, the surge in the new technological environment persists with Individuals, in particular, students' possession of various smart media devices, such as iPod and cell phones that allow them to connect instantaneously to the internet to search for information and to access knowledge [p.2}

It is argued here that Gill's reference to students highlight the value of smart media to

the student's life (See Eyeregba, 2014; Jena, 2014; Morphitou and Morphiries, 2014). Further evidence of students' uptake of mobile technologies was provided by Tethered World. According to the research team, 800 students were surveyed in eight universities on three continents and their responses indicated that Facebook and Twitter as well as social networks comprised the most homogenizing presence on the students' smart usage behaviour.

Yartey and Ha, (2013) conducted a survey of college students at a public university in the Midwest United States to find out why they owned and use smart media device. The researchers found as follows; First, the students who owned smart media device used it as medium of self broadcasting on social media sites, enabling them to update their social network page. The concept of self-broadcasting or self-presenting allows the users to present an identity that is appealing to friends on facebook.. Second, the students' network size can influence the engagement of self-broadcasting and the resources open for connection from their network. Third, most of the college students with smart media device used the system technology to update their status and that young people of 18 to 25 years are more into frequent self-broadcast. Their findings also the importance of income as a factor of students' ability to own smart media device as well as gender differences in the usage of smart media. According to the authors, the male smart media users are more likely to have a higher network size than females' smart media users.

Furthermore in Castell's idea of networked individualism the usage of smart media devices can be differentiated along gender lines. The difference between genders in smart media utilization is also evidence in the work of scholar such as Park and Lee (2014) who found in their study of Korean college students' smart media use that the female students tended to use the camera on their smart media more frequently than the males while the males were more likely to make phone calls and use smart media applications. In addition, Evan, Mark et al, (2013) view gender as predictive factor in assessing the usage of smart media among college students. They found that female respondents used their smart media more frequently than the males to facilitate social relationships and to share videos and pictures.

3.16   Reasons for Owning Smart Media Technology

The reasons for young people's interest in mobile device have been demonstrated by a number of researchers. For examples, Korst and Sleijpen, (2014) notes that smart media are by far the most popular device for young people from 18 to 24 years old and that the most important reasons they own smart media device are to access the internet, play video games, watch

videos and access social networks. However, Helena, (2012) explains that the reasons young people own smart media device may vary according to the country of the users, and that device internet access may be a means of attaining relevant information which is less expensive and more accessible than desktop computers. There are, however other reasons for young peoples' interest in owning smart media device as well. For instance, Williams, (2014) cited friendships as a reason as smart media device offer the way to communicate via text messages and telephone in addition to offering entertainment and everything- play games and read blog, and listen to podcasts among others. Moreover, Ladge, (2013) and Kashyap, (2014) also indicated the following as reasons for smart media device ownership: display (of one's identity or personality) and trendiness, connectivity to social media sites, entertainment, taking pictures and videos, and browsing the internet. In addition, a study carried out at Zurich University found that young people are influenced to own smart media device by the multimedia nature of the system technology that offer wider opportunities for usable applications and functions (Benl, 2014). Furthermore, Mothar, Hassan et al, (2013) reported that undergraduate students between the ages of 18 and 27 years in public and private universities in Malaysian send and receive text messages on their smart media device and use them as a platform for interaction, reveal their personal identity and serves as a reflection of social status. Furthermore, the Pew Internet and American Life Project, (2015) reported that smart media play an important role in helping their owners navigate their environment and get where they want to go. The report cited respondents that the devices are helpful in connecting, offer freedom and are generally worth the cost of ownership. Furthermore, Madden, (2010) found in his study that a substantial number of students are involved in entertainment activities on their smart media which provide them with the opportunities to watch videos, listen to music, listen to podcasts and browse the internet for general entertainment.

In Nigeria, researchers including Ibrahim, Salisu and Popoola, (2014) found in a study of smartphone usage by fourth year medical students that making and receiving calls was the greatest benefit to them. Mobility, ease of use and quick access to the internet were cited as other benefits of possessing the system gadget. Furthermore, Tunmibi, Aregbesola and Asani, (2015) sampled university students (at the university of Ilorin and Landmark university) in Nigeria and Houdeghe North American university in the Republic of Benin to glean the factors that influence the adoption of smart media. The researchers found that ease of use, internet browsing and interaction with family members influenced their participants' adoption of smartphones in both societies. Similarly, Nnadozie, Ossai-Onah and Udo-Anyanwu, (2015) surveyed of 200 final year students at the Federal Polytechnic, Imo State, Nigeria on the use of

smartphones. They found access to online information resources as a major reason for using smartphones and the usage frequency of smartphones was on daily basis.

The foregoing discourse provides the basis upon which this study explored why university students in Nigerian society own smart media device in relations to their usage experience of the system gadget. The university students constitute major of segment of the youth population as well as represent the majority of smart media subscribers to mobile network providers (Jidenma, 2014).

3.17   Relationships between Smart Media and Social Networking Sites

Researchers have discussed the importance of smart media in today's society and as a device that has ease access to the social networking sites (Hackbert, 2012, Niedermann, 2012, Hwang, 2013, Nam, 2013, Lundquist, Lefebvre and Garramone, 2014; Yu, 2014).

As Hingorani, Kamal et al, (2012) and Stollak, Mathew et al, (2011) explained smart media have created opportunities for users to access social networking sites such as Facebook, Twitter, Myspace, or Linkedin as well as blog and other features in the system configuration. Srivastava, (2012) and Dube, (2012) commented that social networking has become the most popular activity on mobile media and today the phrase smart social media management has become expression used to refer to this activity. According to Peter, (2012) smart media allow users to get things done efficiently and conveniently while staying connected.

3.18   What are Social Media Sites?

The term social media sites refer to online communities of different usage platforms. Such sites provided diverse opportunities for human affairs and activities to expand beyond the traditional actions and behaviour in society. Boyd and Ellison, (2008) made a useful documentation of different social media sites in relations to their periodic emergence, which provides greater understanding of the functionalities of each sites for users. Similarly some researchers have made reference to the evolution of social media sites (Dewing, 2010, Chan- Olmsted, Cho and Lee, 2013 Chaffey, 2015, Ezumah, 2013). Of particular interest to this study is Kaplan and Haenlein's, (2010) classification of social media sites into six categories:
  i.   collaborative projects (e.g.Wikipedia)
  ii.   blog and micro blogs (e.g.Twitter)
  iii.   content communities (e.g. Flickers for photos; Youtube for videos)
  iv.   social networking sites (e.g. Facebook, Myspace)

v. virtual game worlds (e.g. world of war craft), and

vi. virtual social worlds (e.g. where the user has a virtual life similar to a real life).

Kaplan and Haenlein concluded that social media sites social instruments contemporary life all over the world. Scholars like Chan-Olmsted, Cho and Lee, (2013) use social media sites as a collective term that describes great number applications which enables users to connect, interact and share contents. To them, social networking sites have taken the centre-stage of all the social media sites as they are most widely used in society (see Ezeah, Asogwa, Obiorah, (2013). More specifically, Ellison, Gray, Vitak, Lampe and Fiora, (2013a: 2013b) and Ellison, (2013:3) explained social networking sites are networked communication platform in which users or members:

1. have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-level data,

2. can publicly articulate connections that can be viewed and traversed by others, and

3. can consume, produce, and/ or interact with streams of user-generated content provided by their connections on the site (see Boyd, 2007).

Furthermore, Richter and Koch, (2012) refer to social networking services (SNS) as application systems that offer users functionalities for identity management (i.e. through the representation of the user's self in the form of a profile) in addition to enabling users to keep in touch with their contacts provided they also use the site) and giving users the administration of their own contacts. Thus, the authors emphasize contact and identity management as the two main characteristics of SNS on which users' behaviour becomes visible publicly on the internet platform.

A 2008 Ofcom report refers to social networking sites as a medium through which people interact in different ways to communicate through the internet, either on their PC or mobile phone. They allow people to easily create their own online page or profile and to construct and display an online network of contacts, often called friends. Users of these sites can communicate via profile with both friends and people outside their lists of contacts. The definition extends to include the notion of social networking sites as the mainstream communication technology for many people. A 2006 Ofcom report described users of SNSs as a 'networked generation with internet or mobile phones engineering the pace of connectivity'.

The foregoing discussion notwithstanding, this study uses the term "social media sites" as an expressive umbrella for all of the aforementioned types and is used interchangeably with the term social networking sites. Earlier researches appear to focus more on the usage of concept of social networking sites. Discussing the current trend of social media research, Kushin and Yamamoto, (2010) argue that:

> Scholarship investigating social media has tended to focus predominantly on social network sites, community sites such as Facebook and MySpace that allow users to create profiles and establish connections with friends and acquaintances on the internet. The authors emphasise the social networking sites are popular form of social media sites

Given the above submission, this researcher asserts that the functionalities of social media sites/social networking sites serve to make visible an individual's social connections to other users of the site. As Kasteler, (2010) notes the sense of freedom afforded by their utilization is what social media sites are all about. They give users the feeling of being part of something big and that everyone in the world is connecting or connected world.

3.18.1 Why People Use Social Media Sites for Sociality

Williams, (2013) as well as other researchers such as Ahlquist, (2013) and Conner, (2013; Leiter, 2014) have argued that people use social networking sites to advance, maintain and foster social interaction, to keep up with friends and socialise, to express opinions, share information about themselves and to learn about others. In addition, he found that users appreciate the convenience of access through mobile devices usage.

Further, Ellison, Lampe and Steinfield, (2007) stated that the social network sites (SNSs) could potentially fundamentally change the character of our social lives, both on the interpersonal and community level emphasizing that changes in interaction patterns and social connections are already evident among young people who are heaviest users of these sites. To Sciandra, Andrea (2011) social networking sites constitute a different medium in which to create or strengthen social relationships. Furthermore, Alassiri, Muda and colleagues, (2014) note that social networking sites as technology-mediated confined to the internet and therefore represents an alternative platforms for communication, interaction and formation of social ties. Other scholars such as Collins, Rahilly et al, (2013) explains that the crucial benefits of SNSs are individual identity and self-expression, a sense of belonging and collective and collective identity as well as the formation and development of interpersonal relationships.

Caliser, Atahan and Saracoglu, (2013) identified the potentialities of social networking sites.

According to the researchers, the nature of social connections and their context in social networking sites vary from site to site, as each site has different usage purposes and benefit users in different ways. These varied social networking sites constitute the visible thrust of network society visibly in online usage behaviour. New media technologies of smartphones provide the means through which different network sites are accessible to users, in the advancement of new forms of communication, sociability and creation of identity (Bratland, 2009; Cheung, 2012). Ditchfield, (2015) viewed social media as a platform for self-presentation and impression management, According to her, identity construction on social media is becoming one of textual presence and that the usage of visual cues such as pictures and videos are affordable means through which users construct themselves and share for other users to know them. She found Facebook to be most usable site for identity construction and projection. Further, Zhao et al, (2008) described Facebook as a multi-audience identity production site, an online environment which allow user to construct their themselves in a number of ways: self description and interests (telling others who they are), displaying photos (making known their virtual selves or true identity) and social connections (network of friends for which they noted people with more than 150)

Papacharissi, (2012) made a similar observation. In his words online social networks like facebook, MySpace, blogging and Bebo are sites for self presentation and identity negotiation. He also points out that social networking sites such as Facebook and Twitter are prime examples of the network society that allows people all over the world to communicate without face-to-face contact.

Das and Jyoti, (2011) argued that people join social networking sites in order to express their views, feel of independency and raise their self-esteem, and to stay connected with old friend and family members. Furthermore, Boyd and Ellison, (2015) summed up why people use social networking sites. According to them, social network sites allow individuals to meet strangers, foster friendships connections, and most importantly communicate with people who are already part of their social network.

Further studies' findings support the ongoing discussion about the use of social networking sites in people's social lives and sociality, and most of these are based on students' usage behaviour. For examples, Ezumah, (2013) found from a study of university students in USA that keeping in touch with friend and reconnect with old friends were the main reason for social networking sites. Sponcil and Gitimu, (2014) similarly reported from a study of undergraduates in Midwestern University in U.S.A that communication with family and

friends was the most popular reason respondents gave for using use social media.

The UK Ofcom (2008) reported that young adults between the ages of 16 and24 years use social networking sites to manage their existing relationships, revive contact with old friends and build up new friendships relations. Bicen and Cavus, (2011) reported that social networking sites such as Facebook enhance the capacity of University students in Cyprus to maintain and straighten social ties. In addition, studies in India offered useful insight into the perceptions and use of social networking sites. According to Haneela and Sumitha, (2011) the students they surveyed at Calicut University were not only aware of social networking sites but also used them especially- Orkut and Facebook as sources of information. They also reported that family communication was identified as the main purpose for using the sites, along with connecting and reconnecting with friends and relatives. Similarly, Manjunatha, (2013) noted from a study of selected students in various colleges and Universities, that they had two main reasons for using these sites. First, they applied social networking sites to the task of sustaining existing friends/contacts and messaging. Personal likeness was also reported as main criteria for making friends in SNS. He therefore submitted that Indian students are techno-savvy and socially active on social networking sites.

Furthermore, study conducted in Mauritius by Chan-Meetoo and Rathacharen, (2013) found that the usage activities on social networking sites centre on keeping in touch with friends and families, making new friends, and sharing interests with circles of social relationships. They also described identity formation and construction on SNSs through creating profiles that reflect who the user is and their identity. Facebook was identified as the most preferred site used for forming and maintaining relationship.

A study by Jensen and Sorensen, (2013) revealed that 90% young Danish participants, aged 18-24 years were active on social networking sites, 77% of them specifically being facebook users. They further found that the usage brings the participants closer to friends, family and relatives thereby strengthening existing offline relationships. The authors also learned that facebook users in particular reported developing friendship that could be described in one of three ways: strong, weak or latent ties. The younger generation reported weak-tie relationships. Jensen and Sorensen (ibid) also find that this young generation were more interested in sweet talk (in the form of chatting) with their friends on facebook.

Furthermore, Ellison, Khan et al, (2013) remarked that social media sites enables students to connect with anyone, anywhere, such that one's network can include people that may be able

to provide resources that immediate family members cannot. The authors then added that social media usage is associated with social capital. The question of social capital is critical to here because the students activities on social media sites involves the development of online social relationships through accumulated network connections with the aimed of self-goal or self-promotion and identity projection.

Elsewhere, students have been shown strong connection to social media usage (Bridgestock, 2013; Ellison, Wohn and Brown, 2014; Hall and Sivakumaran, 2014; CampusSquand, 2014). These studies point to the common convergence of findings on the potentials of social media sites for students. According to the findings, students use social media sites to stay in touch with friends and keep up to date, and for international students in the U.S.A, social media engagement is a means of staying in touch with family and friends back home. All of these studies note that facebook is the most used site (Hall and Sivakumaran, 2014). A study by student POLL, (2014) revealed that students use social media for socializing and staying in touch with friends they rarely see in person. Moreover, in the U.K. 87% of the University students have been found to use social media applications (Bennet, 2014). Furthermore, the OpinionpanelResearch, (2007) reported that 83% of the students in the U.K. have facebook accounts which they use to keep in contact with old and current friends. The researcher attributes the reasons for students' use of facebook to the fact that it is: (i.) easy to use, (ii) the layout is clear, (iii) the interface is intuitive, and (iv) identifying contacts is simple. Moreover, Hew and Cheung, (2012) found from a survey of 83 students in Singapore, aged 15-23 years that facebook provides a platform for keeping in touch with friends, broadening one's social networks and entertainment. More specifically, the students' network size between 251 and 300 with 17.72% determinant and that Facebook serves as a supplementary channel of communication relations. A study by Rahman, (2014) on the usage and behavioural patterns of social networking sites by international students in New Zealand found that the majority (82%) of the students preferred facebook over other social networks. The reason for using the sites was to connect friends (94%) and with family (92%). Similarly, Viner, (2014) found from a survey on how college students use social media that 95% of the respondents had facebook accounts and 40% of the respondents check their facebook account six times a day while 75% of the students are most likely to use their smartphone access social media. Equally, Park and Lee, 2009:877 and Tham and Ahmed, 2011) notes that SNSs provide platforms for university students to construct their identities and maintain social relationships.

Furthermore, Foster, (2010) maintained that social networking sites provide positives benefits for users by making them part of virtual world of friendships. Ellison and Boyd, (2013 pointed out that friending practices constitute the core activity of social networking sites and that different kinds of relationships evolved from this practice, from strong to weak ties. They stated that the size of a user's friends' network becomes the determinant factor in the strength of friendships ties.

The Pew researchers and Chang, (2010) indicated that the size of a user's friends network is significant. The friends' network size is the number of people with whom an individual has specified social relationships and this has been the focus of some studies. For examples, Sponcil and Gitimu, (2014) investigated the use of social media by undergraduates at Midwestern University in the U.S.A and found that the average size of the students network was between 301- 600 with facebook, as preferable friendships connection. Similarly, Ellison, Steinfield and Lampe, (2007) carried out a survey of 800 Michigan State University undergraduate students to gain insight into the connection between usage behaviour of SNSs especially facebook and social capital, and their participants reported having between 150 and 200 on Facebook. In addition, Akyildiz and Argan, (2015) found in a study of the purposes of facebook usage among students at the University of Turkey, that just over 50% their participants had a network of 101-300 and that the students used Facebook for social purposes especially to have fun, contact friends and to follow photos, videos and events.

Studies have found in Africa on students use of social media. For examples, Wild, Cant, and Neil, (2014) found from the study of South African students perceptions and use of social media that facebook was the most usage site and helps the students to communicate, schedule events, post notes and remind other students important dates as well as update their status. The researchers also found that majority of the students were between the ages of 18-24

In Nigeria, scholars have looked at the importance of social networking sites with university students being the focus of investigation. For examples, Adaja and Ayodele, (2013) found from the study of social media use by undergraduate students at Olabisi Onabajo University that students are on facebook, and that sending and receiving information were the major activities on the site. Ezah, Asogwa and Obiorah, (2013) investigated the social media use of undergraduate students from different Universities in the South East of Nigeria that entertainment (watching movies and chatting in class) and finding information were the main usage activities of the students. Also, Folorunso, Vincent, Adekoya and Ogunde, (2013)

carried out a survey of students at the University of Agriculture, finding that students had been using social networking sites between 1-2 years and has more than 100 people on their friends' lists. Onyeka and Dalhatu, (2013) conducted a study of students at the Federal Polytechnic and the Adamawa State University and found that the students were members of facebook and spend an average of 2-4 hours on the sites on the daily basis. In addition, they identified maintaining ties with friends and family members as the main reason for their use of social networking sites. Furthermore, Eke, Omekwu and Odoh, (2014) studied the use of social networking sites among undergraduate students at the university of Nigeria, Nsukka and found that majority of the students used facebook for communicating and interacting with friends and for strengthening interpersonal relationships, saying these were the main benefits of the site to them.

These studies provided a useful indication of the benefit of social networking sites to students in Nigerian society. The current study advanced the knowledge in this area further by looking at the role of smartphones in students' usage of such sites. This was examined in the context of the existing studies reviewed above.

3.19   Building Social Capital through Social Media Sites

Social media sites are becoming unique online environment for the cultivation and maintenance of social capital for constructive relational ties of people who are users of the sites and of sizeable dimensions in terms of the number of friends individual users make on social media sites. The term *'social capital'* requires explanation in order to understand the views of scholars about it and its connecting root to the use of social media sites in today's society.

3.19.1 The Importance of Social Capital on Social Media Sites and Social Relationships

One of the defining characteristics of social capital is its role in the development of social networks of individuals, and its effect on the forms of interactions between individuals in such networks. As Azza, (2015) explains social media sites provide an important source of community which represent a key source of social capital in the digital age and on which opportunities for the development of new relationships and the maintenance of existing relationships online are open to SMSs users to explore for personal advancement and social connections.

Scholars have emphasized the importance of social capital in building social networks and social relationships. Steinfield, DiMicco, Ellison and Lampe, (2009) examined the connection

between social capital and social media sites. According to them, social media sites constitute the platform on which individuals or group of individuals converge to create and maintain social capital, either in the form of bonding social capital, i.e. close-knit relationships

with intimate friends, and family or bridging social capital such as acquaintances and friends of friends.

Furthermore, Fox, (2013) explains that social capital is critical to the success of online communities in which site-specific behaviour of two-way interaction was obvious. The author identifies social networking sites as building blocks of social capital. Facebook and to some extent twitter were the usable social networking sites being mentioned and students' use of mobile device in assessing social networking sites was also one of emphasis.

Berends, Mokhar and Zottola, (2008) refers to social capital as those social relationships between persons that provide resources for achieving certain goals and they emphasized the importance of social networks, obligations and trust, information flows and social norms in individual social connections. Besides, Ellison, Wohn, Khan and Fewins-Bliss, (2012) referred to social capital as the potential resources that reside in social relationships and can be assessed by the individual.

Furthermore, Lin, (1999) argued that individuals are the centre piece of social capital for which the nature of social networks and social ties becomes crucial. He examined the nature of social ties, stating that bonding social capital depend on pre-existing offline relationships that involves close friends (peer bonding) or family members (family bonding) and that such relationships are often associated with an internal sense of belonging. This is related to Granovetter's strong ties. As Williams (2006) puts it, bonding occurs when strongly tied individuals, such as family and close friends, provide emotional or substantive support for one another. The individuals with bonding social capital between them have little diversity in their backgrounds but have stronger personal connections. On the other hand, bridging social capital involves relationships with a wide variety of individuals who could be seen as acquaintances, course mates and possibly distant friends who all potentially have a role in one's network entity. This is similar to Granovetter's weak ties. As Williams explains bridging social capital occurs when individuals from different backgrounds make connections between social networks with opportunities to access information or new resources. Such relationships offer only minimal emotional support.

Phulari, Khamitkar et al, (2010) and Taradyan, (2013) clarified the relationships between social capital and Granovetter's social ties, explaining that bonding social capital to strong ties in an individual's networks including family or close friends. As Putnam, (2000) puts it, bonding social capital forges strong personal relationships that provide emotional, and substantive support. Second, Phulari et al stated that bridging social capital refer to weak ties in the networks and involves the linkage of individuals to external assets and for useful information or new perspectives. Putnam (2000) explained that bridging social capital is found in quantity driven relationships and means to exploit opportunities. Third, maintained social capital refers to weak tie to individuals in one's network (Ellison et al, 2007).

According to the authors, maintained social capital depends on the maintenance of valuable connections with people after being physically disconnected from them, as occasioned by movement to different locations. The focus is on previous contacts and on providing individuals with assistance (see also Hofer and Aubert, 2013; Vitak, Jessica et al, 2010; Ellison, Steinfield and Lampe, 2007, Safiollah, Ali, Mohammad and Javadi, 2009; Steinfield, DiMicco, Ellison and Lampe, 2009).

Further explanation of bonding and bridging social capital was gleaned from a study on social capital and stronger communities in Leicestershire. As the authors explained, bonding social capital resides in family and friendship relationships and peer groups that provide a sense of belonging in the here and now, while bridging social capital stems from creating links with people outside our immediate circles who can enhance our network formation and broaden our opportunities and horizons. In an apparent distinction between bonding and bridging social capital, the author remarked the latter is good for 'getting by' and the former 'getting ahead' and that the diversity of groups, individuals and communities that underlines respective social capital are what influences social capital formation and the circle of networks[12].

Footnote:

[12]The report on social capital and stronger communities in Leicestershire was published by the Stronger Communities Board of Leicestershire Together, January, 2010.

Overall, Dominguez and Watkins, (2003) summed up the perspectives of social capital. According to them, social capital is based on the strength of relationships that assist individuals through the provision of resources and meeting different needs. On the other hand, Pernard and Poussing (2013) point out that social capital is an individual attribute that enable people to draw on the resources of other members of the networks, to which they belong and to obtain greater monetary and non-monetary benefits from social interaction with others. Researchers have found evidences for the connection between social capital and the usage of social networking sites. Most of these studies were carried out by Western scholars in different regional blocs as subsequently indicated. Sgambato, Erika, (2011) surveyed 106 University students about the use of Facebook in terms of intensity and how they used the site to sustain their social network in campus life which consequently contributed to building both bridging and bonding social relationships.

Ellison, Steinfield and Lampe, (2007) conducted a survey of 800 Michigan State University undergraduate students seeking to glean the usage behaviour of SNSs relative to Facebook with a focus on Facebook and social capital that. They found that:

i.   The majority of the students enjoyed using Facebook
ii.   Facebook has affected students' ability to develop and maintain bridging social capital at college, based on the intensity of Facebook use
iii.   The students spend between 10 and 30 minutes a day on average using on facebook, most often for fun and killing time, and
iv   The size of their network friends was between 150 and 200. The researcher applied Williams (2006) measures of bridging and bonding social capital scales to access the students' usage potentialities of facebook and social capital as resources yielding capacities.

Steinfield, Ellison and Lampe (2008) carried out a follow up longitudinal survey of 800 undergraduate students and quantitative-based survey of 286 students in a large Midwestern university regarding the relationships between the intensity of the students' facebook use, self-esteem and bridging social capital. The authors reported that students with lower self-esteem gained bridging social capital by using facebook frequently. Also, Lin and Tsai's, (2012) investigated 259 college students in China to determine the SNSs usage behaviour and found that frequent use of social networking sites contributed to social capital and social inclusion of the students in relations to self-esteem. The authors referred to social inclusion as

access to competition, opportunities and resources. They cited facebook as a resource offering opportunities for peer group interaction and social integration.

3.19.2 Why Studying Students Social Capital on Social Media Sites and Social Relationships

University students are social group in digital networked society, an upcoming generation who have took to social media sites to forge and sustain their own social capital, using smartphones or smart media as devices for assessing social media sites and constructive relational ties of social network. As Steinfield, Ellison, Lampe and Vitak, (2012) argues social media sites help users to accumulate social capital and resources from the relationships with people within a specific social context or network.

Ellison, Khan et al, (2013) argues that social media sites enable students to connect with anyone, anywhere, such that one's network can include people that may be able to provide resources that immediate family members cannot. The authors then added that social media usage is associated with social capital. The question of social capital is critical to signpost here because the students activities on social media sites involves the development of online social relationships through accumulated social connections with the aimed of self-goal or self-promotion and identity projection.

Furthermore, Ellison, Wohn and Brown, (2014) examined college students' social relationships and argued that bonding social capital provides a platform for tapping resources related to emotional support or financial favours and bridging social capital provide opportunities for accessibility to new information, social connections and worldviews. The issue of worldview requires explanation for a better understanding of the term. According to the Worldview Project, (2015) a worldview is the collection of values and beliefs about life and the universe that is common to a group. Additionally, the worldview of the particular group one identifies with is the basis for the way one act, the way one reacts and the way one feels about the world (See Deckard, Berndt et al, 2008). Thus, social media represent online communities which are comparable to the universe, where the young generation that is tagged the digital natives, net- generation or millennial can adopt new worldviews as a result of their interaction with people in other societies, friendships connections and reconnections, and exposure to new information that influences their life styles and social values. Thus, activities on SNSs expand users' horizon through exposure to the entertainment of other cultures and sharing information about themselves as part of identity projection, self-presentation and their sense of belonging. According to Bourn, (2008) many young people

have adopted a worldview in which the whole globe represents the key arena of social activities and social behaviour. As an extension of Bourn's argument, I assert that the social media sites represent different outlets through which young people alter the nature and direction of their worldviews depending on their usage behaviour of the respective sites of the various social media platforms (See McCarthy, 2011; Sawyer, 2011).

In Nigerian society, the emergence of smartphones and social media use had an immediate influence on how university students' views their world, enabling them keep abreast of the cultural values and social lives of other societies. This worldview has translated into the usage

behaviour of social media, for which social interaction, identity expression and information derivations have become the ultimate goal of their social media engagement. A few studies have looked on how university students use the social media. Edegoh, Asemah and Ekanem, (2013) showed the importance of social media with specific focus on facebook as a platform for relationship management through their survey of Anambra State University students. The authors found that students used facebook for an average of 2-3 hours a day, for the purpose of creating new friendships, rediscover old friends and chatting. The study also revealed that the use of facebook leads to physical (offline) contacts between users.

The foregoing discussion helped understand how students in Nigerian society engaged with social media sites. Yet the question of what the students do on social media sites within the framework of bonding and bridging relationships and the social capital resources is still unaddressed. This was one interest of the current study in which an investigation was conducted in order to understand the nature of Nigerian students' social relationships based on social capital theory. This was considered an important gap in the literature which the current study could address in order to contribute to the scholarship on social media, social capital and social relationships in new media research.

As Fields, (2008) explained students social capital can be measured by the number of people they know, and by how much they have in common with those contacts "which means that they need to feel they have something in common with each other. If they share values, they are much more likely to cooperate to achieve mutual goal". Further interpretation also implies the significance of students' social relationships which are influenced by three interrelated factors:
1.   bonding social capital
2.   bridging social capital, and

3.   network size referring to the total number of connections (ties) in one's social network (Ertan, 2013)

3.20   Studies on the Relations of William's (2006) Internet Social Capital Scales and Social capital on Social Media Sites

It is said that individual is at the autonomous centre of digital networked society and that people are interacting with diverse others, to the emerging patterns of social relationships and of social capital formation in social media sites and technology playing vital role. The word technology in this study implies mobile media devices (Raine and Wellman, 2012).

Studies are emerging on how mobile media users cultivate social capital on social media sites and the patterns of such relational formation. For examples, William's (2006 studied online/offline social capital of bonding and bridging relationships on social networking sites using ten statements of social capital resources on each dimensions of ties relationships. These measures indicate two opposing variables; First, the dependent variable - bonding social capital and bridging social capital and Second, the independent variables - social capital resources on which the benefits of being in bonding and bridging social relationships are determine with statistical evaluation. The results of this study revealed 'there is someone online to meet for financial assistance in an emergency 'as the main finding linking the bonding social capital and 'interacting with people online makes me feel connected to the large picture' as the main finding for bridging social capital.

Beyond William's study, scholars have been found to use ISCS in their research on the linkage of social capital and social connections on social networking sites. For instance, Sgambato, Petkov and Wolf's, (2011) replicated Williams Internet Social Capital Scales to study students' social networking system in their campus life at Michigan State University, USA. The authors found that the respondents had relational ties of bonding and bridging dimensions on their facebook for which 'there is someone at my university I can turn to about making very important decisions' was the main result linking bonding relationships and 'interacting with people at my university makes me feel like a part of a larger community' as the main finding for bridging social relationships. Both results suggest that the respondents derive the benefit of social capital resources in different structural relationships.

A study by Dohmen, (2012) on how Dutch young adults engage the use of social media sites for creating new ties of social capital and William's (2006) Internet Social Capital Scales was utilised in questionnaire development with bonding and bridging social relationships as

dependent variable and different social capital resources being independent variables measure on a five-point Likert scales as a response format to determine respondents' choice of social capital resources. The author found that facebook as the most used site for cultivating social capital of bonding social relationships and 'There is no one among my facebook friends that I feel comfortable talking to about personal problems' was the main benefit of social capital resource.

Furthermore, Adnan, and Mavi1, (2015) carried out a study of Malaysian college students use of facebook in forging social connections and constructing bridging social capital and in with questionnaire to collect data from 824 respondents made up of male and female who were between ages of 18 to 25. The questionnaire design was based on bridging social capital and of Williams' (2006) Internet Social Capital Scales measures comprising of six statements of social capital resources and are; "Interacting with people on Facebook makes me feel part of a large community" "Interacting with people on Facebook makes me interested what people unlike me or thinking". "Talking with people on Facebook makes me curious about other places in the world". "Interacting with people on Facebook reminds me that everyone in the world is connected". "Interacting with people online makes me want to try new things". "I am willing to spend time to support general Facebook community activities". The use of the word 'online' was replaced with facebook and measure on a five-point Likert scale as a response format. All of these were independent variables. The findings revealed that most students use Facebook to stay in touch with people they know and a high level of bridging social relationships was also found and "interacting online with people making them feel part of a large community" was the main social capital resource to them. Furthermore, gender differences was apparent in the level of bridging social capital suggesting that male students are more likely to have bridging social capital on their facebook than the female. The respondents were also found to have between 200 to 299 facebook friends. Moreover, all of these studies were statistically tested and significantly determined.

Therefore, in sum, the RQ6 what role do social media sites play in the university students' social relationships was built on bonding and bridging social capital using Williams Internet Social Capital Scales measurement for social capital resources. The rationale for replication ISCS was aimed to gain understanding of the students' patterns of social relationships and of social capital formation relative to the social capital resources that motivate them. Also, William's online/offline was modified with social media sites to capture the research question. The next discussion deals with the frequency of contact on social media sites and its

implication for students' reciprocity behaviour in Nigerian context.

3.21   Frequency of Contact on Social on Social Media Sites

Granovetter's, (1973) measures of social ties emphasise the importance of reciprocity in social relationships which can be applied to users on social media sites. Thus, the nature of the ties between individual in a friends network can be influence by the frequency of contacts with circle of network. For those in weak relationships, the frequency of contacts may be inconsistent or mutual compared to those in strong relationships with close friends and family. The expectation is that the emotional relationships would be characterised by the frequency of contacts, the intensity of communication and length of interactions. The Pew Internet and American Life report, (2006) also identifies core and significant ties as two categories of social relationships in online communities in the US and that the frequency of communicating between friends in a network depends on the strength of the relationship, with cellular phone users engaging in weekly cell phone contact with four core ties and once per week with significant ties.

As Cheng et al, (2014) wrote social media settings provide users with a platform on which to interact by way of sending communicative messages to one another and reciprocity becomes the ultimate goal of connecting relationships. Further, Nikabadi and Maleki, (2014) indicated the significance of proximity to network links in social relationships on social media sites. They found that the physical distance between friends in online networks plays a decisive role in reciprocal relationships.

Among the previous studies on the frequency of contacts and the length of interactions with family and friends on social media sites is the work of Brandtzag, Heim and Kaare (2010) who found that users reported the frequency of contact with family members was once a month or more and contact with friends occurred more frequent. Similarly, Cheng Ean Lee et al, (2011) observe that their participants reported making contact with friends in their network for 1 to 2 hours a day. Both studies appear to show the correlation between the amounts of time spent interacting and emotional attachment between individuals in the network.

Further, Hill and Dunbar, (2002) explained that the frequency of contact in relationships over time could be driven by the distance between individuals in a students' network and their emotional closeness to their circle of family members and friends. Moreover, Rahman's (2014) study on international students in New Zealand found that because they were away from home, they used social networking sites to communicate with family and

friends in their home country. Gender differences were detected, female respondents was more likely to use SNSs more than their male counterparts in order to communicate with their friends and family.

3.22 Critique and Methodological Orientation of Digital Networked Society: implication for the Present Study

Manual Castells' digital networked society is generally defined by four dimensions, namely, i. new technological paradigm, ii. globalization, iii. enclosing of cultural manifestations, and iv. demise of the sovereign nation-states (Gill, 2009). Castells therefore argued that these dimensions may have drawn the attention of scholars to viewing the theoretical position of the network society as too broad to apply in any specific way. Scholars, such as Stalder, Felix and Castells tend to offer a very broad and general definition of network society. To Perkmann (a critic of Castells) the terms amount to an empty signifier because of its vague nature and broadness (cited in Charusmita, (2013).

Besides, the notion of new technological landscape in Castells' networked society of a new technological landscape has extended the criticism further, according to Otani, Remi (2009) because the traditional neighbour has given way, to a more fragmented individualism whereby group of people are now tied together in terms of social networks that is, they are connected through various networks including computer networks. Thus, a new form of social ties and online communities in terms of social connection and social relations has become visible in modern day society.

Some scholars have called the new trend the online community, electronic community and internet-based community. (ibid), network individualism (Charusmita, (2013). The Ofcom report (cited in Edgecliffe-Johnson and Parker, (2006) called the youth, the networked generation in reference to those who have turned to social networking sites to advance their sociality and friendship.

It is against this background that the internet technology, being at the heart of network society has been seen as creating a new social environment and a new society in which individual internet users' shape their social lives. In Charusmita's (2013) words Internet is leading to isolation of individuals from the real world: faceless individuals practice random sociability appears to sum up the relation of Castells technological paradigm and it gives an insight to the nature of network society in reality.

Despite the aforementioned negative perception of Castell's network society, its advantages as a theory have also been emphasized by some scholars, as documented by Charusmita. As he explains, 'The theory of network society is more relevant today as compared to any other era in history to which the debate of freedom versus individuality is relevant even today' This researcher interpreted this submission to mean that the freedom to use technological device is open to individuals in society, what they use them for is entirely their own decision and the usage benefits to them depends on their needs. This also bring to the fore, the opinion of Osman, Mohd Azam et al, (2012), according to whom smartphones can only be beneficial and effective if the system device is fully utilized.

The foregoing discussion provides a good foundation to assert that the present use of smartphones and social media sites by students is engineering a new dimensions in their social lives and sociality in which the freedom of usage behaviour is entirely their own decision and functions to them according to them. As Castells put it 'Yet we must take seriously the material transformation of our social fabric, as the new information technologies allow the formation of new forms of social organisation and social interaction along electronically based information networks.

3.23   Gap in Literature

The current study attempts to fill certain gaps in the scholarship on new media, with specific focus on mobile media and social media sites, which have to date mostly conducted and published by researchers mostly based elsewhere, especially in the U.S.A, Europe, and a few in the Middle East, and other parts of Africa. These studies appear to focus on the usage of mobile media and social media sites in relations to sociality and social lives of users in their respective societies. Similarly, the relationship between social media sites, social capital and social relationships based on Williams (2006) Internet Social Capital Scales (ISCS) appears to be receiving little attention by scholars, as only few studies were found along this line (see Sgambato, Petkov and Wolf, 2011; Ahn, 2012; Jung, Gray, Lampe and Ellison, 2013).

Also in Nigeria, a few media researchers have looked at the use of mobile media and social media sites. However, the focus appears to take different direction from this study. For example, Tumbi, Aregbesola and Asani, (2015) examined the factors influencing university students in Nigeria and Republic of Benin regarding the adoption of smartphones, based on the diffusion of innovation as theoretical position, which is quite different from the digital networked society theory used in this research. This is a gap which this research expects to fill.

Further, Ezeah, Asogwa and Obiorah, (2013, Okafor, and Achukwu, (2014) conducted investigation into the significance of social media sites in relations to university students' social lives and their effect on academic performance. The uses and gratification theory of the media was applied. This is another gap because the current study looked at the use of social media sites, social capital and social relationships, within the framework of digital networked society, with the university students in Nigeria as participants in the study. This represents a major contribution to the growing body of knowledge in mobile media and social media in the Nigerian context.

3.24: Summary

The dynamic of Castells digital networked society is becoming deep rooted in today's society with social lives and social relationships of people undergoing changes. This has culminated into networked individualism and at the heart of the ongoing scenarios is the influence of smart media and as technological platforms that have open up opportunities for people's engagement with social media sites.

The cultivation of social capital as a building block of bonding and bridging social relationships has advance smart media users network of friends and social relationships, much beyond the traditional face-to-face interaction. Moreover, Fiske's paradigms of sociality and of four conceptual frameworks provide further understanding of smart media users' social differentiation in terms of age, education, class and income and perceptual field in terms of value system relating to smart media device ownership and usage potentialities denoted the cost-benefits of mobile media and social media sites usage in digital networked society.

Furthermore, prior studies have suggested that the use of smart media and social media sites have differing benefits for users in society which was obvious in various issues explore in the literature review. All of these discourses provided the set up of the research questions for the study of university students' attitudes smart media and social media sites in Nigerian context. Thus, the RQ7 why do university students own smart media device was drawn from the literature of smartphone (smart media) and society, and the reasons for the domestication of smart media device, the RQ8: Which usage activities of smart media are the most preferred by the university students? was linked to the discussion on the importance of smart media to users in society, the RQ9 on how university students use social media sites for sociality was linked to the discourse on why people use social media sites for sociality, the RQ10 on what role do social media sites play in the university students' social relationships and acquisition of social

capital came up from the literature relating to social capital on social media sites and students' social relationships, and Williams Internet Social Capital Scales was applied to unfold the patterns of social capital formation and the resources accruable to each dimension. On the other hand, the RQ11 are there any differences between gender in smart and social media use was influence by the debates on gender as an intervening variable in smart and social media sites platforms coupled with Fiske's Authority Ranking which emphasise the notion of individuals as different social categories, with related value system and attribute in terms of meaning to usable object. This was aimed to capture the demographic background of the university students in terms of age, socio-economic status and cultural orientation. Moreover, the university students are at the center of digital networked society exploiting the potentialities of smart and social media sites to advance and sustain their social lives and social relationships of social capital. This implies that the students at DELSU and BIU are not just active individuals in digital networked society but also users of smart and social media sites for social activities and constructive social capital of bonding and bridging social relationships and resourceful benefits. The overall signpost of this section focuses on smart and social media sites for sociality and cultivation of social capital through genders and socio-economic and cultural context of Nigeria networked society.

The next chapter discusses the methodology utilised to address the research questions of this study.

CHAPTER FOUR

METHODOLOGY

4.1   Introduction

This chapter deals with the research methodology for the study. It was design to reveal the university students' perceptions and usage behaviour of mobile phone technologies in Nigerian society. This research utilised the mixed methods approach, and of qualitative and quantitative dimensions. The words 'mixed methods' has been described in different ways. For examples, Wisdom and Creswell, (2013) refers to an emergent methodology of research that advances the systemic integration or mixing of qualitative and quantitative data within a single investigation or inquiry.   Jeanty and Hibel, (2011) describe mixed methods research as a platform for researchers to mindfully create designs that can effectively answer their research questions adding that the primary objectives of using mixed methods lies on desirability to obtain a more complete understanding of the researchable while Johnson and Onwuegbuzie (2004) sees mixed methods as a class of research where the researcher mixes or combines qualitative and quantitative research techniques, methods, approaches, concepts or language into a single study (see also Bazeley, 2004; Jensen and Sorensen, 2013).

For the purpose of this study, the uses of mixed methods as an investigative stance aimed to provides a more useful picture about university students' feelings on mobile phone technologies in the context of their society, and a more holistic understanding of why the university students own and use mobile device in their social lives. Further, Symonds and Gorard, (2008) provide useful comments about mixed methods research. According to the authors qualitative research is about anything else (use of words, image and audio as expressive views about the mobile phone) and quantitative is about numbers (use of physical data to generate and interpretations). Thus, mixed methods research involves both anything else and numbers in research engagement.

The use of mixed methods in the study of the university students ownerships and use of mobile phone involves the combination of qualitative focus group interviews relating to anything bordering on the expression of students opinions about mobile phone and of subjective interpretative analysis to address three research questions and the quantitative surveys, sample of students in numbers (sample size) and statistical analysis in terms of numbers to address four research questions. Thus, the mixing of both research paradigms in the thesis suggest the process of triangulation whereby the validity of the research findings relative to the students

ownership and use of mobile phone in Nigerian society can be trustful and predictive. For a more understanding of qualitative and quantitative dimensions in the study, discussion was undertaken to know more about their relevance in the study. The first of this discourse commence with qualitative and then follow by quantitative discourse.

4.2   Qualitative Focus Group Interviews

Focus group interviews are qualitative research and of exploratory data collection strategy, used in this study to addressed three research questions: RQ1 do university students believe that their socio-economic status influences their perceptions and uses of mobile phone?, RQ2: how do university students use mobile phone personally and for socially in everyday affairs? and RQ3: how university students use mobile phone for entertainment consumption? These questions were derived from the prior studies on the relations of focus group discussions and mobile phone research (Belwal and Belwal, 2 009; Rahman and Azhar, 2010; Suggiyama, 2014).

The rationale for examining these research questions lies on the desire to explore the students' feelings about the use of mobile phone in relations to the benefits of the system technology to them. The use of focus group interviews was aimed to provide insight to the students' opinions on respective research questions advanced and for a better understanding of the importance of mobile phone to them, and as specific social group who are expressive users in Nigerian context.

The importance of focus group interviews as a means of data collection in qualitative research has been discussed by scholars. According to Hansen and Machin, (2013) focus group interviews are the most substantive mode of data collection in a piece of research, with semi questionnaires as a guide to the researcher's interviews process and direct interaction with participants. The authors (pp.231-232) isolated two reasons which are related to the benefits of focus group interviews. The first of which involve generation of meanings and interpretations of media content (mobile phone ownership and usage) through conversation and interaction with the researcher as moderator. Second, focus group interviews offer dynamics and ways of eliciting, stimulating and elaborating (students are asked questions, with responses to the questions and possible to follow-up to derive further interpretations or clarifications on issue being discussed. The group dynamics involve the natural setting under which the students' interviews were conducted and in a way to express their views unrestricted.

Furthermore, Schurink, Schurink and Poggenpoel (1998:324-325) emphasised the importance of focus group interviews in research engagement, as fact-findings strategy. According to them, focus group interviews expose researcher to the participants' world-views; permit considerable probing, shed light on the nature of relationships in the field and illuminate phenomena and social processes that are hitherto little unknown. Implying that the use of focus group discussions allows the moderator to elicit the students opinions on respective questions under investigation and in a more flexible forms, and on which unanticipated issues might come up for further exploration. Thus, the essence of focus group interviews helps uncover the students' perceptions and uses of mobile phone in the context of the own society.

4.3   Implementation of Focus Group Interviews for the Thesis

University students are generally young people who in this day and age have grown up in the new media landscape and in the Nigerian context have never had access to landline telephones. Getting them to express their feelings about mobile phone necessitated the use of focus group discussions to systematically to understand the reasons for their adoption, how they use them and with what benefits. Thus, the decision to employ the focus group interviews was linked to several reasons,

i.   Focus group interviews are helpful for gathering information about the use of mobile phone from individual students in a face-to-face dialogue.

ii.   Focus group interviews help unravel the students' varying abilities regarding many usage features of the mobile phone, given their educational background and lifestyle.

iii.   Focus group interviews provide the flexibility to seek the participants opinions on issues raised during the discussion itself which could possibly leads to a more follow-up questions. As a result, they were deemed to yield a greater understanding of the students' knowledge about mobile phone in relations to the wider social context.

iv.   Focus group interviews as a platform in qualitative research could afford the opportunity to look closely at different kinds of issues that could emerge from the individual students' opinions.

v.   Focus group interviews are helpful in the development of questionnaire and for the advancement of theory (Morgan and Kruger, 1993; Wimmer and Dominick, 2000).

vi.   Focus group interviews are usually conducted in a more natural form which allows the participants to be relaxed and comported during the discursive processes (see Hansen, Cottle, Negrine and Newbold, 1998)

4.4   Limitations of Focus Groups Interviews

Despite the strengths of focus group interviews in qualitative research, as also discussed above there are obvious limitations militating its usage and are isolated as follows:

i.   Focus group interviews are based on unstructured questionnaire and subjectively discussed by participants, most often time-consuming by allowing each participant in the group discussion to express their views on the question asked by the moderator.

ii.   Discussants in the focus group interviews can potential influence their viewpoints given the open interactive session under which the interview is conducted. To a large extent, the moderator has less control over participants' discourse in the process of responding to question.

iii.   Data generated by focus group interviews involve tedious process of analysis given the comments of participants which are require interpretation within constructed social setting or environment under the question is being explore.

iv.   Information acquired by using focus group discussions cannot be subjected to generalisation. This is because focus groups involve small sample of participants and therefore not projectable for a larger population under study (see Schurink, Schurink and Poggeenpoel, 1998:325-326).

4.5   Interviews Questionnaire

The questionnaire for the focus groups was derived from the research questions and was formulated in the context of previous literature on mobile phone. For examples, Chen, (2007) adopted the technique of focus group discussions to explore the use of mobile phones by US college students. Similarly, Matanhellia, (2010) explored the use of mobile phones by young adults in India through the use focus group interviews. Both studies were conducted in different societies with varying but relatively high levels of development and technological capabilities.

Moreover, the questionnaires were designed to provide preliminary research directions regarding the students' perceptions of mobile phone use (see Appendix 2 for questions that

were asked in the focus group discussions). The overall aim of the focus group discussions was to unravel the participants' knowledge of the usage features of their mobile device and its values to them.

4.6   Participants

The study of university students' perceptions and usage behaviour of mobile media technologies involve two locations research and the involvement of participants along the same lines. Because the study was conducted in two phases to which the first phase was qualitative focused with semi-structured questionnaire as opinion derivation strategy on mobile phone (feature phone) and the second phase was quantitative survey with questionnaire design as a mode of data collection on smart and social media use. Both of which involve different selection procedure of participants and are;

4.6.1: The First Phase of Participants Selection: Focus Group Interviews

The first selection stage for the qualitative phase of research involved two universities location: BIU and DELSU. A total of 32 undergraduate students were drawn from two Universities in Nigeria: 18 students from Delta State University and 14 students from Benson Idahosa University, split into equal men and women participants. The students were between the ages of 18 and 26 years old. A convenience sample strategy was utilised in selecting the participants for the focus group interviews in respective university and this was done with the assistance of co-ordinators that were recruited for the purpose.   Participants were all full-time as an undergraduate student and mobile phone users.

Earlier scholars have discussed the importance of focus group interviews in exploratory research relative to the number of participants that could be drawn for participation. For examples, Hansen, Cottle, Negrine and Newbold, (1998:264-265) indicated that focus group interviews are conducted to obtain specific types of information from a clearly identified set of individuals. Furthermore, Babbie, (2005:376) explained that, in these interview 12 to15 people are brought together in a room to engage in a guided discussion of a specific topic. Wimmer and Dominick, (2000:119) described focus group interviews as 6 to 12 people being interviewed simultaneously, with a moderator leading the respondents in a relatively unstructured discussion about focal topic.

The choice of the specific target group was influenced by the work of Schiffman and Kamuk (2007) and Rahman and Azhar, (2010). Rahman and Azhar, (2010) recruited 100 university

students, aged 19 to 28 years from public and private universities in Pakistan to investigate the perceptions of the mobile phone service industry and the students' brand preference. All the students in the group discursive interviews had mobile phone and were chosen on the assumptions that they were already familiar with mobile phone utilization in different dimensions of social life.

4.6.2: The Second Phase of Participants Selection: The Quantitative Survey

Participants for the quantitative driven survey was carried out at BIU and DELSU, and the selection of individual students which were 250 participants at BIU and 350 at DELSU was done by means of heterogeneous samples. The rationale for this sample procedure was due to the size of respective university with large students' population, faculties and departments. (see also Gillspie and Mileti, 1981).

The size of participants for the survey was informed by the researcher thought to achieve representative spread of respondents in each study location and ensure possible validity of statistical picture. This equally necessitates splitting participants into equal men and women (150 men and 150 women at BIU) while 175 men and 175 women at DELSU). The participants selected were all users of smart media device with expected ability to complete the questionnaire within the time frame. The selection of participants at BIU and DELSU was done with coordinators recruited from the senior undergraduate class who helped provide class attendance of core courses in different faculties and departments, and on which students were selected across respective faculties and departments.

In sum, the selection of participants for the focus groups and the surveys was carried out in a systematic way that could ensure trust worthy results in terms of achieving predictable findings and generalisation.

4.7. Location of Focus Group Interviews

The 90 minutes focus group interviews at Delta State University were held in the researchers' office. This was to ensure a relaxed and informal physical setting for free- flowing interviews while the interviews at Benson Idahosa University students were held in the studio of Mass Communication department. This was possible due to the approval of the Head of Department. Four coordinators: two men and two women were recruited at Delta State University and trained, their responsibilities included the seating arrangements, the provision of logistical back-up, ensuring effective audio recording of interviews and monitoring the

participants' actions during the interviews. Memon, (2015) describe audio-recorded of focus group interviews as the most simple and inexpensive method of handling the participants conversations on the questions being asked.

The men coordinators were used to cover the interview sessions with men group while the women coordinators were responsible for the females group. A similar procedure was applied at Benson Idahosa University where the second group interview was held for 90 minutes. The researcher was directly involved in the interview sessions in Delta State University and Benson Idahosa University and ensured that the students answered the questions they were asked, and that they did so of their own free will.

The overall aim of focus group interviews was exploratory and it provide pointers to relevant issues, themes and concerns to be map for subsequent engagement in the research.. All these are indication of the potentials strength of focus group discussions in qualitative research and as a source of information yielding strategy.

4.8   Analysis of Focus Groups Data

According to Morgan, (1988:10 also cited in Memon, 2015) the analysis of focus group data involve s the researcher's subjective process of making sense of what was discussed in the focus groups. Thus, constant comparative method was utilised in reducing the qualitative data from focus group interviews into coded categories of similar and dissimilar viewpoints with a view to arrive at specific decision and organized around themes identified by the researcher based on the objectives of the study and research questions (Boeije, 2002; Carter, Thatcher and co-authors, 2011; Dube, 2014). Specifically, Boeije, (2002) emphasise the role of the researcher in the textual interpretations, coding processes and the positive outcomes leading to the themes building. All of these constitute the thrust of inductive standing in qualitative research. The use of constant comparative methods in this research helps underscore the patterns of the university students' usage perceptions of mobile phone reported in the form of words, direct or indirect quotations, and identifying the main themes and patterns of categories.

The data from the focus group interviews was coded by hand and organised into four processes of analysis and are; First, the discussions were extensively and verbatim transcribed and it contained the spoken words of the thirty-three students, who participated in the interviews sessions at Delta State University and Benson Idahosa University. Each interview groups consisted of an equal number of men and women, so arranged with view to obtaining representative opinions. Second, in the analysis of the transcribed data, each of the participants

was designated as individual 'S' to ensure ethical practice. All of their opinions on the use of

mobile phone were written against the respective 'S' and then cross-checked and re-checked to ensure conformity with what they said in relation to the questions. Third, the transcription of the interviews was separated into different sub-heads to produce an effective narrative discourse and flow of thoughts on each issue discussed. This formed the basis on which the interviews were analyzed, in relation to the themes structure. Their opinions were coded and classified to determine the concurring and non-concurring views of the thirty two or thirty three students' participants. This was done to ensure similar patterns of the views expressed. Two sub levels of opinion were established specifically: i. the majority opinion where large proportion of the student participants share similar opinion on each issue discussed. ii. non-concurring views which few participants expressed agreement (Poggenpoel, (1998:338, Vicsek, 2010). Fourth, the analysis of the entire interviews data was recorded as comprehensive and in-depth text, reflective of the themes structure and research questions. The next section presents the themes from the focus group interviews data

4.9   Themes from the Focus groups Data Analysis

The analysis of focus group data on the interviews at DELSU and BIU yielded seven themes and respective theme was explain in relations to their finding relative to the respondents opinions on the research questions. The themes are;

1:    Ownership of mobile phone with internet connection and possession of smartphone by few respondents. The theme was derive from RQ1 in relation to the finding on the issue. As observe, respondents' choice of mobile phone with internet was preferable to most of the respondents and choice of smartphone as advance system device and of multimedia applications was link to few users. The finding on smartphone technology prompted the researcher interest to follow up with a view to unfold its significance to students in a wider university population

2:    Connectivity and peer group influence was the most tenable decisions for mobile phone adoption. This theme emerges from the RQ1 on decisions about mobile phone possession and respondents opinions centred on the relations of mobile device and social connectivity. For examples, interactive connection with family, friends and loved ones, social networking sites as a platform for expanding friendship network and promote good image of them, and peer group influence as a factor of decision in mobile phone adoption.

3:      Mobile phone use in multiple ways and functionalities to users' interest and needs This theme was derive from RQ3 and the focus was on respondents' usage ability of their device in the fulfilment of entertainment. For example, music, time management and self organising entity. For example, use of clock, alarm and calculator, and social networking sites for sociability. For example facebook as main favourite site for social performance

4:      Socio-economic status of users influences how they view their mobile device relative to the meaning they attribute to the system usage. This theme came up from the RQ3 and on which the respondents' socio-economic status provide major influences on perceptions of mobile phone ownership and use. For examples, the perceptions of the device as fashion status, dressing, identity projection and class were expressions of most respondents.

5:      Mobile phone use as facilitator of sociality and social networking sites for connectivity, sense of self and identity performance. The theme was identified from the RQ4 for which respondents opinions unveiled the role of mobile phone as a platform for opportunity to forge friendships relation, sense of self and identity performance through interaction in social networking sites

6:      Mobile phone use in facilitating personal communication with mobility of interaction in public and private spaces based on users decisions and control. The theme was frame from the RQ5 and on which respondents' personal communication behaviour and mobility were clearly obvious. For examples, respondents' interaction with other user of the system device via voice calls and text messages to sustain social connections and interactive relations in open spaces, public or private spheres.

7:      Mobile phone as medium for user entertainment consumption and functionalities. The theme was obtain from the RQ6 and respondents expressions on the relations of entertainment and mobile phone use show indications of the system significance in entertainment derivation. For examples, playing music for relaxation, video for the sustenance o happiness, games playing to keep busy and stimulate creativity and chatting to ease boredom were the most valuable interest and functionalities.

All of these themes inform the next stage of research and of quantitative dimension for which the second set of the research questions were advanced to guide the inquiry on the university students' attitudes towards smart and social media sites (see RQ7 – RQ11).

The rationale for inquiry lies on the desire to know more about the university students attitudes towards mobile media and usage behaviour of social networking sites relative to their influence on surveyed respondents sociality and social relationships of social capital in virtual communities. Earlier in the chapter, the superiority of mobile media device over feature phone (mobile phone) was discussed and for further reflection, mobile media device is built on computer operating systems that run diverse applications and connectivity than feature phone (see Yartey and Ha, 2013). Against this background, the use of survey method was applied as a means to find out the students' opinions about mobile media and social media sites with a view to unfold their thought about them, beginning with survey method.

4.10   Quantitative Survey Method

The use of survey method has been used in this study to handle four research questions: RQ7: why do university students own smart media device?, RQ8: Which usage activities of smart media are the most preferred by the university students?, RQ9: How do university students use social media sites for sociality?, RQ10: what role do social media sites play in university students social relationships and in what social capital? and RQ11: are there any gender differences in mobile and social media use? These research questions were address through self reported questionnaire and on which survey participants at DELSU and BIU were involved.

The importance of survey method in quantitative research has been discussed by a number of scholar (Babbie, 2005:250-292; Burton, 2007; Mathiyazhagan and Deoki, 2010; Gunter, 2012; Visser, Krosnick and Lavarakas, 2014). The overall position of these scholars regarding survey method involves collecting data from a sample of individuals through their responses to questions and its importance lies on three interrelated characteristics, which are versality, efficiency and generalizability[16].

---

[16]Survey research www.sagepub.com/upm-data/43589 8.pdf.Sage Publications [Accessed 12 April, 2014]

4.10.1 Rationale for Using Survey Method

According to Burton, (2007) a survey enables data to be collected from individual, usually from large samples of a particular population for the purpose of descriptive statistical interpretation and analysis. The current study therefore adopted the survey procedure to collect data from university students on their use of mobile media device and social media sites, and their opinions played key role in ascertaining the usage ability, experience and functions to them.

The rationale for the use of the survey method as a data collection strategy are as follows; First, surveys provided the mean for collecting data from a population of students in two universities: Benson Idahosa University and Delta State University on their use of smartphones and social media sites. The survey was designed as a self reported questionnaire.

The significance of questionnaire in survey research has been discussed by previous scholars (Hansen et al, 1998:225-256, Ambrose and Anstey, 2010, Gunter, 2012:242-243, Giesen, Meerteens, Vis-Vischens and Beukenhorst 2012). Specifically, Giesen et al point out that questionnaires facilitate the collection of data needed to answer the research questions, which requires the data to be valid, reliable and relevant. Second, the use of questionnaire was cost effective in terms of the researcher ability to Second, the use of questionnaire was cost effective in terms of the researcher ability to distribute questionnaire to a large sample of students in two geographical locations. The questionnaire was structurally standardised. It was easily readable and completed in a short duration (Wimmer and Dominick, 2000:162).

Third, since the study focused on the university students' opinion on the use of social media sites, and smartphones as the mean to access these sites. The survey method was useful in obtaining the students perspective in quantitative forms. Keegan, (2014) notes that the survey method gathers quantitative data on those thoughts, feelings, and behaviours we have in common, or in which we differ. He goes on to say that this survey method asks a representative sample of people the same questions about particular opinions, values and beliefs. Fourth, because the study considered demographic characteristics of the students' users of smartphones and social media sites, such as gender, age, year of study, family status and family income, the survey method was necessary for determining statistical differences in usage of smartphones and social media between men and women as well as the other characteristics. Weaver, (2008) and Wimmer and Dominick, (2000: 162 stated that 'if researchers wish to analyse various individual characteristics such as age, gender, income, or

altitudes about issues of a large group of population, then the survey technique should be adopted' Moreover, the generalizability of the findings is a major goal of this technique. Fifth, the data helpful to the research already existed, both from primary sources and secondary sources which could be tapped in the course of developing the questionnaire (Wimmer and Dominick, (2000: 162).

Sixth, surveys were deemed useful in generating data from two universities locations: Benson Idahosa University and Delta State University in standardized forms. This allowed for specific statistical comparisons to be made between the different categories of students' uses of smartphone and social media sites, thereby clarifying the usage significance of each medium. In sum, using surveys would permitted the raw data to be viewed and then analysed in order to arrive at a statistical picture of the usage patterns of smartphones and social media sites.

4.10.2 Limitations of Survey Method

Scholar like Hansen and Machin, (2013) note that the use of survey method in quantitative research has inherent limitations. According to them, these are; First, surveys are snapshot and therefore offer little or no insight into how opinions are formed, shaped, negotiated and develops through interaction. Second, survey does not tell much about how individual beliefs and behaviour are shaped in a social context. Third, answers to survey questions are specifically determined for specific respondents' choice of answer to the questions. All of these are numerical or categorical data and statistically driven. As Tuli, (2010:98) argue quantitative approach fall short in answering why things are the way they are in social world and why people act in ways they do.

4.11   Survey Method: Mobile and Social Media Research

Previous studies on the use of survey method in mobile and social media research are emerging with evidence drawn from the work of some scholars. For examples, Matanhelia, (2010) drew on quantitative survey to investigate the use of mobile phones in India with survey questionnaire as a means of data collection and of twelve sections to address the research questions, and as the literature review unfolds. Significant to indicate was that the survey questionnaire design was a follow-up to the findings of the focus group discussion earlier conducted on mobile phones which was also exploratory. Campbell, (2007) used self-report survey containing 61 items to assess perceptions and uses of mobile telephony in cross-cultural setting and participants were reportedly drawn from the U.S. Fifteen of the items that were used for this study were derive from the research review literature. Aoki and Downes, (2003)

drew on survey method and questionnaire design to conduct investigation into young people's use of and attitudes toward cell phones. The participants were undergraduate students in a large Northeast university and questionnaire was administered in December 2001 and January, 2002. A total of 137 students completed the questionnaire and those who completed the questionnaire were made up of second or third year college students from middle to upper class families. Furthermore, some scholars have used survey method and questionnaire design to study the use of mobile (smartphones) and social media. For examples, Mothar, Hassan et al, (2013) investigated the importance of smartphones usage among Malaysian undergraduates with survey method and questionnaire design, and of five-point likert scale as data collection procedure. The questionnaire was structured to address research objectives. A total of 385 respondents were derived through purposive sample. Similarly, Peterson and Johnston, (2015) used survey method and survey questionnaire to examine the impact of social media usage on the cognitive social capital of university students in South Africa. Random sample of over 100,000 students attending the five universities were carried out with questionnaire measures based on five point likert scales and of Internet Social Capital Scales (William, 2006) comprising of bonding and bridging social capital with subscale of ten statement each. The rationale for this as the researchers explain was to find out how students forge social capital on social media and the resources derived from network of social capital relative to bonding and bridging social relationships.

4.11.1 Implementation of Survey Method and Research Questions for the Thesis

Survey method was applied in the study of smartphones (smart media)) and social media sites with specific regard to Nigeria university students' attitudes towards these media platform. Survey provides the means for data collection that unfold the students' feelings and usage values of these virtual media environment. Moreover, the survey questions were based on RQ4 to RQ7 as earlier set up in the thesis and each research question has specific objective. For examples, the research question four on why do university students own smartphones? This was aimed to find out the reasons students own smartphones as mobile media of enormous power and usage diversity. The literature review on smartphones and society, and the reasons for owning smartphones provide useful evidence to affirm its functional value. The research question five on how university students use social media sites for sociality was connected to the literature on the issue of what social media sites implies and why people use the sites for sociality. The research question six on what role do social media sites play in the university students' social relationships and acquisition of social capital? This reflects the literature on

social capital, social media sites and students' social capital of social relationships in social media sites. The research question seven: are there any differences between gender in mobile and social media use? This was borne out of the debate in the literature that gender serves as a moderating influence on the use mobile and social media sites. The university students (men and women) play decisive role in the usage patterns of both media forms, as an active social group in networked society. All of these influence the design of the survey questionnaire which was the next discussion.

4.12   Structure of Questionnaire for the Thesis

The survey questionnaire was designed to reflect the research questions and structurally discussed in different sections, starting from section one.

Section 1: Respondents' Demographic information
This section aimed to collecting information about university students who are users of mobile devices and social media sites. They constitute a major segment of the young people in Nigerian society and are members of the generally technological savvy generation. The information sought about them was gender, the year of study and the students' family status in terms of income in order to determine class variations among the students; and provide picture of the amount of disposable income they had available. This was evaluated through single response to a number of questions

Section 2: Ownership and usage experience of smartphone (mobile media)
This section examined why university students owned technological device and three options were advanced to assess their opinions. This was followed with usage experience with five options as measures of students' opinions as well as usage applications of the device which was aimed to determine how students use the different features for self benefits. Fifteen items of usage applications were provided as measurement factors and on five point likert scales.

Section 3: Social Media Sites for Identity and Social relationships
This section consisted of four sub-topics: The first questions concerned how the university students use social media sites for the advancement of social network relations with six media platforms: facebook, Myspace, Linkedin; Twitter, Friendster and blog to assess respondent choice of usage site.

These sites were chosen because of the role they play in forging social network connections and thus in the social lives of the students.   Second, the students were asked to indicate which

technological devices enable them to access social media sites and a list of different devices was provided to choose. This question was posed to ascertain the nature of the devices used, given the variety of new media devices that have emerged in recent times. Third, the university students were asked how many friendship connections they had on social media sites. Friendship connection here refers to the number of friends they have online. This information was important for ascertaining the nature of the students' social capital whether bonding or bridging. To answer this question, four measures of network sizes were provided for the students to select from. The final group of questions concerned how the respondents meet themselves on social media sites.

Section 4: Social Relationships on Social Media Sites and Social capital

This section of the questionnaire was aimed to address RQ10: what role do social media play in the university students' social relationships and acquisition of social capital?. Prior studies on the relations of William's (2006) Internet Social Capital Scales (ISCS) and social capital on social media sites provided ground for the question. The William ISCSs was utilised in this thesis in order to understand the patterns of respondents' social capital formation on social media sites and the benefit they obtained from relational ties of social relationships. Thus the variables here are; First, the dependent variable-bonding and bridging social relationships and Second, the independent variables-social capital resources of different option. Below are the bonding and bridging social relationships in relations to different items of social capital resources.

Bonding relationships

1. There are several people in SNSs I trust to keep solve my problem
2. There is someone in my SNSs I can turn to for advice about making important decisions
3. When I feel lonely, there are several people in my SNSs I can talk to.
4. The people I interact within my SNSs would be good job references for me.
5. If I needed an emergency financial assistance, I know someone in my SNSs I can turn to
6. The people I interact with in my SNSs would put their reputation on the line for me.
7 The people I interact with my SNSs are those that are of benefit to me
8 I do not know people in my SNSs well enough to get them to do anything

96

important

      9   The people I interact with in my SNSs would help me fight injustice

Bridging Relationships

1. Interacting with people in my SNSs make me interested in things that happen in the environment and beyond

2. Interacting with people in my SNSs make me want to try new things

3. Interacting with people in my SNSs make me interested in what people unlike me are thinking.

4. Talking with people in my SNSs makes me curious about other places on the world.

5. Interacting with people in my SNSs makes me feel like part of a larger community

6. Interacting with people in my SNSs makes feel connected to bigger picture

7. Interacting with people in my SNSs reminds me that everyone in the world is connected.

8. I am willing to spend time to support SNSs community activities.

9. Interacting with people in my SNSs gives me new people to talk to.

10. Through SNSs I come in contact with new people all the time.

All the items were measure on a five-point Likert scales, ranging from 5: strongly agree to 1: strongly disagree. The uses of William's Internet Social Capital Scales help shed light on the respondents' social relationships of social capital on social media sites in relations to social capital resources derivation to individual user in networked society.

Section 5: Interactivity and frequency of Contacts in Social Media Sites

The section aimed to assess how students relate with network of friends and the frequency of contact relationships. Five frequency time variations were adopted to investigate the students' opinions on contact frequency, presented on a five-point likert scale for different friendships categorisation. This ranges from 5-family members to 1: acquaintances. The adaptation of communication frequency variations was influenced by the work of Ben-Harushi, (2010) and Sciandra, 2011) (Appendix: 3 on Questionnaire Survey Data Collection)

4.12.1: Pre-testing the Questionnaire

Scholars such as Babbie, (2005:265); Oosthuizen, (2009); Wimmer and Dominick (2000) and

Czaja, (1998) have discussed the significance of pre-testing questionnaire in survey design. As Oosthuizen explains pretesting a questionnaire enables the researcher to ensure that respondents understand the questions and to identify possible problems with the completion of the questionnaire. Similarly, the Fairfax County Publication on survey questionnaire design (2012) notes that a pre-test is administered with the aim to ensure, First, ease of administration of the survey. Second, pre-testing can help ensure that field processes to be employed will work smoothly. Third, it helps the researcher confirm that the questions can be easily understood. Fourth, it verifies all important questions have been asked and Fifth, that the respondents will understood the instructions. Furthermore, Innovation Insights (2006) recommends that a small number of people approximately 5 to 10 handle the pretesting of the questionnaire to handle the pre-testing of the questionnaire, in order to ascertain their understanding and ability to complete it[17].

Prior research evidences has confirmed the advantages of pre-testing questionnaires where it has been carried out (Beekie and McCabe, (2006) and Shambare, Rugimbana and Sithole (2012). These scholars pre-tested their questionnaire with ten undergraduate students to ensure the questions will be correctly interpreted by the target sample as well as the clarity and relevance of the questionnaire for effective data collection.

The current study pre-tested the survey questionnaire with four students at BIU; four students (men 2 and women 2) and DELSU; six students (men 3 and women 3). The reason for the equal gender representation in the pre-test of the questionnaire was to ascertain whether there would be similarity in their understanding and the clarity of the questionnaire content. The questionnaire was administered to the students by the researcher, with time given for completion. The observed findings from the pre-tested questionnaire were as follows: i. All of the students filled out their questionnaire and returned them to the researcher within 15 minutes. ii. The questions were answered with clarity. iii. Their ability to comment on the open-ended questions was excellent as the researcher noted. Giesen, Meertens, Vis-Visschers and Beukenhorst (2012) noted that the performance of a reliable and valid assessment of a questionnaire is required to satisfy two conditions.

Footnote:

[17]Using surveys for data collection in continuous improvement, Publication of the Office Planning and Institutional Assessment, Penn State University, Innovation Insights Series Number

The first is that each respondent must interpret the question in the same way and the second of these each respondent must understand the questions the way the researcher intended. Both groups of respondents participating in the pretesting provided valuable observations and suggestions and my supervisors and these were incorporated in the draft. The revised draft of the questionnaire was again forwarded to my supervisors for approval. This was the basis of the main questionnaire which became the actual instrument for administration.

4.13   Questionnaire Distribution

Data for the study were derived through the equal distribution of the survey questionnaire to the students' participants who comprised 175 males and 175 female students from Delta State University, and 125 males and 125 females from Benson Idahosa University. The surveys were carried out in a face-to-face procedure, with the aid of male and female assistance who were given the requisite training on how to distribute the questionnaires. The reason for the equal rate of distribution was to ensure a representative sample spread of the students, all of whom were self-described users of social media sites and mobile devices whether smartphones or mobile phones with internet connectivity. This helped to determine the overall demographic sample in terms of the usage differential between males and females respondents' social media use for sociality and in the formation of their online social relationships.

4.14   Main Survey Fieldwork

Benson Idahosa University and Delta State University were the main survey community for data collection. The fieldwork took place from 2 June, 2013 to 30 August, 2013.

4.14.1 The Study Sample

Sampling of participants for the study of university students' attitudes towards mobile media and social media use in Delta State University and Benson Idahosa University was by heterogeneous samples. Phrasisombath, (2009) and Etikan, Musa and Alkassim, (2015) describe heterogeneous samples as the selection of participants across broad spectrum of study population in a given inquiry or investigation. For this study, the sample of participants for the questionnaire administration was carried in different faculties/ department of the two study locations.

The rationale for drawing on heterogeneous sample of participants across DELSU and BIU was aimed to achieve comprehensive responses to the research questions as well as reliability

of findings resulting from survey data analysis. Moreover, the ground for the utilization of heterogeneous samples in the thesis has been sum up as follows;

First, Benson Idahosa University was established in 2005 as the first private institution in Benin City, Edo State, Nigeria. It is comprised of seven faculties and a school of postgraduate studies and the student's population numbers over 16, 000, Delta State University was established in 1992 by the Government of Delta State. There are eleven faculties and a school of postgraduate studies, and the student's population is over 35, 000.

Second, the tuition and fees at BIU are quite high and consequently, the students there are mostly children of the affluent while there is more variety in the background of students at DELSU. The fees are generally affordable, including for those in the lower income brackets and as a result, the socio-economic status of the students' parents varies considerably. By orientation, the students in both universities share similar value, interest and lifestyle. This might influence the way they think and use the social media sites.

Third, the students are part of the young generation who are core users of smartphones and subscribers to network service providers for easy access to the internet. The affordable pre-paid modem and subscriptions data plans falls within the scope of the students disposable incomes. Fourth, the collection of large quantities of data from students at both universities was cost effective, efficient and manageable in terms of geographical proximity to the researcher. In addition, the researchers' position as a Lecturer at Delta State University facilitated access to students and served to ease the mobilisation of assistance from Lecturers at BIU to assist in recruiting students for questionnaire administration and retrieval.

4.14.2 Sample Size and Sample Type

Wimmer and Dominick, (2000:93) evaluated a number of reasonable sample sizes that a researcher might consider in the engagement of fieldwork and for statistical possibilities. They rated a sample size of 50 or fewer as very poor, 100 or fewer as poor, 200 as fair, 300-as good, 500- as very good, and 1,000- as excellent. Hansen, Cottle, Negrine and Newbold, (1998:243) acknowledged that for the unfunded researcher, samples sizes would of necessity be considerably smaller and suggested that research students should work within the scope of 100 to 300 respondents' undergraduate and postgraduate students should aim for samples of about 30 upwards.

The present research had a sample size of 600 students divided between those from BIU (250) and those from DELSU (350) and heterogeneous sample by location through which

sample of respondents was selected across the students' population of both universities. The rationale for the two locations for data collection to address the research questions was to ensure representative spread of respondents' answers or opinions in order to achieve predictable findings as well as the possibility for generalisation to be made. The use of a common faculty-based course at different levels helps select respondents for the distribution of survey questionnaires, and this was undertaken in this study.

The response rate for the distributed questionnaire and the final number of actual respondents who completed the questionnaire was observed to be slightly low: 324 students returned completed questionnaire out of 350 distributed in Delta State University and 230 out of 250 distributed at Benson Idahosa University. The shortfall was due to the failure of some students to complete the questionnaire.

4.14.3 Time for Questionnaire Completion

Wimmer and Dominick, (2000:174-175) suggested that the length of a questionnaire influences the ability of respondents to complete it on time., adding that shorter questionnaires have higher completion rates while long questionnaires create the possibility of respondents fatigue. The authors therefore recommended time limits of 60 minutes for the questionnaire to be completed by respondents, whether for self-administered questionnaires in a group situation supervised by a researcher, self-administered mailed 60 minutes or one-on-one interviews.

The current study however, had a time frame for the distribution of the questionnaires to respondents and their completion was 50 minutes. The main reasons for this were that respondents selected were familiar with the usage of social media sites and mobile devices to engage these sites, so it was not expected that they would need much time to think about the answers and the content of the questionnaire was written in English Language, the language of instruction and written expression in universities in Nigeria. Also, the students had prior exposure to a similar survey questionnaire from other postgraduate student researchers who have requested them to fill out their questionnaires.

4.15   Analysis of Data

The questionnaire data were subjected to descriptive statistics through the use of:
Chi-Square test, based on calculations made from the crosstab tables, examines the relationship between two variables, measured on nominal or categorical scales in order to establish whether

the association with each other is statistically significant or not between the study locations and demographic groups (Pallant, 2007, Sarfo and Ansong-Gyimah, 2011). The statistical parameter was evaluated for statistical significance at an alpha value of 0.05..

One-way ANOVA test was applied to test the mean scores of independent variables with three or more groups or conditions (Field, 2005; https://statistics.laerd.com/statistical-guides/one-way-anova-statistical-guide.php Accessed 6 June, 2016)[1] For examples, the mean score for men and women at BIU and for men and women at DELSU relative to the data computed from the questionnaire on research question (see reported data and analysis in Table 6.4.1 and reported data in chapter seven). Outcomes were evaluated for significant difference at 5% level of significance

Data for the usage of social media sites for social relations, total connection in network and the devices used to access social media sites devices were subjected a Pearson chi-square test via crosstabulation procedure to determine whether or not there was a relationship between variables that were set out. (Gravetter & Wallnau, 2005 pp. 465-475). Three null hypotheses were advance to speculate no relationship between the variables being tested and outcomes were evaluated for statistical significance at an alpha value of 0.05 (see Table 7.1a; 7.1b and 7.1c)

In the case of reported data analysis for research question ten, where the results of the One-way ANOVA test shows significant findings for respondents individual resource benefit at BIU and DELSU. Bonferronni test of multiple comparisons was then conducted to ascertain specific resource benefit to students in respective institutions. (see results of specific resource benefit in Table 7.6.2 and 7.6.3 on bonding social relationships for BIU and Table 7.6.4 and Table 7.6.5 for DELSU; Bridging social relationships Table 7.7.2 and Table 7.7.3)

The simple percentages was utilised to compare men and women differences arising from the analysis of data from the questionnaire/independent variables for their percentage values and in which significant result was predicted for gender differences (Hinton,2004, Michael, 2015; http://www.unesco.org/webworld/idams/advguide/Chapt1_3.htm, http://www2.le.ac.uk/offices/ld/resources/numerical-data/percentages) (see discussion on gender differences chapter six; chapter seven and chapter eight section 8.5.1: Gender differences in smart and social media use.

[1.]Footnote:
One-ANOVA
https://statistics.laerd.com/statistical-guides/one-way-anova-statistical-guide.php [Accessed 6 June, 2016]

The work of these scholars were found useful in the statistical procedures and analysis of the respondents data in the thesis (Chan-Olmsted, Cho and Lee, 2013; Yates, Kirby and Lockley, 2015; Elareshi, 2011; Wild, Cant, and Neil, 2014)

4.16   Ethical Considerations

Fouka and Mantzorou (2011: 4) note that ethics deal with the dynamics of decision making concerning what is right and what is wrong. Ethics generally involve the protection of dignity of subjects and the publication of information about a research. Thus, the ethical concern for the study of university students' perceptions and usage of mobile phones in Nigerian society was observed in two stages. The first was prior to conducting the focus group interviews of students at Delta State University and Benson Idahosa University, ethics and code of practice of human relied research of the University of Leicester, United Kingdom was sought and approved. The rationale was due to the nature of the interviews in which the spoken words was the basis of data collection and on which researcher was involve in steering the students to meaning discussion to the questions. The students who participated in the focus group interviews were sufficiently briefed on the nature of the interview questions, aims and objectives. The preservation of anonymity and confidentiality was assured.

This also took cognisance of the suggestion by Wrench et al. (2009: 28) that researchers should ensure that all possible participants of a study are adequately informed about the purpose of the research, the voluntary nature of the research, and the risks and expected benefits that may be associated with participation. The second ethical concern was on the quantitative survey of the research regarding the university students' attitudes toward mobile (smartphones) and social media use, with questionnaire design as a means of data collection.

The importance of ethical concerns in social media research has been expressed by a number of scholars. (Gifkins and Suttor, 2013; Moreno, Natalie and et el, 2013; Henderson and his colleagues, 2014; Hill, 2014, Murphy, Joe et al, 2014; Swatman, 2014). Specifically, Hill (2014) remarked that social media research is an incredibly exciting area of academic inquiry while Gifkins and Suttor, (2013) notes that social media platforms have incredible potential for researchers to conduct studies and recruit survey participants. They went on to emphasise the need for social media researchers to ensure ethical conduct in human research, with cognisance of research merit and integrity, justice, beneficence and respect. Moreover, Natalie et al, (201) and Beninger et al, (2014) point out that that privacy, informed consent, confidentiality and anonymity are critical ethics issues for social media researchers. These principles of social media research practice were valuable to this researcher as well in handling the survey data

collection on the usage behaviour of mobile and social media sites by students at Benson Idahosa University and Delta State University in Nigerian context.

Given the requirement to comply with the University of Leicester ethics and code of practice in human research and the Department of Media and Communication ethics, the researcher ensured respondents were sufficiently the nature of the research as well as its aims and objectives. The questionnaire included a clearly written section for students to read and make up their mind on participation in the research. They were asked to check Yes or No to affirm their willingness or otherwise to participate and in addition, they were informed of their rights to withdraw from participation at any time if so desired. All of the students filled the questionnaire voluntarily. (see the University of Leicester Ethics Approval)

4.17   Conclusion

This chapter examines the process of mixed methods in handling the investigation of the university students' perceptions and usage behaviour of mobile media technologies in Nigerian context and on which qualitative and quantitative directions were sequentially advance to address the research questions on each process. The rationale for drawing on the mixed methods lies on the desire to achieve a more in-depth understanding on why and how the students own and use the mobile phone technologies in their social lives.

The overall goal of mixed methods in this study lies on the following observations and are; First, the value of mixed methods for this study allows for the combination of qualitative focus groups interviews as fact-finding of university students' opinions regarding adoption and use of feature phones with internet connection and quantitative surveys of students' attitudes towards mobile media and social media use for sociality and social capital formation. Both of which involve the interplay of inductive and deductive reasoning in this study. Second, the qualitative design was aimed to address RQ1 to RQ3 with focus group interviews of students at BIU and DELSU for data collection which were subjected to interpretative analysis and themes were identified to understand the student usage patterns of mobile devices. On the other hand, the quantitative design was met to address RQ4 to RQ7 with survey questionnaire as data collection at BIU and DELSU, and on which descriptive statistics was applied to understand the respondents' responses on each questions relative to the statistical outcomes for generalisation. Third, the results of qualitative focus group interviews of students at BIU and DELSU inform the quantitative RQ's development and therefore the foundation of research questions and theoretical advancement in the quantitative aspect of the study on mobile and social media use

for sociality and social capital of social relationships. Fourth, the analysis of data in the study point to different direction of the RQ's; the qualitative focus group data analysis regarding RQ1 to RQ6 was conducted by means of constant comparative method and on which the students opinions in two interview locations: BIU and DELSU on each question were coded by hand and compare to arrive at consensual finding in terms of majority and non majority while the quantitative analysis of the survey data relating to RQ7 to RQ11 was statistically incline for predictable outcomes and generalisation in relation to the study population of the university environment. Fifth, the triangulation of opinions of men and women in the qualitative focus groups data in BIU and DELSU in addressing the research questions indicate the importance of gender in the study of mobile and smart media in Nigeria university communities. Thus, the gender involvement in the study provided good ground to understand the differences between men and women participants in the usage of mobile device and social media. Hesse-Biber, cited in Mertens and Hesse-Biber (2012) emphasise the importance of feminist theoretical lens in mixed methods research that could ensure diversity of opinions in the research to which differences can be identified for positive standing.

Finally, the utilization of mixed methods in the study clearly indicates complimentary relationships of qualitative and quantitative in understanding the university students' orientation towards mobile media technologies and social media usage in a more holistic interpretation and meanings relative to the discursive interpretation of respondents' data to the research questions in thesis: qualitative and quantitative RQs

As Bulsara (2015) explain using mixed methods approach help enhance and validate research implying that the benefit of utilizing the mixed methods in the study of university students' perceptions and usage behaviour of mobile media technologies provided better illumination on how the system technologies were being perceived and used in Nigerian context. Perhaps to link up further with Symonds and Gorard, (2008) remarked and according to the authors the combination of qualitative and quantitative approaches potentially offset the weakness of either approach used by it.

The next chapter examines the analysis of the focus groups data which were derive from the interviews of students at DELSU and BIU.

CHAPTER FIVE

QUALITATIVE ANALYSIS OF FOCUS GROUPS INTERVIEWS DATA: BENSON IDAHOSA UNIVERSITY AND DELTA STATE UNIVERSITY

5.1 Introduction

This chapter deals with the analysis of the focus groups data on the interviews regarding the university students' perceptions and usage behaviour of mobile phone in Nigeria with six research questions being set up to guide the inquiry. These were:

- RQ1: Does the socio-economic status of university students influence their perceptions and ownership of mobile phone?

- RQ2: How do university students use mobile phone applications?

- RQ3: Do the university students believe that the use of mobile phone influences others perceptions of the users class and socio-economic status?

- RQ4: How do university students use mobile phone in Sociality?

- RQ5: Do university students perceptions of mobile phone influences their personal communication and mobility?

- RQ6: How do university students use mobile phone for entertainment consumption?

These RQs was addressed through the focus group dialogue with students in two study locations in Nigeria: Delta State University and Benson Idahosa University and of two group sessions comprising men and women groups that were sampled from different faculties of each University. Each group session at Delta State University had nine men and nine w o m e n participants while those at Benson Idahosa University had seven men and seven women participants. The focus group sessions provided the opportunities for the students' participants to express their opinions on why they owned mobile phone and how they used them. Each discussion session lasted just over ninety minutes. This was because the participants were given time to discuss freely on respective questions they were asked. The data derived from the discussions were organized and presented in a table format to show students descriptive profile as the participants. The use of the table format to draw up the students' descriptive data, and the designation of the individuals' participants as subject or 'S' was influenced by the work of Palen, Sakzman and Youngs, (2000); Reed and Payton, (1997); Debbie, (2006). The organisation of the focus group interviews data and coding was done by hand while the analysis and interpretation involve inductive reasoning, and constant comparison method to arrive at consensual and non consensual responses (see Thomas, 2006; Carter, Thatcher and co-authors, 2011; Zhang and Wildenmult, 2015). This was also aimed to

provide insight to the participants' perceptions and use of mobile phone in the context of Nigerian society.

Table 5.1: Focus Group Interview Participants at Delta State University and Benson Idahosa University: Usage of Landline and Mobile Phone

Subject	Age	Gender	Faculty/Course of Student	Landline Telephone Use and Years	Mobile Phone Ownership and Use
S.1	28	Men	Faculty of Science/ Geology	2	4
S.2	27	Men	Faculty of Education/ Business Education	6	4
S.3	26	Men	Faculty of Law/Law	From childhood	6
S.4	25	Men	Faculty of Science Laboratory /Pharmacology	6	6
S.5	25	Men	Faculty of Arts/Theatre Arts	15	6
S.6	29	Male	Faculty of Social Sciences/Mass Communication	Non-Accessible	6
S.7	24	Men	Faculty of Engineering/Civil Engineering	Non-Accessible	10
S.8	27	Men	Faculty of Health Sciences /Medicine	1	7
S.9	23	Men	Faculty of Applied Sciences/Mathematics	1	5
S.10	24	Women	Faculty of Applied Sciences/Industrial mathematics	3	5
S.11	26	Women	Faculty of Education/Guidance and Counselling	15	6
S.12	22	Women	Faculty of Law/Law	10	7
S.13	25	Women	Faculty of Science Laboratory/Biomedical	11	9
S.14	24	Women	Faculty of Arts/English language	10	10
S.15	25	Women	Faculty of Social Sciences/Mass Communication	Accessibility for years	8
S.16	24	Women	Faculty of Health Sciences /Dentistry	Non accessible	5
S.17	22	Women	Faculty of Pharmacy/Pharmacy	Non accessible	4
S.18	24	Women	Faculty of Agriculture/Agricultural Economics	Short Accessible	7
S.19	27	Men	Faculty of Information & Computer cience/Computer Science	2	5
S.20	25	Men	Faculty of Sciences /Biochemistry	2	8
S.21	26	Men	Faculty of Law /Law	Non accessible	7
S.22	21	Men	Faculty of Social Sciences /Mass Communication	Used, years unspecified	8
S.23	25	Men	Faculty of Education /Mathematics Education	Used, years unspecified	5
S.24	27	Men	Faculty of Agriculture /Agricultural Economics	Used for several years	7-8
S.25	26	Men	Faculty of Arts/International Studies and Diplomacy	8	6
S.26	27	Women	Faculty of Social & Management Sciences/Business Administration	15	10
S.27	26	Women	Faculty of Education/Business Education	Non accessible	8
S.28	20	Women	Faculty of Applied Sciences/Microbiology	Used, years unspecified	8
S.29	20	Women	Faculty of Law/Law	2	9
S.30	23	Women	Faculty of Sciences/Mathematics	Non accessible	6
S.31	20	Women	Faculty of Information & Computer science/ Computer science	Used, years unspecified	5
S.32	25	Women	Faculty of Arts/ English Language	4	6

Note: i. S1-18 denotes individual students in Delta State University Discussion Group
. ii. S19-S32 denotes individual students in Benson Idahosa University Discussion Group
iii. The Group interviews were studio based, audio recorded in Mass Communication Studio of respective Universities.
iv. The recorded respondent opinions were transcribed by a neutral year Four Law student

5.1.1 Analysis of Data: Socio-Economic and Technology Information of Participants

The motivation to undertake the analysis of participants' data on Table 5.1 was inform by the literature on factors influencing perceptions and exposure to mobile phone with age, gender and disposable income, and gender-technology relation as user intervention variables. The addition of technology variable defines participants' exposure to landline telephone and mobile phone since both are component of technological environment of participants in Nigerian society. Moreover, Fiske's (1992) Authority Ranking (AR) sees individuals in society as of differential categories and therefore could influence the way technological experience and usage ability in terms of number of years. For instance, every one of us belongs to different class, age, educational orientation and possesses technology exposure. All of these provide the set up to critically examine the focus group interview data of participants to arrive at the demographic characteristics of participants.

As observe in Table 5.1, the S1 – S32 represent individual participants in the focus groups and of different age categories and educational orientation by faculties. This suggests that the participants are of differing social background, parental affiliation and cultivation of value system in terms of life style and socialization. These social formations could reflect the individuals thinking about technological exposure and ownership. For examples, the number of years of mobile phone ownership and perhaps, to add that those who were expose to landline telephone in terms of usage years could be from affluent home either from middle and upper class suggesting further that the respondents accessible disposable income might play a part in the early ownership of mobile phone and its usage exposure. The findings from the focus group interviews of participants at DELSU and BIU on the question how do you get your mobile phone? and the responses were surprising as they all point to similar comments. The comments cited here are representative

> *S1; my parents bought it for me except S24: who said I bought my mobile phone through money from my upkeep*

The question on how they fund the use of their mobile phone yielded similar majority comments and on which representative opinions are indicated. For examples,

> *S13: money from my parents while S21: said personal savings*

All these comments are positive indication of respondents' accessible disposable income and on which the opportunity to acquire and service their mobile phone was open to them. This observation appears to ally with the views of scholars who pointed to the importance of disposable income as potential means of becoming mobile phone adopters and users (see Koutras, 2006; UK Tschmuck 2013; Nairaland report, 2013).

Furthermore, the designation of the participants as *"S"* individuals helps in the differential position in the presentation of participants profile and for easy constant comparative analysis that could show the gender pattern of technology exposure. For example, DELSU: men-nine and women-nine while BIU: men- seven and women- seven. All of these discourses could serve as pointer to gauge the participants' socio-economic background and technological exposure to mobile ownership and usage experience, and possibly possessing the knowledge to have exceptional views about mobile phone and the way they use the device.

5.1.2   Concluding Remarks

This section dealt with the analysis of participants in the focus group interviews data (see Table 5.1) within the literature set up on factors influencing perceptions and use of mobile phone, gender and technology, and Fiske's (1992) Authority ranking (AR). Arising from the analysis was a number of submissions and are;

First; individual mobile phone users age, educational orientation by faculties, and differential parental background were determinants of social status of respondents. Second; individual users accessible disposable income for expendability on mobile phone in terms of ownership and usable funding were tied to parental commitment through provision of allowance for upkeep. This was link to class status of respondents. Third; individual users' adoption of mobile phone and usage experience in terms of number of years represent gender-technology relationship of participants and in which mobile phone was the core of men and women users of the system technology.

In sum, these submissions provide the basis to understand participants' demographic information to which future trends of mobile phone ownership, usage experience relative to disposable income and exposure mobile phone and adoption could be predicted in a larger university student's community in Nigerian society and this might equally influence the researcher thoughts on mapping demographic information of mobile users the next stage of this research.

The next section discusses the perceptions of mobile phone ownership and the decisions to own the device.

5:2   Perceptions of Mobile Phone Ownership and Decisions to Own the Device

The RQ1 on why do university students own mobile phone? was influence by the literature on mobile phone and society. The finding of the focus group interviews of students at BIU and DELSU necessitated the issue of perceptions of mobile phone ownership on which the participants was asked whether they own mobile phone. This was aimed to unravel their opinions on the device that has transformed the social landscape of Nigerian society. The comments from the participants point to differences in mobile device ownerships. First; majority of the participants had mobile phone with internet connection and Second, few of the participants with smartphone with internet facility among other applications. These results therefore produce two forms of mobile devices among the students groups interviewed; feature phone with internet connection (see Fig. 3.1) and smartphone with advance technological protocol and applications including the internet (see Fig. 3,2). The participants' possession of mobile devices with internet connectivity shows the importance of the internet. Perhaps to argue that this may have possibly influence participants comments and on which selective representations are indicated

> *S13: To get easy access to the internet is what made me to have my*
> *kind of phone and S20: To access the internet and social networking*

These comments demonstrate the significance of internet to the student participants in the focus groups and scholars like Rosen, (2008) and Pew Research Center, (2011) who found that the internet connectivity in mobile device was vital to college students (undergraduate and graduate) in different societies.

Furthermore, the participants were again asked what inform their decisions to obtain mobile phone. This was informed from the literature review, which portrays the device as a critical medium in society, and for which the concerns for social connectivity were obvious. Mobile phone provides opportunity for those who have never had internet access or enjoyed the service delivery of a landline telephone. The word connectivity implies that using a mobile wireless communication gadget to meet one's desired communication needs and for self-satisfaction. For students at BIU and DELSU, connectivity could means different thing to them depending on the line of thought in their comments regarding decision to own mobile phone. As some of the respondents commented:

> *S2: to reach out to friends, family and loved ones*

and S28: said to communicate and stay connected.

This finding suggests the influence of mobile phone to the students' communication relations both on campus and off campus. This observation was similar to Utulu and Emmanuel, (2010) and Oyewole, (2014) who noted communication as motivation for possessing mobile phone. Moreover, a few opinions were detected on the importance of mobile phone as a mean to access social network. This was again evident in some comments;

> *S4: explain I own mobile phone for social networking*
> *and S13: comment to engage social networking for*
> *friendship connections*

These findings portray the relations of mobile phone and social networking which also indicate the participants' aspiration to belong to a wider social network and promote good image of themselves for others. This appears to reinvigorate McClatchy, (2006) explanation that students used mobile services to develop sense of belonging and maintain good image with their peers.

Significant to bring up was what appears to be peer group influence on participants' interest to have mobile phone and this was obvious in one of the respondent opinion and it state;

> *S15: yes because nowadays if you don't have a*
> *phone you feel left out*

A reflection on this opinion revealed the significance of peer group interaction on campus environment and on face to face regularly. The possibility that those with mobile phone might be physically showing off their system device for non users to see and move to acquire their own. Moreover, the physical design and features of mobile device might provide attraction for non users to make up their mind for acquisition. This argument appears to tie up with Tucker, (2011) observations that in addition to the media of communication, friends and family members were motivations for the respondents' decision to purchase mobile phone.

These thought on the relationship of connectivity to mobile phone ownership, suggest further that mobile phone user may have a different interest on which to base their decision to acquire the device. However, this is by no means conclusive as a broader representation of opinions through larger university student population would be required to unveil further influential decisions in the process of mobile phone acquisition.

The main point to consider here is, why people opt for the device and how they use it in order to derive satisfaction and make sense of the system usage. Besides, the power of internet connectivity in the system feature has enhanced its usage capacity, serving different needs and functions for users in society. As one of the respondent puts it;

> *S28: internet has made it easier for me to surf for*
> *information and materials to follow-up my lectures.*

This comment unveil the value of internet in mobile phone to the students, perhaps to argue further that internet facility could be another influential factor for decision to acquire the device. This observation was similar to Utulu and Emmanuela, (2010) position that student's reason for using mobile phone lies on the need to browse the internet and obtain information.

5.2.1   Concluding Remarks

This section examined the mobile phone ownership and decisions to obtain the device, and the responses from the focus group participants revealed different lines of thought. First; most respondents had mobile phone with internet connection and smartphone by a few respondents which was more expensive to procure. However, the internet connectivity in both devices shows its value to the respondents. Second; connectivity via communication relations with family members, friends and loved ones; accessibility to the internet and social networking as well as peer group influence were major expressions in decisions to obtain mobile phone. In sum, mobile phone has become the most cherish object to respondents with varied interest and decision for its adoption.

Theme 1: Mobile phone with internet facility was mostly common with students in DELSU and BIU and only few had smartphone. The latter was more surprising because of the expensive nature of the device with more usable features and of computer driven platform.

Theme 2: Connectivity via communication relations, internet and social networking and peer group influence as major factors of influence in decisions to obtain mobile phone.

The next discussion explores the issue of how respondents use mobile phone in terms of applications and sociality beginning with the usage applications of mobile phone.

5.3   Perceptions of Mobile Phone Usage Applications

RQ2: How do respondents use the applications in mobile phone?

The literature relating to the reasons for the use of mobile phone provides the thought to explore this issue and mobile phone as a new technological gadget in society is serving diverse interest and functions for users and therefore the need to find out more of what it does for users becomes crucial for investigation. According to Omotayo et al, (2008) mobile phones usage refers to any application of the device as a tool including talking, text messaging, game playing or sheer accessibility of the instrument. Similarly, Zulkefly and Baharudin, (2009) remarked today mobile phone are equipped with other features that allow further communication such as Short Message Service: SMS; MP3 (MPEG-1 Audio Layer 3) player; games; internet and videos (see also Banjo, Hu and Sandar, 2008). Thus, the students were asked about the usage applications of mobile phone relative to the system benefits to them. This extends the reviewed literature that emphasised the benefits of mobile phone in different forms and functions. An analysis of all responses expressed by the participants showed that there were variations in the usage patterns. There was however majority opinions regarding musical application as preferred usage interest and the MP3 player for listening to music and sound production was also mentioned as additional entertainment preference especially to cushion the effect of power failure in the hostel. Representative comments are therefore cited;

> *S11: I listen to music on my phone as entertainment when in bored and also because I love music and S23 comment Yes, listening to music on my mobile phone gives me inspiration and helps keeps me going*

These findings demonstrate the uniqueness of entertainment to the students' social life and social activities, serving also as extracurricular affairs. This finding affirm the notion of Nurullah, (2009); Furlonga and Cartnel, (2007) that mobile phone are becoming entertainment medium for users social life through which relaxation and fun can be fulfilled.

Additional finding on the opinions of the participant lies on what the researcher refers to as interwoven utility in mobile phone applications as majority of the respondents found calculator application particularly useful and a few respondents, however, indicated that they used the clock, alarm, calendar, to do list, recording feature and reminders. These were specific to the individual respondent usage need. Representing the views of the respondents are the following comments, which sums up their opinion on the use of clock, alarm and calculator.

> *S19: says the clock is used in setting alarms and it serves as a*

> *kind of reminder while calculator helps me to solve*
> *mathematical problems*

The respondents 'opinion signals the value of mobile phone to them and as technical device known to be serving as time management and self organising entity. This indicates that the usage of these features could be serving as a substitute for conventional clock/alarm and calculator. Closely connected to this analysis are the work of Culvin, (2005); Baron and Ling, (2008); Walsh, White and Young, (2008) Simay, (2009) who explains that clock, alarms and calculator are important features in mobile phone use and as time management and self organisational entity. Equally, Ling and Yuri (2002) micro coordination of mobile phone utilization reinforce the findings of respondents' mobile usage features.

Furthermore, respondents' opinions on the significance of social network sites were detected and majority opinions were obvious indication. Some representative comments are drawn and it states;

> *S1 yes, my mobile phone helps me in social networking and*
> *facebook is the most favourable site and S26 comment I use*
> *phone for social networking*

These comments demonstrate the usefulness of social networking sites in mobile phone usage implying also that students' cherishes mobile device as platform for sociability. This further resonate Mc Clatchy, (2006) views that students usage of mobile device help them develop a sense of belonging and maintain good image. Furthermore, social networking sites have become virtual communities for users to tell others what they are via posting their profile, visual image of themselves and instant messages to circle of friends network are reflection of online personal behaviour which conform even more closely to Goffman's idea of everyday life than our everyday life does.

5.3.1 Concluding Remarks

This section discussed RQ2 on the usage applications of mobile phone in which the responses from the focus group interviews were the basis of analysis and in the context of literature review. Findings indicate entertainment functionality of mobile phone to the participants' social life and social networking sites as a platform for social connection and self presentation. Equally revealed was the utility benefit of mobile phone through the use of clock, alarms, and calculator. All of which are the basis of students' self organising behaviour and time management.

Theme 3: mobile phones applications in different functional capacity with musical

entertainment, self- organization and time management and social networking for self presentation were valuable features to users. This raises the issue of whether mobile phone could be regarded as a personal assistant entity. Influencing the researchers' thought on this issue are the work of Kendrick, (2012), Glau, (2011) and Stald, (2008). These authors regard mobile device as personal utility or personal log. In the words of Stald All my stuff is on my phone-functions like a diary that saves experiences, memories, thoughts or moments in a visual and textual form.

The next discussion examines how the university students class and socio-economic status influences their perceptions of mobile phone

5.4: Perceptions of Mobile Phone: Influences of Users Class and Socio-Economic Status

The concern for mobile phone becoming an extension of users class and identity projection has drew the attention of scholars (Campbell, 2005; Katz and Sugiyama, 2005; Campbell and Park, 2008; Yuan, 2012) and on which the *RQ3 do respondents believe that the use of mobile phone influences others perceptions of the users class and socio-economic status?* was put forward to assess respondents' opinions. The literature on social relations and identity projection provided the ground to pursue this issue and the responses from the focus groups provide useful indication on the relations of mobile phone and identity performance, and their comments reflect on mobile phone as a fashion accessory. Assessing the 'why' aspect of their opinion, reference to selective comments yields some insight into their thoughts on this issue. For inst*a*nce,

> *S5: said yes because nowadays phones are used to complement dressing while S28: indicate I see my phone as fashion gadget because it is expensive and it gives me a certain identity*

On the issue on whether they see their mobile phone as an indicator of status and pride, the opinions of the participants offer useful insight into their thoughts. In the words of few respondents:

> *S13: Yes because when you are using an expensive phone, you belong to certain class of people and it also [shows] your identity in the midst of the peer group. As S15: puts it' Yes, to an extent, because my phone is expensive and I can shows-case it to the world.*

Reflection on these comments shows that the words *class, expensive, complement dressing and show case it to the world* used in connection with their phone demonstrates the power of the device as a physical object with expressive meaning and symbolic value to users. The users' display of mobile device connote Goffman claim of self expression and of good impression in

the eyes of others, implying that the notion of mobile phone as fashion and status device is relevant to establish, depicting further the connotation of aesthetic value or the iconic appearance of mobile phone as being fashionable and wearable by users (see Fortunali, 2004; Katz and Sugiyama, 2005; Boyd, 2007:12; Campbell, 2008). This implies that the nature of the system device, reference to mobile phone use by the students help define their identity in terms of projecting themselves in the presence of their peer groups and perhaps helps to launch them into virtual society. Drawing on Boyd's (P.12) statement, the choice of mobile phone as an expensive entity could be seen as extending their body with digital make up that could provide fundamental information about them. Thus, the individual's mobile phone use could serve as markers that allow others to know who they are and what they are, arguing further that the connection of socio-economic status of the respondents was critical to spot out, reference to 5.1.1 on socio-Technology information of respondents in socio-economic and technology evidence were feasible. This connection again link back to the comment made by a discussant:

S18: my phone is expensive and it gives me certain class.

This comment in relations to those cited earlier clearly indicates the connection of socioeconomic status of the respondents' mobile phone ownership and identity projection. Furthermore, Campbell and Park (2008) and ITU (2004) views that mobile phone has become a status symbol and a form of identity for youth in society provide support for the respondents opinions on mobile phone and users class and socio-economic status.

5.4.1 Concluding Remarks

This section dealt with RQ3 do respondents believe that the use of mobile phone influences others perceptions of the users class and socio-economic status? and it was addressed within the content of literature and on which responses from focus group participants at DELSU and BIU yielded inspiring comments bordering on mobile phone as a fashion device and status. Further, most respondents point to the expensive nature of the device they possess which could tell more of their class status, and identity in the eyes of other users and peer group.

Theme 4: Socio-economic status of respondents influence users perceptions of mobile phone
The next discussion examines the issue of mobile phone and user sociality.

5.5. Perceptions of Mobile Phone Use in Sociality

Earlier in the literature, Fiske's (1992) paradigms of sociality emphasise the importance of communal sharing and on which its principle lies on the idea that social relationships in society is about people or group of people with common interest, shared values and sense of unity and intimacy, and that solidarity and kindness to each other constitute the basis of relationships. Further, Palen, Salzman and Youngs, (2000) remarked that the usage of mobile phone is influenced by the social contexts and lifestyle of users. Thus how mobile phone is influencing the university students' sociality was pursued, starting with friendship and on which the literature about social relations and identity; relations of Goffman and social interaction relative to mobile phone use provide the thoughts to follow up this issue and opinions from focus group participants at BIU and DELSU was aimed to find out respondents views, with friendships and sense of self identity performance as the main focus of exploring the respondents feelings. The discussion therefore begins with friendship.

5.5.1 Friendship

The findings derived from the respondents' comment on mobile phone and social life show that the aspect of friendship was important to them. The majority of the respondents affirmed the uniqueness of mobile phone in building friendship. The comments of participants were therefore cited;

> *S13: said it has given me the opportunities to make new friends as well as connected me to friends and family members I don't see regularly while S26: comment communication with friends and social relations has been enhanced*

These opinions are reflection of the usefulness of mobile phone in participants' friendship building in sociality. Further support on this submission was drawn from the work of Green and Singleton, (2009) who assert that mobile phone plays decisive role in the cultivation of friendship and that young people are at the heart of the system usage which enables them to stay in touch with friends both locally and globally. Shklovski, Krant and Cummings, (2008) refer to friendships as voluntary relationships based on equality.

The next issue that emerge from the focus group interviews at DELSU and BIU was the relations of mobile phone in forging sense of self and identity performance and on which respondents opinions was unique to follow up the discussion.

5.5.2 Sense of Self and Identity Performance

Participants' opinions on the role of mobile phone in promoting sense of self were crucial to indicate and social networking sites as a platform for social relations and identity formation was mostly expressed. Some comments are representative;

> *S14: my social relations has improved through interaction on social networking sites and S26: said mobile phone has me connected to new friends in far-away country through social networking sites*

These opinions are fundamental to show the virtual life of the focus group participants has enhance beyond the traditional face to face interactive relations for which the value of social networking sites exemplify the sense of self and the advancement of social identity. This observation reinvent Goffman supposition that social life is a stage in which social relations is driven by exchange of actions, reactions and social connections, with social networking sites acting as a platform in virtual arena. (see Zhao, Salehi et al, 2013).

5.5.3 Concluding Remarks

This section explored the relations of mobile phone and sociality within the context of Fiske's communal sharing, the literature on social relations and identity performance and Goffman's social interaction with mobile phone as a presentation of self in sociality. Findings from focus group participants show that mobile phone has provided platform for friendship development and maintenance (see Green and Singleton, 2009; Shklovski, Krant and Cummings, 2008). Further findings from the respondents' opinions on sense of self and identity performance revealed varied comments with the social networking sites being noted for facilitating social relations and friendship connections. All of these findings demonstrate the role of mobile phone in sociality and social relationships of mobile users in virtual society.

Theme 5: Mobile phone use inspire user sociality with social networking sites as productive platform for connectivity, social relations and identity performance

The next discussion examines the issue of mobility and communication behaviour of participants with their mobile phone. This was aimed to unfold how they use their device in the wider social context. This extends the analysis of focus group data of participants' opinions on the issue.

5.6: Mobility and Communication Behaviour

> *At this modern edge of technology the "Communication" is so prominent factor to connect with each others and this process become robust due to the invention of modern communication devices Source: Raskoff, (2008)*

This statement denotes the importance of mobile phone in mobility and communication behaviour of users and in which the RQ5 Do respondents' perceptions of mobile phone use influences user personal communication behaviour and mobility? was informed. The term 'mobility' in this study implies public and private use of mobile phone in spacial setting moderated by interactive status of users. The literature on personal communication and mobility provide the thought to follow up and on which Fiske's Equality Matching (EM) in sociality was connected. The principle behind EM relationship lies on the fact that people construct relations on the basis of sameness of emotion, affection and communication behaviour using varieties of communication channel.

In response to the RQ5 earlier stated there were variations in respondents' opinions which were examine within public and private contextual mobility of respondents personal communication behaviour. The public contextual mobility of mobile phone use drew significant opinions and most of the respondents reported the usage of the system device everywhere. Selected comments provide useful illumination and some of these comments are therefore cited;

> *S4: I use my phone everywhere so I can reach others and be reached and S28: said I use my phone everywhere because important information comes in anytime*

These comments demonstrate the flexibility or convenience of the system device to the participants. Perhaps to argue that Watsh, White and Young, (2008) supposition that the strength of mobile phone lies on convenience and ease of contact with others, time and location notwithstanding. Moreover, the views of a few respondents specifically indicate the use of mobile phone anywhere in cases of emergency.

> *S16: my phone is always with me because anything may happen when going to the hostel at night S29: I keep my phone with me all the time because of recent attack on campus, it was mobile phone call that led to quick intervention*

These opinions appears to reinvigorate the linkage the between mobile phone use and personal safety (Nasarand Wener, (2007). As the Pew Internet and American Life Project, (2010) reported majority of young people use their mobile phone for safety, security and ease

119

of communication in crisis situation. Oksman, (2006; 2010) note that safety and security as mostly connected to mobile phone use by young people in Finnish Information society which was also conceptualised as micro-coordination.

Regarding private contextual mobility with respect to family context, voice calls were another important link to mobile phone usage. Ishii (P.348) referred to family context as one in which mobile phone are used by young people to maintain or manage their privacy and to keep in touch with parents or maintain their social networks outside of parental supervision. Young people in this context include students who often communicate with their parents while on campus through their mobile phone.

The question of how they would take calls if they are physically around their parents and siblings was subjected to inquiry. This extended the discourse in the reviewed literature. The responses from the participants show their willingness to take calls in the presence of their parents as observed in the majority opinions. The following comment provides insight into their opinion:

> *S9: I will excuse myself and answer the call as a sign of respect*
> *S29: comment I will excuse myself and answer the call when*
> *around my parents*

These expressions indicate obvious example of decision-making and control behaviour which can be viewed as a resemblance to disruption of hegemony; the idea that the person looked at the caller ID before answering the call (Humphrey, 2005).

Another important issue that exemplified the connective use of mobile phone in the classroom environment was prompted by the work of Campbell, (2008). This was the question of whether the respondents would receive calls when lecture is going on and what their reaction would be if their phone rang and the responses relate to majority opinions which was not to answer. As one student said:

> *S20: I will ignore the call or switch off the phone.*

This expression can be linked to decision-making in which to response to caller or otherwise appear to ally with maintenance of hegemony, the notion of a person calling and receiver decision to answer citing classroom as an example where phone users switched off their device (see Humphrey, 2005).

5.6.1   Text Messages and Contextual Reactions

The term contextual reaction is used here to explain mobile phone user reaction to text messages. This implies that the individual has the option to read and respond to text messages either in public or private. This brings to the fore what Yang et al, (2011) described as relative freedom from the constraints of interaction as human actions are essentially situated within a particular context.

Building on this line of thought, the issue of whether to read text messages in the presence of others and respond instantly was posed to the study participants. The majority of the respondents indicated that they would immediately read their text message and some opinions were representative

> *S16: Yes, I will text back instantly*
> *S26: comment Yes because it's convenient*

These expressions highlight crucial observations and are; texting back instantly which implies decision based on the spur of the moment and reaction to texter due convenience of decision driven by the flexibility of mobile phone usage. Yang et al referred to this as the time context in human involvement with the world. The authors went on to posit that mobile phone enable people to exchange information fast and save time as well as communicate with people while doing something else. This appear to coincide with Humphrey's (2005) caller hegemony in which texter send messages (action) and texting back (receiver action) provide useful illustration of contextual reactions to text messages.

5.6.2   Concluding Remarks

The section looked at RQ5 Do respondents' perceptions of mobile phone use influences user personal communication behaviour and mobility? and explore in the context of previous studies on the relations of mobile phone, personal communication behaviour and mobility, and Fiske's (1992) Equally matching (EM) to throw more light on mobile phone users relation with others in terms of similarity of affection, emotion and interactive communication behaviour. Findings relating to mobile phone use and user communication behaviour, and mobility of interaction unfold respondents calling and texting behaviour which most often require decision-making and

control process with Humphrey's conceptual framework of hegemony being useful in drawing inferences in the interpretations of respondents' expressions. Furthermore, Puro (2004) argument that mobile phone has engender privatization of public and private spaces in social interaction is relevant to suggest again that people's behaviour in communication interaction appear to represents dilemma in terms of closeness and openness in a mobile phone usage engagement and of social efficiency relative to the norms and rules of interaction. This implies the culture of mobile phone users may influence the usage of their device in public and private spaces.

Theme 6: Mobile phone use for mobility of communication with public and private spaces as social practice. The next section examines the entertainment usage behaviour of mobile phone.

5.7 Entertainment Behaviour

To investigate the relation of mobile phone and entertainment, the RQ6 how do university students use mobile phone for entertainment consumption? was raised. This question was derived from the discussion on the entertainment potentialities of mobile phone relative to the literature review. Kreutzer, (2008) notes that the importance of mobile phone features other than for communication, has been rising extremely rapidly and that all new phones produced today have the ability to play music, take pictures or record videos and play games. The responses to the research question revealed a number of respondents entertainment interest and functions and on which music and chatting was the main preference.

The opinions of the respondents on musical entertainment was overwhelming and the reasons for using this form of entertainment are cited to shed more light. For instance,

> *S8: I use music application on my phone because I am a music freak and*
> *listening to music makes me happy while S25: commented i play music*
> *on my phone to feel relaxed, cheerful and get entertained and S30: said*
> *videos are important to me on my phone because whenever I watch them*
> *I feel happy and it makes me laugh*

These opinions signified the importance of entertainment to the respondents and as young generation born into the world of entertainment with mobile devices opening up wider access to musical artists and downloading. Earlier studies have shown the importance of mobile content entertainment of young people with listening to music, watching videos, watching mobile television being identified as entertainment platform for relaxation, fun, pleasantries and share jokes among others. (Nurullah, 2009, Furlong and Cartmel, 2007).

Similarly, games were mentioned as another choice of participants' entertainment interest and

few opinions were representative. For examples,

S23: said I play games on my phone to keeps me busy
and S23: says I play games brings out the creativity in
me and help keeps me relaxed

These opinions extend the entertainment functionalities of mobile phone to users suggesting that the study participants are exploiting the benefit of their device for entertainment functions. As Sathalingam and Devi, (2011) and Kreutzer, (200) explains games has become entertainment component of mobile phone, serving vital interests and needs for mobile phone users in society.

Finding on mobile phone use by participants in focus group discussion further revealed chatting as another important student's social life suggesting that chatting to students was a form of gap filler and as stimulative mood. Few comments are therefore cited to underscore the importance of chatting and one participant comment;

S21: chatting on my phone is to ease boredom and laugh

This opinion amplifies the usefulness of mobile device-chatting relationships. Earlier study by Grinter and Eldridge, (2001) reported chatting and gossiping as part of students social lives. All of these avenues of entertainment constitute the basis of students' social activities and on which stress reduction strategies could be informed. Boyd, (2007:4) expression of music as a cultural glue among the youth affirms the relevance of entertainment to young people.

5.7.1   Concluding Remarks

The RQ6 on how university students use mobile phone for entertainment consumption was the focus of this section on which the literature on entertainment behaviour influence the inquiry. Findings from the focus groups participants revealed a number of entertainment variables suggesting that the respondents have different ways of meeting their entertainment needs through their mobile phone and of functionalities as evidence from their expressions

Theme 6: Mobile phone use for entertainment consumption and functionalities

5.8 Relationship of Social Construction of Technology Theory to the University Students Perceptions and Use of Mobile Phone

Bray, (2007) argue that technology is socially constructed and the need for social constructivist approach is necessary in order to understand the thoughts and usage value which underline the potentials of the technology for users. (see also Campbell and Russo, 2003).

The emergence of mobile phone is widely regarded as a new technological platform in today's society and has become a major component of our daily life, and on which its role in the lives of university students in Nigerian society is equally valuable to establish. What the students thinks about mobile technology and how they use it in their daily lives has been subject of inquiry, for which the social construction of technology (SCOT) was conceive in order to achieve a better understanding of the students perceptions about the system device (see Bijker, 1992; 2001). The SCOT is all about mind probing and of subjective opinions on issue based on user socio-cultural environment.

The relation of mobile phone (feature phone) in the study was derived from three levels of perceptual field. The first of these was the interpretative flexibility in which the findings from the focus group interviews of university students at BIU and DELSU on their opinions and usage of mobile phone was a reflection of individual students' interpretations on what the system device means to them, relative to its values as an object of domestication. The students' opinions on mobile phone help provide a clear focus on various aspects of usage applications (different expressive opinions of the students on their mobile phone ownership and usage behaviour).

The students who are part of a larger society constitute specific social group of people comprising men and women who grow up in their own unique way in terms of socialisation and social class affiliation. The students as social group are one of the main principles of SCOT and are linked to socio-economic status (parental), cultural environment and lifestyle. Thus, the students studied at BIU and DELSU are generation of social group with educational orientation and lifestyle, and whose ability to access and use mobile phone could be influence by the environment under which the system technological devices thrive. Furthermore, Fiske's Authority Ranking (AR) reinforce the students as specific class of individual men and women offering opinions about their mobile phone ownership and usability, suggesting the connotation of interpretative variation of expressive feeling on their system gadget.

The students' evaluation of mobile phone, as an object of domestication and pride, helps unfold their values and meanings which underline the system potentials and benefits in society. The students' perceptions of their mobile device were obvious to establish in the focus groups discourse at BIU and DELSU and the findings were evident through a number of benefits arising from the device usage (see chapter five of the thesis).

Moreover, the findings of the students' opinions on the usage value of the device, reported in italics, are indications of the students' ability to construct the system technology based on their knowledge, sociality and societal norms. SCOT's principles did underline the socio-cultural context under which technology is use influences the way people sees it, implying that the students view mobile phone from the perspective of their own society and of cultural orientation. As Campbell and Russo, (2003, 2007); Luyt, Zainal, et al, (2008) explain people shape technological usage by way of personal expressions and interpretations suggesting that their usage ability and educational orientation might have played a part in viewing their device and relating symbolic meanings.

The overall benefit of SCOT in this chapter is sum up as follows; First, that students opinions on mobile phone was known through the focus group interviews at BIU and DELSU and were documented for further scrutiny and understanding of students usage patterns and functions. The outcomes of the focus group discourse are evidence in relation to identifiable issues that were discussed earlier in the chapter. Second, the students' opinions in relation to the focus group interviews analysis uncover the area of usage patterns and on which the themes were laid out for further exploration on smart and social media sites. (see section 5.10 for the themes set up). Third, the students are social group and of individual generation with socio-economic class (parents) and cultural orientation and value system whose interpretations of mobile phone is subjective and inductive. Fourth, the use of SCOT help influence the focus group interviews approach in students' opinions exploration on mobile phone, in which the themes derive help nurture the design and development of the survey questionnaire for the second phase of the research. This was main methodology in the thesis.

5.9   Conclusion

The findings from the analysis of the focus groups interviews regarding the usage perceptions of mobile phone were presented in this chapter. The data revealed that the individual experience and interpretations of mobile phone utilization carry symbolic meanings which were apparent in the students' responses to questions that were designed to get their opinions.

The conclusion from the focus groups discourse at DELSU and BIU suggest that the respondents were all keen on internet enabled mobile device and a few of them were users of advanced smart media device known as smartphone.

Furthermore, the value of mobile phone to the students cut across wide range of usage functions; from connectivity, friendship building, status and identity enhancement, personal communication and mobility of use to entertainment derivation. All of these are the 'cost benefits' of mobile phone adoption and usage behaviour in today's virtual society to which the principle behind Fiske's Market Pricing (MP) has been connected and as critical determinant for the assessment of mobile phone users' identification with the device, and as material object and commodity possessive of pricing affordability and purchasing ability.

The uniqueness of mobile phone as a device of personal communication and of mobility in public and private has enhance the interactional relations of users through exchange of messages via calls and texting, and relationships based on emotion, affection and mutual connection and Fiske's Equally Matching (EM) was supportive of this observation.

The significance of social construction of technology theory (SCOT) and Fiske's principles in the understanding of the students' perceptions and use of mobile phone was obvious to establish and against the notion that the students are social group in society with different interpretative dimensions and attribute of meanings to the system device as well as usage lifestyle.

This study, however, was exploratory and themes generated from the focus groups analysis provide ground to undertake deeper inquiry on the themes set up and outline as follows;

5.10   Themes from the Focus group Interviews Analysis

There were a number of themes which was identified from the analysis of focus group interviews data at BIU and DELSU, and are listed as follows;

1. Ownership of mobile phone with internet connection and smartphone ownership by few respondents.
2. Connectivity and peer group influence was the most tenable decisions for mobile phone adoption
3. Mobile phone use in multiple ways and functionalities to users' interest and needs.
4. Socio-economic status of users influences how they view their mobile device relative to the meaning they attribute to the system usage.

5. Mobile phone use as facilitator of sociality and social networking sites as platform for connectivity, sense of self and identity performance.
6. Mobile phone use in facilitating personal communication with mobility of interaction in public and private spaces based on users decisions and control.
7. Mobile phone as medium for user entertainment consumption and functionalities.

This chapter conclude with argument that the themes are inspiring for further inquiry as smartphone technology was important to some of the respondents and for better understanding on why its adoption and use is desirable in order to unravel its usage potentials and functions to the students in a wider university population. The literature review on smartphone and society has been set up along with other themes which have been established from the focus groups interviews analysis.

The next chapter explore the relations of smartphone and users attitudes towards the system technology with students at BIU and DELSU as a focus of investigation. It is important to indicate that the use of smartphones will denote smart media in the study from now on.

CHAPTER SIX

UNIVERSITY STUDENTS ATTITUDES TOWARDS SMART MEDIA

6.1   Introduction

The aim of this chapter is to examine data on the University students' attitudes towards smart media in which three research questions were projected for investigation and are RQ7: Does the socio-economic orientation of the university students influences access to smart media?, RQ8 Why do university students own smart media, with what usage experience? The word *smart media* denote *smartphone*, multimedia technology that has change the communication and social fabric of today's digital network society.(see Castells, 2005)

In order to address these questions, a survey of 600 students, both undergraduate and postgraduate in two study locations: BIU and DELSU were carried out through self-completed questionnaire via heterogeneous sampling procedure and the responses were run on crosstabulation of the data collected on each issue and subjected to descriptive statistics using Chi-square test and the simple percentages. The used of chi-square statistics helped determine whether there were significant d i f f e r e n c e s in the smart media usage behaviour between students from the two study locations while the percentage helps shed light on differences between men and women students' usage. The reason for undertaking these analyses was to attain an understanding on how university students used mobile media technologies as a new form of technological gadget in their midst. Besides, the findings are discussed within the framework of Fiske's (1999) paradigm of sociality and with reference to the opinions expressed by the students who participated in the focus group interviews. These yield a more in-depth understanding of the relationship between smart media and society. The first issues to examined is the reason university students own smart media. The overall focus of this chapter lies on its deductive nature in which statistical findings and language of discourse reflect descriptive evaluations (see Soiferman, (2010); http://www.socialresearchmethods. net/kb/dedind.php [Accessed 12 August, 2015].

The next section examines the research questions beginning from RQ5.

6.2   Results

RQ7.   Does the socio-economic orientation of the university students' influences access to smart media?

Earlier in the literature, the relations of age, education, class, income, gender, skills and competencies have been discussed as critical intervention for access to new media, and on

which usage time and frequency, number and diversity of usage applications were given as indicator of usage access in new media. (see Van Deursen and Van Dijik, (2015). Thus, the study of university students' attitudes towards smart media is examined in the context of the discursive set up. The rationale for this investigation is to know whether socio-economic inclination of the university students influence their access to smart media as well as whether skills and competencies to exploit the usage potentialities of the system technology yield benefits to them. The smart media possesses vast usable applications and of computerisation architecture and expensive to acquire in terms of market sales. This part of the research question therefore examine relationships between smart media as dependent variable and socio-economic orientation of the university students as the independent variables (measures in terms of age, year of study, family status (upper, middle and lower) and family income per month). The simple percentages were applied in this regard to unfold respondents' differentials in terms of gender variations in access-smart media relationships.

Table 6.1 summarised the results on access to smart media by age and gender

Table 6.1: Access to Smart Media by Age and Gender

Categories	Benson Idahosa University			Delta State University		
	GENDER			**GENDER**		
	Men	Women	Total	Men	Women	Total
18 – 20 years	25 (9.2%)	32 (11.8%)	57 (29.9%)	41 (15.1%)	28 (10.3%)	69 (21.3%)
21 – 25	62 (22.8%)	73 (26.8%)	135 (61.4%)	82 (30.1%)	106 (39.0%)	188 (58%)
26 – 30	20 (7.4%)	5 (1.8%)	25 (11.3%)	23 (8.1%)	22 (8.1%)	45 (13.9%)
Above 30 years	3 (1.1%)	0 (3%)	3 (1.4%)	16 (3.9%)	6 (2.8%)	22 (6.8%)
Total Count Percentage	110 (40.4%)	110 (40.4%)	220 (100)	162 (59.6%)	162 (59.6%)	324 (100)

Table 6.1 shows there were variations in respondents' age between men and women in BIU and DELSU. However, majority of these respondents were between the ages of 21 to 25 in both universities. This implies the most prominent age group with strong motivation access to smart media in terms of ownership of the device. This result was expected because of earlier research on smart media adoption which point to similar age group as the early adopters of smart media device (see Korst and Sleijpen, 2014)

6.2.1: Gender Differences by Age

There were gender differences in the categories of age groups in the perceived access to smart media. One exception was the age of 21-25 and on which in BIU women (73 (26.8%) are more likely than men (62 (22.8%) to have access to smart media while in DELSU. the women (39.0%) are more likely than men (30/1%) to have access to social media device. These findings is consistent with previous research done by the UK Mobile Insight Report, (2013)

who reported that, 58% of the women owned smart media device compared to 42% men. The finding of the current study was quite surprising because, in Nigerian universities young women are more in numerical strength in terms of population in all the faculties and departments than the men and therefore, the likelihood of active appropriation of smart media and use

Table 6.2: Access to Smart Media by Year of Study and Institutions

Categories	BIU	DELSU	
Year of study			Total Count
Year 1	30 (13.6%)	46 (14.2%)	76
Year 2	46 (20.9%)	54 (16.9%)	100
Year 3	44 (20.0%)	64 (19.8%)	108
Year 4	54 (24.6%)	74 (22.8%)	128
Year 5	42 (19.1%)	60 (18.5%)	102
PGD/MA/MSc, PhD	4 (1.8%)	26 (8.0%)	30
Count Total Parentage	220 (100)	324 (100)	544

Table 6.1.2 reveals percentage variations of the respondents' year of study in BIU and DELSU, and in which most of the students were in year of study. These results was expected because year four of students in Nigerian universities is usually refers to as senior undergraduate class and a graduating year with stressful academic engagement, suggesting further that access to smart media could be higher due to accessible financial resource to meet the demand for academic related expenses, and the use of smart media device is critical to the students at this level of study. For examples, most of the students at this level rely on their smart media device for browsing for academic publications for their coursework and project.

Table 6.3: Access to Smart Media by Family Income Per month and Gender

Categories	Benson Idahosa University			Delta State University		
Family Income per month	GENDER			GENDER		
	Men	Women	Total	Men	Women	Total
Under N18,000	0 (0%)	0 (0%)	0 (0%)	1 (0.4%)	6 (2.2%)	7 (2.7%)
N21,000 – N44,000	0 (0%)	0 (0%)	0 (0%)	12 (4.4%)	8 (2.9%)	20 (6.2%)
N45,000-N66,000	7 (2.6%)	5 (1.8%)	12 (5,5%)	23 (8.5%)	9 (3.3%)	32 (9.9%)
N66,001-N85,000	18 (6.6%)	17 (6.3%)	35 (15.9%)	23 (8.5%)	31 (11.4%)	54 (16.0%)
N85,001-N90,000	18 (6.6%)	11 (4.8%)	29 (13.2%)	11 (4.0%)	19 (7.0%)	30 (9.3%)
N90,001-N100,000	17 (6.3%)	7 (2.6%)	24 (10.9%)	17 (6.3%)	10 (3.7%)	27 (8.3%)
Above N100,000	50 (18.4%)	70 (25.7%)	120 (54.5%)	75 (22.5%)	79 (29.0%)	154 (47.5%)
Total Count Percentage	110 (40.4%)	110 (40.4%)	220 (100)	162 (59.6%)	162 (59.6%)	324 (100)

Table 6.3 reveals there were variations in family income per month among students at BIU and DELSU, and these was quite surprising because the students at both institutions are from different parental background. For examples, the students at BIU are more affluent with solid parental income while students at DELSU are from lower, middle and upper income parental group. These results portray the assumption that the students at BIU and DELSU are from the same parental level of family income per month.

This finding appear to be supported by earlier pieces of research on the relations of income and new media. For examples, Pedrozo, (2013) argue that parents' income play decisive in media related acquisition and use and a report on a survey of New Zealanders' use of smartphones revealed that the higher the income, the more likely someone is to own or have access to a smartphone.

6.2.2: Gender Differences in Family Income Per Month

Further analysis of Table 6.3 on Family income per month revealed percentage differences among respective students family income categories at DELSU, and in which substantial number of students are in the bracket of above N100,000 per month and that women (29.0%) are more likely than men (22.5%) to come from higher income family.. This findings appear to reinvent the connection of family income and students' disposable income. Evidence from the study by UK Tschmuck, (2013) has shown that young people are able to keep up-to-date mobile phone with their monthly disposable income with money from parents as a derivable factor. Thus, the findings of the current study indicate that Nigerian students family income per month is linked to the potentials of disposable income for access to smart media..

Table 6.4: Access to Smart Media by Family Status and Gender

Categories	Benson Idahosa University			Delta State University		
Family Economic Status	**GENDER**			**GENDER**		
	Men	Women	Total	Men	Women	Total
Upper class	20 (7.4%)	26 (9.6%)	46 (20.9%)	24 (8.8%)	36 (13.2%)	60 (18.5%)
Middle class	85 (31.3%)	80 (29.4%)	165 (75.0%)	122 (44.9%)	107 (39.3%)	229 (70.7%)
Lower class	5 (1.8%)	4 (1.9%)	9 (4.1%)	16 (5/9%	19 (7.0%)	35 (10.8%)
Total Count Percentage	110 (40.4%)	110 (40.4%)	220 (100)	162 (59.6%)	162 (59.6%)	324 (100)

The findings reported in Table 6.4 indicate class differences between men and women at BIU and DELSU to which significant proportion of the respondents are form middle class families. These results were quite surprising because at DELSU, the family status of the students cut across the three levels of social class in society. The reason for this is due to the affordable nature of tuition fees, being government-owned university compared to BIU which is privately owned and of higher tuition fees. Students there come from rich homes with potentialities to pay high rise tuition fees. However, the students' capacity to access smart media could link to their disposable income and Nigeria students being what they are have means of funds to meet up their social life on campus.

6.2.3: Gender Differences in Access to Smart Media by Family Status and Gender

As shown in Table 6.4, those who reported that they come from middle class families are more in terms of percentage differences. For examples, at BIU the men (31,3%) are more likely than the women (29.4%) to come from middle class families with capacity to access smart media device compared to the women whereas at DELSU, the men (44%) are more likely than women (39.3%) to access smart media device. These results suggest that the men attitude towards smart media is much stronger compared to the women suggesting also that the men are incline to access smart media more quicker to the exclusion of class consciousness

RQ8: Why do university students own smart media and with what usage experience?

The research question eight on why the students own smart media device was informed by the literature on the reasons for owning the system device and a number of functional benefits were given as primary reasons for possessing the system technology and are;: i. access to the access internet ii. the advantage of usage anywhere and iii. the adaptability of the device (see Ladge, (2013) and Kashyap, (2014)

Studies in Nigeria, Ibrahim, Salisu and Popoola, (2014) have shown that access the internet and the mobility of utility were the reasons fourth year medical students perceived for owning smart media device. Similarly, Tunmibi, Aregbesola and Asani, (2015) found that students from Nigeria (University of Ilorin and Landmark University) and from Houdeghe North American University in the Republic of Benin specifically indicate ease of use; internet browsing and interaction with family member as factors of influence in the adoption of smart media in both societies.

The current study therefore undertook similar inquiry to know why university students own smart media device, and with what usage experience. Table 6.5 presents the results of respondents' data on the issue.

Table 6.5: Reasons for Owning Smart Media Device

Variable	Benson Idahosa University				Delta State University			
The reasons for owning smart media device	GENDER				GENDER			
	Men	Women	Total		Men	Women	Total	
To access internet and other system application	74 (33%)	87 (39.%)	161 (73.8%)	$df = 2$ $X^2 = 7.06$ $\alpha = 0.05$	91 (28%)	136 (42%)	227 (70%)	$df = 2$ $X^2 = 31.04$ $\alpha = 0.05$
Advantage of usage anywhere	18 (8.2%)	6 (2.7%)	24 (10.7%)		52 (16%)	19 (6%)	71 (22%	
Adaptability of the devices	18 (8.2%)	17 (7.7%)	35 (15.4%)		19 (6%)	7 (2%)	26 (8%)	
Total Percentage	110	110	220 (100)		162	162	324 (100)	

Table 6.5 investigates the rationale for owning a smart media device by students in Benson Idahosa University and Delta State University and on which three reasons: to access internet and other system applications, advantage of usage anywhere and adaptability of the devices were advanced for exploration. Chi-square test was performed to determine what factor was important to the respondents and with what significance. The analysis of the results showed different levels of statistical significance between the samples from BIU and DELSU. Thus, internet access as a motivation for smart media device ownership was found to be statistically significant for respondents at DELSU: (χ^2 = 31.04, p > 0.05). This result was quite surprising for quite surprising for DELSU and quite unexpected for BIU. The reason for this difference could be linked to the strength of the respondents nominal data which was higher in DELSU compared to BIU.

6.2.3: Gender Differences in Reasons for Owning Smart Media Device

Gender differences were apparent at DELSU, the women respondents (42%) were more likely than the men (28%) to own smartphones for the purpose of internet access. This implies that the women were more incline to internet usage, both in terms of social supposes and educational support. The importance of internet in mobile phone was mentioned by a few participants in the focus group interviews at DELSU as well. Some of the comments were:

S 12 I got my mobile phone to give me access to the internet and easy to access

information and materials for assignment Another S11 said my mobile phone

helps me to access internet and download educational materials

These comments show that internet is a key factor in students' acquisition of smart media device. Similar Observations were made by the Pew Internet and American Life Project (2002) which identified the importance of internet to American students as a major aspect of their lives. According to the report, 42% of college students use the internet to communicate socially and to enhance other forms of social usage.

6.3: Usage Experience of Smart Media Device

Earlier in the literature digital skills and competencies were identified as key parameters for usability of new media and in which education, and usage time and frequency were isolated as primary usage goal (see Van Deursen and Van Dijik, (20115). Thus, the university students in Nigeria in this study are young people with higher level of skills, literacy and competence to use smart media, For instance, the student year four of study found in the previous result (see Table 6.2) could be seen as additional confidence building to exploit the usage features of smart

media. The current study therefore examines the university students' usage experience of smart media using chi square test as a predictive outcome.

Table 6.3.1: Usage Experience of Smart Media Device

Variables	Benson Idahosa University				Delta State University			
Usage experience of smart media device	GENDER				GENDER			
	Male	Female	Total		Male	Female	Total	
Under 1 year	5	10	15	$X^2 = 7.06$ df = 2 $\alpha = 0.05$	10	16	26	$X^2 = 31.04$ df = 2 $\alpha = 0.05$
1 – 2 years	9	11	20		7	22	29	
3 – 4 years	56	17	73		90	20	110	
Above 5 years	34	56	90		44	83	127	
Never	6	16	22		11	21	32	
Total	110	110	220		162	162	324	

The data in Table 6.3.1 indicate the lengths of the students' usage experience of smart media device on which five categories were provided for students choice: less than 1 year, 1-2 years, 3-4 years, above 5 years and never. The responses were used to determine the respondents' usage patterns. These were subjected to a statistical analysis based on the Chi-square test between BIU and DELSU. The results indicate that most of the students had a usage experience of above five years, which was significant to students at BIU ((χ^2 = 29.047 df-.04,p > 0.05) and DELSU: (χ^2 = 68.7898 df-.04,p > 0.05). This result was expected given the demographic spread of the respondents' length of usage experience in both universities suggesting that the students were quick to embrace smart media device and as university students possessive of the motivation to use the as educational resource support..Findings from the focus group interviews point to similar usage of mobile phone and virtually all the discussant had indicated more five years of using their mobile phone. Some of the respondents opinions are representative in this regard and it states:

> *S11 I have been using mobile phone for over six years and S20 said*
>
> *I have been using mobile phone for more than five years*

6.3.2: Gender Differences in Usage Experience of Smart Media Device

Running through the table, the percentage differences on length of usage experience were visible between men and women at BIU and DELSU. Thus, at BIU, the women (25.5%) are more likely than the men (15.5%) to have had five (5) usage experience of smart media device. In the same vein at DELSU the women (25.8%) are more likely than men (13.6%) to have had five (5) usage experience of smart media device. These results suggest that the women have more time read the instructions on smart media device for effective utilization compared to men who are full of distraction and concentration to read the instructions on smart media device. Furthermore, the women usage experience of smart media device could be linked to the

convenient nature of the system device, i.e. that it can be used anywhere and at anytime as well as to the possible storage of personal data. The concept of personal data as applies in this research includes phone numbers of family, friends, acquaintances, and even course mates.

As Fiske's (1992) paradigm explains cost and benefits becomes critical determinant in an assessment of users' identification with the product. Smart media device as an advanced product with computer capabilities and immense functional applications have endeared themselves to many users leading them to adopt the system devices. Internet accessibility is seen as a case of the cost benefits of smartphones to respondents in a society where landline telephones are substantially inferior in terms of accessibility and system features

6.4: Utilization of Smart Media for Social Relationships

Social relationships are fundamental in human society and the basis for mutual interaction, the cultivation of friendship and the maintenance of connections. The term social relationships denote interaction between individuals or social groups with complimentary actions and thoughts. It is the shaping of individual behaviour and in a variety of ways

In today's society, social relationships have gone beyond physical face-to-face socialising to encompass virtual interactive relations and virtual friendships or virtual connections have become a new forms of sociality which has be termed cyber sociality or digitally-enabled sociality (Brown, 2011; Brook, 2013; Tufekci, 2014).

According to Tufekci, cyber sociality means the relationships that are forged and sustained online and social networking sites are facilitative platforms for such sociality and accessed through internet connections. The technologies of smart media have instigated a new paradigm of human relational management and communication behaviour in society. As Lungberg, (2013) explains the constant presence of today's smart media has engendered different forms of social relationships and physical, face-to-face interaction between people. On the other hand, Pang et al, (2014) notes that the unprecedented penetration of smart media in society offers potentially cost-effective and sustainable solutions for people to stay connected with their families, friends and communities. Besides, Spiteri, (2013:21-26) maintained that smartphones have created networked society and a new form of sociality in which users of the system technology are constantly connected, reachable and accessible.

The author indicates further that smartphones allow students to become involved and feel themselves a part of a communication system that connects individuals across a symbiotic network structure.

Furthermore, social relationships and sociality in a virtual society share the trust of communal sharing and equality matching in friendships and friendship connections. Individuals relate with others in terms of similar orientation and mutual affection. Some amount of closeness and kindness are critical factors in their relationship. Equality matching relationships advances social relationships and sociality, driven by peer group activities and the sense of commitment to self-fulfilment. (Fiske, 1999).

Thus, the university students were asked how they use their smart media for social relationships, for which six predictive factors of friendships activities were provided for the students' decision (see Table 6.4).

Table 6.4. Utilization of Smart Media for Social Relationships

	BIU		DELSU	
Friendship Activities	Men	Women	Men	Women
Making new friends	55	59	61	69
Building friendship connections	70	65	80	84
Maintaining previous friendships	56	55	60	62
Re-uniting with friends	60	55	57	61
Sustaining romantic relationships	54	55	57	56
Connecting with friends & course mates on campus	58	55	63	65

Analysis

One-way ANOVA test was applied to the six friendship activities and as individual variables to determine whether there are any significant differences between the means of these friendship variations and between men and women students. The results are presented in Table 6.4.2 and Table 6.4.3.

Table 6.4.2: Present the Result at BIU on the Utilization of Smart Media for Social relationships among Men and Women Students

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	20.200	7	2.886	.780	.638
Within Groups	14.800	4	3.700		
Total	35.000	11			

The result obtained from the analysis indicate that there is no significant difference at 5% level of significance between the friendship activities among men and women student at BIU

Table 6.4.3 Present the Result at DELSU on the Utilization of Smart Media for Social Relationships among Men and Women Students at DELSU

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	30.000	9	3.333	1.333	.500
Within Groups	5.000	2	2.500		
Total	35.000	11			

The result for DELSU shows that there is no significant difference at 5% level of significance between the friendship activities among men and women student at DELSU.

Further reflection on these results suggests that both men and women at BIU and DELSU share similar motivation in friendships development or building network of friends that could sustain their student lives on campus and future aspiration in terms of post university education. Furthermore, the finding from the focus group discourse at BIU and DELSU on how mobile phone has transformed their behaviour and social relationships yielded interesting comments and on which some are cited:

> S16: my mobile phone has made it possible to make new friends and keep up with them and S28 said yes, my social relationships has been transformed because I have new friends

These expressions appear to consolidate the significance of mobile media device in the advancement of social relationships in society.

6.5: Summary

The chapter has looked at the university students attitudes towards smart media in Nigeria for which three key issues by way of research questions was projected to understand the importance of the system technology to the students. The students are upcoming demographic group in Nigerian society with value system reflective of contemporary social behaviour and swimming in a new media environment.. It has dealt with descriptive data on socio-economic orientation of the university students' access to smart media, why the students own smart media, and with what usage experience and the use of smart media for social relationships. The chapter provides interesting findings in relation to the way in which Nigerian students use smart media and what the system technology means to them. The RQ5 does the socio-economic orientation of the University students influences their access to smart media was addressed to

determine whether or not there was a relationship between smart media (dependent variable and the independent variables (age/gender, student year of study, family income/gender and family status/gender) to serve as predictive effect on the dependent variable. The results on each relationship have shown statistically significant findings in relation to gender differences. For examples, there was significant relationship between age and access to social media device at BIU and DELSU, and gender differences was observable with women in both universities falls with higher access to social media device than the men. On the relations student year of study access to social media device, there was significant relationship between a student year of study access to social media device. Nevertheless, differences were stronger in year four of the study at BIU ((24.6%) and DELSU (22.8%). With regard to access to social media device by family income per month, there was no relationship between family income per month at BIU whereas in DELSU, there was a relationship between family income per month. Both results suggest that there is a divergent family income per month and access to social media device between the institutions. Gender differences was apparent at BIU and DELSU, the women have higher family income per month in relation to access social media device compared to men in each institutions. The relation of family status and access to social media device has shown that there were no relationships at BIU and DELSU. Gender differences were obvious in both universities with men in each institutions being more associated with middle class families compared to the women.

The sixth research question on: why do university students own smart media and with what usage experience? Chi-square test statistically infer that there was a significant variation between the reasons why students own smart media device and as such access to internet and other system applications was one of the major rationale for students' ownership of smart media device

On the usage experience of smart media device, Chi-square test on the lengths on the usage experience at BIU and DELSU reveals that there was an association between the students' usage experience and smart media device, resulting in a statistical inference that most students had a usage experience of above five (5) years. The finding clearly indicates that university students in Nigeria possess the ability to use smart media device despite their weak technological environment. Gender differences was evident at BIU and DELSU as women in both institutions had a five years usage experience of smart media device than the men suggesting that the women are early adopters in Nigeria perhaps more accessible to disposable income.

This chapter has also looked at the utilization of smart media for social relationships, on which

the university students were asked how they use their smart media for social relationships. Six measures of friendships activities were stipulated for their decision and the data obtained was subjected to statistical analysis based on the use of One-way ANOVA test. The result unfold that there was no significant differences between men and women students in their friendship behaviour suggesting that both students at BIU and DELSU share similar motivation towards friendship networks and connective relationships. The theoretical position of this chapter is the digital network society and will be discuss fully in relations to chapter seven.

This chapter concludes with the argument that the integration of the focus groups opinions on mobile phone (feature phone) use helped provides broader views of smart media device functions to men and women at BIU and DELSU. Thus, the combination of both focus groups which was one of exploration and surveys which was statistical based demonstrates the significance of inductive and deductive thinking in the interpretations of both results to converge, as a single finding, reference to all the issues addressed in this chapter, with chi square analysis being supported with the students responses (*italic*).

As Banks, Mark (2012) explain the importance of triangulation via existing qualitative and quantitative research in a single academic inquiry help provide holistic interpretations that appeared to generate the satisfactory ring of truth, which in the current study of students' usage of smart media provide validity of finding to each issue analysed for smart media usage behaviour.

The next chapter explore the role social media play in the formation of university students' social relationships and of social capital resources.

CHAPTER SEVEN

RELATIONSHIPS BETWEEN SOCIAL MEDIA SITES AND UNIVERSITY STUDENTS' SOCIALITY

7.1   Introduction

This chapter focuses on the relationships between the use of social media sites and the university students' sociality for which the following research questions have been projected for investigation and are; RQ9: How do university students use social media sites for sociality? and RQ10 What role do social media sites play in the university students' social relationships and acquisition of social capital?

These questions were prompted by the findings of the focus group interviews in which the theme of social networking sites was identified. This was followed by the literature review on the importance of social media sites in relations to their functions in users' social lives and building social relationships of social capital. The concept of social media sites define virtual communities of different platforms in which people exploit for socialisation, connection with others and development of structural relationships in today's digital network society.

Thus, the current study of university student is to find out whether the coming of social media sites have create a new dimension in the life of these students in Nigerian society. The attempt to explore whether this phenomenon is occurring require the use of survey procedure via heterogeneous sample to collect data at Benson Idahosa University: 250 and Delta State University: 350 students who were asked about the usage behaviour of social media sites for sociality and development of social relationships by way of social capital.

This chapter begins by reporting the descriptive statistics based on the use of Pearson chi-square test, One-way ANOVA test and the simple percentages. The reason for undertaking these analyses is to gain an understanding of how students in Nigerian society use social media sites and the motivation surrounding its usage. The findings of this study are compared to and discussed in the context of previous studies, most of which were carried out in Western societies.; Central to the research questions were three hypothesis to test whether there is a relationships or otherwise between social media sites and social relations of students and these are;

7:2   Results

Table 7.1: Usage of Social Media Site For Social Relations

Table 1a

Social Media Sites Used to Sustain Social Relations	BIU GENDER				DELSU GENDER			
	Men	**Women**	**Total**		**Men**	**Women**	**Total**	
Facebook	40 (36%)	54 (49%)	94 (43%)	α = 0.05 df = 6 X² = 13.61	40 (25%)	112 (69%)	152 (47%)	α = 0.05 df = 6 X² = 68.24
Myspace	9 (8%)	10 (9%)	19 (9%)		19 (12%)	10 (6%)	29 (9%)	
LinkedIn	17 (16%)	10 (9%)	27 (12%)		40 (25%)	10 (6%)	50 (15%)	
Twitter	18 (16%)	6 (6%)	24 (11%)		23 (14%)	12 (7%)	35 (11%)	
Friendster	13 (12%)	8 (7%)	21 (10%)		12 (7%)	6 (4%)	18 (6%)	
Blog	5 (5%)	10 (9%)	15 (7%)		18 (11%)	5 (3%)	23 (7%)	
Others	8 (7%)	12 (11%)	20 (9%)		10 (6%)	7 (5%)	17 (5%)	
Total	110 (100)	110 (100)	220 (100)		162 (100)	162 (100)	324 (100)	

Table 1b

Total Connection in Network	BIU				DELSU			
	Men	**Women**	**Total**		**Men**	**Women**	**Total**	
1 – 49	15 (14%)	6 (6%)	21 (10%)	df X² = 26.3	25 (15%)	28 (17%)	53 (16%)	df = 4 α = 0.05 X² = 30.66
50 – 99	19 (17%)	18 (18%)	37 (16%)		29 (18%)	21(13%)	50(15%)	
100 – 149	22 (20%)	11 (10%)	33 (15%)		35 (22%)	13 (8%)	48(15%)	
150 – 200	23 (21%)	9 (8%)	32 (15%)		36 (22%)	21 (13%)	57(18%)	
Above 200	31 (28%)	66 (60%)	97 (44%)		37 (23%)	79 (49%)	116(36%)	
Total	110(100%)	110(100%)	220		162	162	324	

Table 1c

Device Used to access SMS	BIU Men	BIU Women	Total		DELSU Men	DELSU Women	Total	
Internet enabled mobile device	62 (56%)	76 (69%)	138 (62%)		122 (75%)	96 (59.3%)	218 (67%)	
Personal computer via internet	6 (6%)	12 (11%)	18 (8%)	$X^2 = 26.3$ df = 4	13 (8%)	23 (14.2%)	36 (11%)	$X^2 = 11.33$ df = 4 α =
Laptop with internet	16 (14%)	6 (5%)	22 (10%)		12 (8%)	15 (9.3%)	27 (8%)	
Cybercafé	15 (14%)	10 (9%)	21 (10%)		10 (6%)	23 (14.2%)	33 (10%)	
Network with sub. Via modern	11 (10%)	10 (9%)	21 (10%)		5 (3%)	5 (3%)	10 (4%)	
Total	110 (100)	110 (100)	220 (100)		162 (100)	162 (100)	324 (100)	

Table 1a-1c reveals the data on the students' usage of social media sites for social relations. Using the Pearson chi-square test, at 5% level of significance and specified degrees of freedom, the calculated values of X^2 seems to be greater than the table value of X^2 in Tables 1a-1c. This leads to the rejection of the above hypotheses by gender. Thus, it follows the conclusion that social relations/ connection by gender solely depend on the social media sites used by them and also, there is a significant difference between the social media site and devices used by gender at BIU and DELSU.

Furthermore, the calculated values of X^2 seems to be lesser than the table value of X^2 in Table Ib and Ic and greater in Table Ib. Thus, the results obtained in Tables Ia and Ib leads to the acceptance of the hypotheses while Table Ib leads to the rejection of the hypothesis by institution. This follows that social relations/connection by institution has no association with social media sites used by institutions suggesting that a student social connection on social media sites lies on individual student choice of route to build network of friends. Likewise, there is a significant difference between the social media sites and devices by used at BIU and DELSU.

7.3 Gender Differences in Usage of Social Media Sites for Social Relations, Total Connection on Network and Devices Used to Access Social Media Sites

Closer observation of Table 7.1a, Table 7.1b and Table 7.1c revealed that all the items (independent variables) revealed percentage differences relative to men and women response data. According to Table 1a, the finding for facebook appear to possess significant percentage value in each gender categories implying that in BIU the women (49%) are more likely than the men (36%) to use facebook for the sustenance of social relations in social media sites and in DELSU, the women (69%) are more likely than the men (25%) to use facebook as a platform for social relations.

These findings was not surprising because in Nigeria university students are accessible to social media sites through their smart media device to socialise and connect with others in the network suggesting that the women students at both BIU and DELSU are favourably incline to using Facebook as a virtual community in which to showcase their identity and sustain romantic affairs and relationships as well as social connections.

Thus, this finding is consistent with previous research done by Bicen and Cavus, (2011) who found that social networking sites such as Facebook enhance the capacity of university students in Cyprus to maintain and straighten social ties. Further, Hew and Cheung, (2012) found from a survey of 83 students in Singapore, aged 15-23 years that facebook provides a platform for keeping in touch with friends, broadening one's social networks and entertainment. Wild, Cant, and Neil, (2014) found from the study of South African students that facebook was the most usage site and helps the students, aged 18-24 to communicate, schedule events, post notes and remind other students important dates as well as update their status.

Similarly, in Table 1b, gender differences were clearly obvious at BIU and DELSU. This implies that in BIU, the women (60%) are more likely than the men (28%) to have network size of over 200 of friendship connection and at DELSU, the women (49%) are more likely than the men (23%) to have network size of above 200 friendship connection. These results show that the women have more networks of friendship connections to strategically enhance their social lifestyle.

These results were not surprising because the students' preference for facebook as a platform for social relations also provide arena to build their social connection of sizeable range. This finding is similar to those of Pew researchers (2010), Sponcil and Gitimu, (2014) and Akyildiz and Argan, (2015) who found university students were more likely have beyond 200 network of friendship size in social media sites, with facebook as a site for network connection. These researches did not indicate the students were men and women.

Furthermore, gender differences were also noted in Table 1c on the devices used to access social media sites. These differences indicated percentage differential in men and women on the device usage to access social media sites. However, the most used device was the internet enabled mobile device with gender differences being observed at BIU and DELSU. In BIU, the women (69%) are more likely than the men (62%) to use the internet enabled mobile device to access social media sites whereas in DELSU, the men (75%) are more likely than the women (59.3%) to embrace the internet enabled mobile device to access social media sites. These

results was not surprising because earlier result on the reasons why students own smart media device revealed access to internet as key factor of possession. This implies that ownership of smart media with internet connectivity provide the students open accessibility to social media sites. This finding is similar to prior research, which reveals that smart media device provide students access to social media sites (Hingorani, Wordard and Askari-Danesh, 2012; Hanley, 2013; Stollak, AL-Harrasi, Ali and L-Badi, 2013). Also consistent with the finding was the study by Viner, (2014) who found that 75% of the students surveyed were most likely to use their smartphone to access social media sites

Table 7.2: Students' Frequency of Contact for Interactivity with Social Groups on Social Media Sites at Benson Idahosa University

	BENSON IDAHOSA UNIVERSITY									
	CATEGORIZATION OF TIME-FRAME									
	Men					Women				
	SOCIAL GROUPS					SOCIAL GROUPS				
Frequency of Contact in SMSs	Acquai-ntance	Colle-agues	Course Mates	Family	Family Members	Acquai-ntance	Colle-agues	Course Mates	Family	Family Member s	Total
1-3 Times per day	6	11	25	33	24	8	14	18	34	26	220
4-6 Times per day	6	5	27	22	40	5	9	32	21	33	220
2-5 hours per week	5	25	23	34	13	3	28	22	22	25	220
6 to 10 hours per week	17	21	25	25	12	14	17	25	21	23	220
11-20 hours per week	33	22	15	16	14	32	9	19	24	16	220

Table 7.2A (Men)

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.160	4	.040	.000	1.000
Within Groups	2238.800	20	111.940		
Total	2238.960	24			

There is no significant difference at 5% level of significance between the students' frequency of contact for interactivity with social groups on social media sites by men students at BIU

Table 7.2 B (Women)

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.000	4	.000	.000	1.000
Within Groups	1840.000	20	92.000		
Total	1840.000	24			

There is no significant difference at 5% level of significance between the students' frequency of contact for interactivity with social groups on social media sites by women students at BIU

Table 7.2A: Students' Frequency of Contact for Interactivity with Social Groups on Social Media Sites at DELSU

DELTA STATE UNIVERSITY											
CATEGORIZATION OF TIME-FRAME											
	Men					**Women**					
	SOCIAL GROUPS					**SOCIAL GROUPS**					
Frequency of Contact in SMSs	Acquai-Ntance	Colle-agues	Course Mates	Family	Family Members	Acquai-ntance	Colle-agues	Course Mates	Family	Family Members	Total
1-3 Times per day	4	3	19	43	31	6	8	17	27	42	324
4-6 Times per day	6	6	27	30	31	4	5	25	36	30	324
2-5 hours per week	5	9	44	30	12	4	8	46	25	17	324
6 to 10 hours per week	12	16	30	26	16	8	21	25	26	20	324
11-20 hours per week	27	25	13	17	18	25	19	21	16	19	324

Table 7.2C (Men)
ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.640	4	.160	.001	1.000
Within Groups	3323.200	20	166.160		
Total	3323.840	24			

There is no significant difference at 5% level of significance between the students' frequency of contact for interactivity with social groups on social media sites by men students at DELSU

Table7.2D (women)
ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.160	4	.040	.000	1.000
Within Groups	3106.800	20	155.340		
Total	3106.960	24			

There is no significant difference at 5% level of significance between the students' frequency of contact for interactivity with social groups on social media sites by women students at DELSU

7.4: Summary on Students' Frequency of Contact for Interactivity with Social Groups on Social Media Sites at DELSU

Table 7.2 and 7.2A shows the various frequency of contact from 1-3 times per day to 11-20 hours per week between men and women students at BIU and DELSU. One-way ANOVA was utilized to test the means scores of the frequency of contact between social groups and within social groups in both institutions data. The results revealed there was no significant difference between students' frequency of contact for interactivity with social groups at BIU (see Table 7.2A and 7.2B) and DELSU (7.2C and 7.2D). These results indicate that the students in each university have similar time frame to relate with their social groups, driven by mutual affection and cultivation of happiness through chatting with network friends either on campus or off campus.

7.5: Use of Social Media Sites for Social Connections

Young people have different preference when it comes to how they expand their social networks in virtual communities, beyond the conventional social connection, which are generally characterised by physical face-to-face contact. It is on this ground that the university students were asked to indicate how they meet the people in their social network. The results are shown in Table 7.4

Table 7.4: How University Students Meet People on Social Media Sites

	BIU		DELSU	
Social Network consists of	Men %	Women %	Men %	Women %
People met face to face	48	57	31	46
People met face to face and online	52	50	28	43
People met on the internet	24	27	28	43
People known personally,	39	50	37	56
People not met at all.	7	14	4	3

Table 7.3 (Men)

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	92.160	4	23.040	.121	.973
Within Groups	3818.800	20	190.940		
Total	3910.960	24			

There is no significant difference at 5% level of significance between the means of meeting people in social media sites by Men students at BIU

Table 7.4 (Women)

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.000	4	1.000	.004	1.000
Within Groups	5502.000	20	275.100		
Total	5506.000	24			

There is no significant difference at 5% level of significance between the means of meeting people in social media sites by women students at BIU

On How DELSU Students Meet People in Social Media Sites

Table 7.5 (Men)

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.160	4	.040	.000	1.000
Within Groups	4158.800	20	207.940		
Total	4158.960	24			

There is no significant difference at 5% level of significance between the means of meeting people in Social Media Sites by Male Students at DELSU

Table 7.6 (Women)

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.240	4	2.560	.007	1.000
Within Groups	7411.200	20	370.560		
Total	7421.440	24			

There is no significant difference at 5% level of significance between the means of meeting people in Social Media Sites by Female Students at DELSU

7.6 Summary on How Do Respondents Meet People in Social Media Sites

Table 7.4 presents the students data on how they meet people in social media sites, made up men and women column at BIU and DELSU, and in five independent variables (people met face to face, people met face to face and online, people met on the internet, people known personally and people not met at all. One-way ANOVA test was relevant to test the mean scores between social network connections of men and women at BIU and DELSU. The finding for BIU indicate that there was no significant differences between men and women in the way they meet people in social media sites (see Table 7.3 and Table 7.4) and at DELSU, there was also no significant differences between men and women in meeting people in social media sites (see Table 7.5 and Table 7.6). These results suggest that students in both universities exploit different paths to meet people in social media sites for sociality and constructive friendship connections.

7.7 Role Social Media Sites Play in the University Students' Social Relationships of Social Capital (BIU & DELSU)

This section examines research question 10 which was derived from the literature review on social capital and social relationships. Thus, this part of the study sought to know whether social media sites helped university students to develop the relational ties of bonding and bridging social relationships as well as the resources derived from social connective relationships. The term *resources derivations* refer to the benefits individual respondents derived from their social relationships with members of networks or social group in the network.

The individual social capital resources measures was based on William's (2006) Internet Social Capital Scale (ISCS) for which two categories of social relationships of social capital: bonding and bridging social capital were advanced (see Table 7.6.1 Bonding social

relationships and Table 7.6.6 Bridging social relationships). This provided the basis for exploring the nature of the social relationships of social capital on the social media sites and on which the students were asked to indicate the various benefits they derive from the usage of social media sites in forging online social relationships (see also Williams, 2006; Sgambato, Petkov and Wolf, 2011; Ahn, 2012; Jung, Gray, Lampe and Ellison, 2013)..

The data from the individual social capital resource benefit relative to bonding (9 items of independent variables) and bridging (10 items of independent variables) social relationships were analyse using One-way ANOVA test and Bonferronni test of multiple comparisons (see Yates, 2015). The results are therefore presented in subsequent tables, relative to the analysis of respective individual resources in bonding and bridging social relationships, with a view to determine whether there were significant differences between men and women students on the nature of social capital resources benefit they derive from their social relationships in social media platforms

Table 7.6.1: Bonding Social Relationships

	Individual Social Resources Benefit	BIU		DELSU	
		Male %	Female %	Male %	Female %
1	Trusted Persons to Solve Problems	30	31	38	32
2	Advisers in SMS to help with decisions	54	45	66	58
3	People to talk to when lonely	29	22	34	24
4	Possible job references	21	22	22	24
5	Emergency financial assistance	30	15	9	19
6	Reputational Support	5	9	22	17
7	Interaction with beneficial People	53	41	30	33
8	Inadequate knowledge of people	7	5	16	9
9	People in SMS can help to fight injustice	10	5	26	21

Table 7.6.2: Bonding Social Relationships by gender in BIU

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4234.778	8	529.347	17.451	.000
Within Groups	273.000	9	30.333		
Total	4507.778	17			

There is significant difference at 5% level of significance between individual social resources benefit among men and women students at BIU. Then using Bonferronni test of multiple comparisons, it was found that there was a statistically significant difference between "Advisers in SMS to help with decisions" and (Possible job references, Emergency financial assistance,

Reputational support, Inadequate knowledge of people, People in SMS can help to fight injustice). It was also found that there was a statistically significant difference between the following attributes: ("Possible job reference" and "Interaction with beneficial people"), ("Reputational Support" and "Interaction with beneficial people"), ("Interaction with beneficial people" and "Inadequate knowledge of people"), ("Interaction with beneficial people" and "People in SMS can help to fight injustice").

Table 7.6.3

Multiple Comparisons

Bonferroni

(I) SR	(J) SR	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1	2	-19.000	5.508	.262	-44.05	6.05
	3	5.000	5.508	1.000	-20.05	30.05
	4	9.000	5.508	1.000	-16.05	34.05
	5	8.000	5.508	1.000	-17.05	33.05
	6	23.500	5.508	.075	-1.55	48.55
	7	-16.500	5.508	.542	-41.55	8.55
	8	24.500	5.508	.058	-.55	49.55
	9	23.000	5.508	.086	-2.05	48.05
2	1	19.000	5.508	.262	-6.05	44.05
	3	24.000	5.508	.066	-1.05	49.05
	4	28.000*	5.508	.024	2.95	53.05
	5	27.000*	5.508	.030	1.95	52.05
	6	42.500*	5.508	.001	17.45	67.55
	7	2.500	5.508	1.000	-22.55	27.55
	8	43.500*	5.508	.001	18.45	68.55
	9	42.000*	5.508	.001	16.95	67.05
3	1	-5.000	5.508	1.000	-30.05	20.05
	2	-24.000	5.508	.066	-49.05	1.05
	4	4.000	5.508	1.000	-21.05	29.05
	5	3.000	5.508	1.000	-22.05	28.05
	6	18.500	5.508	.302	-6.55	43.55
	7	-21.500	5.508	.130	-46.55	3.55
	8	19.500	5.508	.227	-5.55	44.55
	9	18.000	5.508	.350	-7.05	43.05
4	1	-9.000	5.508	1.000	-34.05	16.05
	2	-28.000*	5.508	.024	-53.05	-2.95
	3	-4.000	5.508	1.000	-29.05	21.05
	5	-1.000	5.508	1.000	-26.05	24.05
	6	14.500	5.508	.980	-10.55	39.55
	7	-25.500*	5.508	.045	-50.55	-.45
	8	15.500	5.508	.728	-9.55	40.55

	9	14.000	5.508	1.000	-11.05	39.05
5	1	-8.000	5.508	1.000	-33.05	17.05
	2	-27.000*	5.508	.030	-52.05	-1.95
	3	-3.000	5.508	1.000	-28.05	22.05
	4	1.000	5.508	1.000	-24.05	26.05
	6	15.500	5.508	.728	-9.55	40.55
	7	-24.500	5.508	.058	-49.55	.55
	8	16.500	5.508	.542	-8.55	41.55
	9	15.000	5.508	.845	-10.05	40.05
6	1	-23.500	5.508	.075	-48.55	1.55
	2	-42.500*	5.508	.001	-67.55	-17.45
	3	-18.500	5.508	.302	-43.55	6.55
	4	-14.500	5.508	.980	-39.55	10.55
	5	-15.500	5.508	.728	-40.55	9.55
	7	-40.000*	5.508	.002	-65.05	-14.95
	8	1.000	5.508	1.000	-24.05	26.05
	9	-.500	5.508	1.000	-25.55	24.55
7	1	16.500	5.508	.542	-8.55	41.55
	2	-2.500	5.508	1.000	-27.55	22.55
	3	21.500	5.508	.130	-3.55	46.55
	4	25.500*	5.508	.045	.45	50.55
	5	24.500	5.508	.058	-.55	49.55
	6	40.000*	5.508	.002	14.95	65.05
	8	41.000*	5.508	.001	15.95	66.05
	9	39.500*	5.508	.002	14.45	64.55
8	1	-24.500	5.508	.058	-49.55	.55
	2	-43.500*	5.508	.001	-68.55	-18.45
	3	-19.500	5.508	.227	-44.55	5.55
	4	-15.500	5.508	.728	-40.55	9.55
	5	-16.500	5.508	.542	-41.55	8.55
	6	-1.000	5.508	1.000	-26.05	24.05
	7	-41.000*	5.508	.001	-66.05	-15.95
	9	-1.500	5.508	1.000	-26.55	23.55
9	1	-23.000	5.508	.086	-48.05	2.05
	2	-42.000*	5.508	.001	-67.05	-16.95
	3	-18.000	5.508	.350	-43.05	7.05
	4	-14.000	5.508	1.000	-39.05	11.05
	5	-15.000	5.508	.845	-40.05	10.05
	6	.500	5.508	1.000	-24.55	25.55
	7	-39.500*	5.508	.002	-64.55	-14.45
	8	1.500	5.508	1.000	-23.55	26.55

*. The mean difference is significant at the 0.05 level.

Table 7.6.4: Bonding Social Relationships by gender at DELSU

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3543.111	8	442.889	19.350	.000
Within Groups	206.000	9	22.889		
Total	3749.111	17			

There is significant difference at 5% level of significance between individual social resources benefit among men and women students at DELSU. Using Bonferronni test of multiple comparisons, it was found that there was a statistically significant difference between "Trusted persons to solve problems" and (Advisers in SMS to help with decisions, Inadequate knowledge of people), "Advisers in SMS to help with decisions" and (Trusted persons to solve problems, People to talk to when lonely, Possible job references, Emergency financial assistance, Reputational support, Interaction with beneficial people, Inadequate knowledge of people, People in SMS can help to fight injustice).

Table 7.6.5

Multiple Comparisons

Bonferroni

(I) SR	(J) SR	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-27.000*	4.784	.011	-48.76	-5.24
	3	6.000	4.784	1.000	-15.76	27.76
	4	12.000	4.784	1.000	-9.76	33.76
	5	21.000	4.784	.063	-.76	42.76
	6	15.500	4.784	.366	-6.26	37.26
	7	3.500	4.784	1.000	-18.26	25.26
	8	22.500*	4.784	.040	.74	44.26
	9	11.500	4.784	1.000	-10.26	33.26
2	1	27.000*	4.784	.011	5.24	48.76
	3	33.000*	4.784	.003	11.24	54.76
	4	39.000*	4.784	.001	17.24	60.76
	5	48.000*	4.784	.000	26.24	69.76
	6	42.500*	4.784	.000	20.74	64.26
	7	30.500*	4.784	.005	8.74	52.26
	8	49.500*	4.784	.000	27.74	71.26
	9	38.500*	4.784	.001	16.74	60.26
3	1	-6.000	4.784	1.000	-27.76	15.76

	2	-33.000*	4.784	.003	-54.76	-11.24
	4	6.000	4.784	1.000	-15.76	27.76
	5	15.000	4.784	.433	-6.76	36.76
	6	9.500	4.784	1.000	-12.26	31.26
	7	-2.500	4.784	1.000	-24.26	19.26
	8	16.500	4.784	.262	-5.26	38.26
	9	5.500	4.784	1.000	-16.26	27.26
4	1	-12.000	4.784	1.000	-33.76	9.76
	2	-39.000*	4.784	.001	-60.76	-17.24
	3	-6.000	4.784	1.000	-27.76	15.76
	5	9.000	4.784	1.000	-12.76	30.76
	6	3.500	4.784	1.000	-18.26	25.26
	7	-8.500	4.784	1.000	-30.26	13.26
	8	10.500	4.784	1.000	-11.26	32.26
	9	-.500	4.784	1.000	-22.26	21.26
5	1	-21.000	4.784	.063	-42.76	.76
	2	-48.000*	4.784	.000	-69.76	-26.24
	3	-15.000	4.784	.433	-36.76	6.76
	4	-9.000	4.784	1.000	-30.76	12.76
	6	-5.500	4.784	1.000	-27.26	16.26
	7	-17.500	4.784	.189	-39.26	4.26
	8	1.500	4.784	1.000	-20.26	23.26
	9	-9.500	4.784	1.000	-31.26	12.26
6	1	-15.500	4.784	.366	-37.26	6.26
	2	-42.500*	4.784	.000	-64.26	-20.74
	3	-9.500	4.784	1.000	-31.26	12.26
	4	-3.500	4.784	1.000	-25.26	18.26
	5	5.500	4.784	1.000	-16.26	27.26
	7	-12.000	4.784	1.000	-33.76	9.76
	8	7.000	4.784	1.000	-14.76	28.76
	9	-4.000	4.784	1.000	-25.76	17.76
7	1	-3.500	4.784	1.000	-25.26	18.26
	2	-30.500*	4.784	.005	-52.26	-8.74
	3	2.500	4.784	1.000	-19.26	24.26
	4	8.500	4.784	1.000	-13.26	30.26
	5	17.500	4.784	.189	-4.26	39.26
	6	12.000	4.784	1.000	-9.76	33.76
	8	19.000	4.784	.117	-2.76	40.76
	9	8.000	4.784	1.000	-13.76	29.76
8	1	-22.500*	4.784	.040	-44.26	-.74
	2	-49.500*	4.784	.000	-71.26	-27.74
	3	-16.500	4.784	.262	-38.26	5.26
	4	-10.500	4.784	1.000	-32.26	11.26
	5	-1.500	4.784	1.000	-23.26	20.26
	6	-7.000	4.784	1.000	-28.76	14.76
	7	-19.000	4.784	.117	-40.76	2.76
	9	-11.000	4.784	1.000	-32.76	10.76
9	1	-11.500	4.784	1.000	-33.26	10.26

2	-38.500[*]	4.784	.001	-60.26	-16.74
3	-5.500	4.784	1.000	-27.26	16.26
4	.500	4.784	1.000	-21.26	22.26
5	9.500	4.784	1.000	-12.26	31.26
6	4.000	4.784	1.000	-17.76	25.76
7	-8.000	4.784	1.000	-29.76	13.76
8	11.000	4.784	1.000	-10.76	32.76

*. The mean difference is significant at the 0.05 level.

Table 7.7: Bridging Social Relationships

			BIU	DELSU	
	Individual Social Resources Benefit	Men %	Women %	Men %	Women %
1	Interest in happenings in the environment and beyond	32	32	26	26
2	A desire to try new things	53	46	36	28
3	Interest in what different people are thinking	55	45	43	37
4	Curiosity about other places in the World	55	46	50	47
5	Connection with the larger community	49	55	46	50
6	Connection with a bigger picture	27	36	47	53
7	Reminder that everyone in the world is connected	50	49	67	63
8	Willingness to support SMS community activities	27	56	34	35
9	Gives new people to talk to	40	26	43	43
10	Coming in contact with new people	55	55	50	43
	Total	110	110	162	162

Table 7.7.1: Bridging Social Relationships by gender at BIU

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1498.450	9	166.494	2.404	.094
Within Groups	692.500	10	69.250		
Total	2190.950	19			

There is no significant difference at 5% level of significance between individual social resources benefit among students at BIU

Table 7.7.2: Bridging Social Relationships by gender at DELSU

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2181.050	9	242.339	21.351	.000
Within Groups	113.500	10	11.350		
Total	2294.550	19			

There is significant difference at 5% level of significance between individual social resources benefit among men and women students at DELSU. Using Bonferroni test of multiple comparisons, it was found that there was a statistically significant difference between "Interest in happenings in the environment and beyond" and ("Curiosity about other places in the world", "Connection with the larger community", "Connection with a bigger picture", "Reminder that everyone in the world is connected", "Gives new people to talk to", "Coming in contact with new people"). There was also a statistically significant difference between "A desire to try new things" and the following attributes: ("Curiosity about other places in the world", "Connection with the larger community", "Connection with a bigger picture", "Reminder that everyone in the world is connected"). There were also significant differences amongst the following: ("Interest in what different people are thinking" and "Reminder that everyone in the world is connected"), ("Connection with the support SMS larger community" and "Reminder that everyone in the world is connected"), ("Connection with a bigger picture" and "Willingness to community activities"). Similarly, there was a statistically significant difference between "Reminder that everyone in the world is connected" and ("Willingness to support SMS community activities", "Coming in contact with new people", "Coming in contact with new people").

Table 7.7.3

Multiple Comparisons

Bonferroni

(I) SR	(J) SR	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-6.000	3.369	1.000	-21.22	9.22
	3	-14.000	3.369	.088	-29.22	1.22
	4	-22.500*	3.369	.002	-37.72	-7.28
	5	-22.000*	3.369	.003	-37.22	-6.78
	6	-24.000*	3.369	.001	-39.22	-8.78
	7	-39.000*	3.369	.000	-54.22	-23.78

155

	8	-8.500	3.369	1.000	-23.72	6.72
	9	-17.000*	3.369	.023	-32.22	-1.78
	10	-20.500*	3.369	.005	-35.72	-5.28
2	1	6.000	3.369	1.000	-9.22	21.22
	3	-8.000	3.369	1.000	-23.22	7.22
	4	-16.500*	3.369	.028	-31.72	-1.28
	5	-16.000*	3.369	.035	-31.22	-.78
	6	-18.000*	3.369	.015	-33.22	-2.78
	7	-33.000*	3.369	.000	-48.22	-17.78
	8	-2.500	3.369	1.000	-17.72	12.72
	9	-11.000	3.369	.383	-26.22	4.22
	10	-14.500	3.369	.070	-29.72	.72
3	1	14.000	3.369	.088	-1.22	29.22
	2	8.000	3.369	1.000	-7.22	23.22
	4	-8.500	3.369	1.000	-23.72	6.72
	5	-8.000	3.369	1.000	-23.22	7.22
	6	-10.000	3.369	.634	-25.22	5.22
	7	-25.000*	3.369	.001	-40.22	-9.78
	8	5.500	3.369	1.000	-9.72	20.72
	9	-3.000	3.369	1.000	-18.22	12.22
	10	-6.500	3.369	1.000	-21.72	8.72
4	1	22.500*	3.369	.002	7.28	37.72
	2	16.500*	3.369	.028	1.28	31.72
	3	8.500	3.369	1.000	-6.72	23.72
	5	.500	3.369	1.000	-14.72	15.72
	6	-1.500	3.369	1.000	-16.72	13.72
	7	-16.500*	3.369	.028	-31.72	-1.28
	8	14.000	3.369	.088	-1.22	29.22
	9	5.500	3.369	1.000	-9.72	20.72
	10	2.000	3.369	1.000	-13.22	17.22
5	1	22.000*	3.369	.003	6.78	37.22
	2	16.000*	3.369	.035	.78	31.22
	3	8.000	3.369	1.000	-7.22	23.22
	4	-.500	3.369	1.000	-15.72	14.72
	6	-2.000	3.369	1.000	-17.22	13.22
	7	-17.000*	3.369	.023	-32.22	-1.78
	8	13.500	3.369	.112	-1.72	28.72
	9	5.000	3.369	1.000	-10.22	20.22
	10	1.500	3.369	1.000	-13.72	16.72
6	1	24.000*	3.369	.001	8.78	39.22
	2	18.000*	3.369	.015	2.78	33.22
	3	10.000	3.369	.634	-5.22	25.22
	4	1.500	3.369	1.000	-13.72	16.72
	5	2.000	3.369	1.000	-13.22	17.22
	7	-15.000	3.369	.055	-30.22	.22

	8	15.500*	3.369	.044	.28	30.72
	9	7.000	3.369	1.000	-8.22	22.22
	10	3.500	3.369	1.000	-11.72	18.72
7	1	39.000*	3.369	.000	23.78	54.22
	2	33.000*	3.369	.000	17.78	48.22
	3	25.000*	3.369	.001	9.78	40.22
	4	16.500*	3.369	.028	1.28	31.72
	5	17.000*	3.369	.023	1.78	32.22
	6	15.000	3.369	.055	-.22	30.22
	8	30.500*	3.369	.000	15.28	45.72
	9	22.000*	3.369	.003	6.78	37.22
	10	18.500*	3.369	.012	3.28	33.72
8	1	8.500	3.369	1.000	-6.72	23.72
	2	2.500	3.369	1.000	-12.72	17.72
	3	-5.500	3.369	1.000	-20.72	9.72
	4	-14.000	3.369	.088	-29.22	1.22
	5	-13.500	3.369	.112	-28.72	1.72
	6	-15.500*	3.369	.044	-30.72	-.28
	7	-30.500*	3.369	.000	-45.72	-15.28
	9	-8.500	3.369	1.000	-23.72	6.72
	10	-12.000	3.369	.232	-27.22	3.22
9	1	17.000*	3.369	.023	1.78	32.22
	2	11.000	3.369	.383	-4.22	26.22
	3	3.000	3.369	1.000	-12.22	18.22
	4	-5.500	3.369	1.000	-20.72	9.72
	5	-5.000	3.369	1.000	-20.22	10.22
	6	-7.000	3.369	1.000	-22.22	8.22
	7	-22.000*	3.369	.003	-37.22	-6.78
	8	8.500	3.369	1.000	-6.72	23.72
	10	-3.500	3.369	1.000	-18.72	11.72
10	1	20.500*	3.369	.005	5.28	35.72
	2	14.500	3.369	.070	-.72	29.72
	3	6.500	3.369	1.000	-8.72	21.72
	4	-2.000	3.369	1.000	-17.22	13.22
	5	-1.500	3.369	1.000	-16.72	13.72
	6	-3.500	3.369	1.000	-18.72	11.72
	7	-18.500*	3.369	.012	-33.72	-3.28
	8	12.000	3.369	.232	-3.22	27.22
	9	3.500	3.369	1.000	-11.72	18.72

*. The mean difference is significant at the 0.05 level.

7.8   Summary of Findings

This section examined whether social media sites helped university students to forge and sustain social relationships of social capital in relation to the derivation of social capital resource benefit. The results of this study were highly of interest. The finding for bonding social relationships has shown that students at BIU and DELSU build network of bonding social relationships on social media sites with differing interest for social capital resource benefit. This was clearly detected for students at BIU and "Advisers in SMS to help with decisions" was a major resource to the students and at DELSU, "Trusted persons to solve problems'' was critical to the students. Both results were statistically significant to the men and women in both institutions compared to other resources, statistically revealed (see Table 7.6.3 on BIU and Table 7.6.5 on DELSU).

The findings in bridging social relationships.equally signalled statistically significant difference in social capital resources, relative to individual students' interest in maintaining social relationships on SMSs. However, at BIU, there was no significant difference between individual social resources benefit among men and women students. The possible explanation is that the students are exploring wide range of social capital resources to sustain their affluent life, with high accessible disposable in funding smart media use for sociality. In regard to DELSU, the diversities of students resource benefit is more telling in this institution due to statistically significant difference among the individual resource benefit linking the students. "Interest in happenings in the environment and beyond, "A desire to try new things" and "Reminder that everyone in the world is connected" were highly significant to the men and women students (see Table 7.7.3 on DELSU). This finding can be seen as an indication that students at DELSU are more interested in building bridges of social network to attract range of social capital resources in their social relationships. Further, the students in this institution are from different social background, most of whom from lower income families and culture, strategically harnessing wider friendship networks for post university education assistance in terms of employment and other social empowerment. This observation find support with MacGregor, (2015) views which states that students who are insufficient have many networks in their lives, ranging from families, acquaintances and social organisations such as churches to serve as a platform for different sources of support and that acquisition of social capital provide the resources for them to fulfil their aspirations..

7.9 Castells Digital Networked Society: A theoretical Relationship to the Study

"Technology continues to spread through population, so the emerging need for people to learn how to cultivate their networks and get out from the cocoon of their bounded groups" Source: Pew Internet Centre, October, 18, 2012)

This expression underscores the importance of technology in today's society and smart media as a new breed of technology has opens up a new environment of digital networked society, and a new form of social behaviour and sociality. This chapter therefore reflects back on the smart media and its functions for users in virtual society. The research question nine has expanded further on the influence of smart media on the social lives of students in Nigerian digital networked society and evidence from the study has shown that students in Nigeria have embraced smart media to become a generation of mobile society or mobile world or mobile network society (see Castells, as cited in Ganguin and Hoblitz, 2012).. The rationality of digital networked society is all about mobile technology in which usability and time are location free. Thus, the functionalities of smart media to the students at BIU and DELSU is sum up as follows; First, the students ownership of smart media has shown that they are member of the digital networked society and of virtual communities. Their ability to own smart media device is driven by the socio-economic environment they find themselves (parental income, status of middle class families and access to better education and institution). Further, the students capacity to use smart media device in a complex new world of digitalization and internet demonstrate better understanding of the technicalities of smart media device and the skills to use the device with confidence, reference to a student year of study and exposure to the device by way of usage experience. Second, the students as the coming generation in the digital networked society are exploiting the functionalities of smart media to drive social relationships with different categories of friendship activities.

Furthermore, the students' sociality and social relationships in digital networked society has gone beyond the conventional face-to-face interaction and relationship, with social media sites becoming platforms for the advancement of friendship network and relational ties of social capital. Evidence from the study, relative to research question ten (10) indicate that men and women at BIU and DELSU have taken to social media sites to improve on their interaction and social relationships with other users of social media sites as obviously observe from the students online behavioural activities (concentration on facebook as convergent arena for harnessing friends, statistically revealed that most men and women students have friendship size above 200 friends on facebook). This implies that the students in Nigeria networked

society are forging networked of individualism using smart media device for effective social relations, communicating with friends and pursuance of personal self-expression, reputation management and chatting on facebook.

The students' formation of social relationships of social capital on social media sites is regarded as additional link to digital networked society. Evidence from the study suggest that men and women at BIU and DELSU are evolving bonding and bridging social relationships on facebook, the benefit of which is peculiar to individual student in terms of social capital resources derivation from their relational ties. Findings from the study indicate that men and women students have different path of achieving individual resource benefit either in the context of bonding or bridging social relationships or both depending on individual students' orientation and value system.

In sum, the current study of smart and social media sites in the context of students in Nigerian society finds relevance to Castells digital networked society (see Castells et al, 2007; 2014; Ganguin and Hoblitz, 2012).

The next chapter discusses the main findings of the study in the context of wider research literature and addresses the extent to which the main research questions have been effectively answered. The limitations of the study and suggestions for further for further research are also discussed.

CHAPTER EIGHT

DISCUSSION AND CONCLUSION

8.1   Introduction

This study has contributed to the understanding of university students' perceptions of mobile media technologies in Nigerian society. The university students are members of the up and coming generation with the ability to use the system technologies, based on their educational orientation and lifestyles. The study aimed to fill a gap in the understanding of how young people used the new media of mobile technologies in Nigeria where landline telecommunications were mostly inaccessible to the young population.

The study took the mixed methodology to investigate the university students' feeling towards the system technologies and this was carried out in two phase, The first phase of the study examined mobile phone with internet connection (feature phone) and focus group interviews was conducted in two study locations; BIU and DELSU to know the participants opinion and use of mobile phone. The second phase investigated the university students' attitudes towards smart media and as multimedia device that has opens up wider sociality and social relationships of users in society. This study was a follow up on the findings of the focus group data analysis with seven themes identification and on which formulation of research questions were informed to guide the investigation and surveys was carried out to collect data at BIU and DELSU.

The use of mixed methodology in the thesis helped provide holistic understanding of how university students in a developing society embrace mobile media technologies in their social life relative to communication behaviour, social interaction and social relationships of social capital in virtual sphere. This role of mobile networks in engineering the development of network infrastructure and service platforms was discussed in relations to their competitive behaviour that has opens up access to mobile device ownership and subscription to network providers.

The significance of the current study stems from the fact that the mobile media technologies and mobile network services are new in Nigeria telecommunications sector and service delivery, and has captured the interest of Nigerians especially the young population as the major users and subscriber to mobile networks (see Uzor, 2012)

The study raised several areas for discussion. This chapter is divided into three phases: The first phase comprises the summary and discussion of the main findings of the focus group interviews on mobile phone with internet connection (feature phone) in relations to the research questions that have guided the exploratory opinions of university students at BIU and DELSU. This is qualitative focused and inductive. The second phase comprises the summary and discussion of the main findings of the surveys of university students at BIU and DELSU on their attitudes towards smart media, relative to the research questions that have comes out from the focus groups data analysis, and it is quantitative focused and deductive. The third phase discusses the main limitations of the study; and suggestions for further research and recommendation as well as the contributions of the study to mobile media research

8.2   Summary of Qualitative Approach to the Study

The section of the study drew on focus group interviews to collect data from thirty two students in two institutions: Benson Idahosa University and Delta State University on their perceptions and use mobile media with six research questions to guide the interview process. This are; RQ1: Does the socio-economic status of university students influence their perceptions and ownership of mobile phone?, RQ2: How do university students use mobile phone applications?, RQ3: Do the university students believe that the use of mobile phone influences others perceptions of the users class and socio-economic status?, RQ4: How do university students use mobile phone in sociality?, RQ5: Does university students perceptions of mobile phone influences their personal communication and mobility? and RQ6: How do university students use mobile phone for entertainment consumption?

The participants in the focus group interviews were similar in ages and were selected by means of convenience sampling, based on other similar age groups and selection procedures in previous studies (see Rahman and Azhar, 2010, and Appendix Two: Qualitative Focus Group Interview Guide). The study theoretical position was based on the social construction of technology (SCOT) theory (Pinch and Bijker, 1984). The theory provided the principles to link up the relationship between mobile phone and society with the discussion. For example, Wong, (2008) noted that individual users of mobile phone define the device usage behaviour in relation to the peculiarities of their utilization experience. Fiske's (1992; 2001) conceptual framework of sociality was drawn upon to add flavour to the discursive findings of the interviews data analysis. Thus, a follow up review of research was carried out to establish the nature of the usage purposes and benefits of mobile phone to users in society.

As this aspect of the study was exploratory, the opinions derived from the group interviews were organized and coded by hand and analyzed through two analytical procedures. The first of this was the use of 'S' and a number to denote individual students, with a view to observing standard ethical practice (Reid, 1997). The second was the constant comparative method and it was used to compare and contrast the participants' opinions into selectivity and to coded them along similar lines of response to determine the consensual and non-consensual views of the thirty two students' participants. This was done to ensure that the views expressed followed similar patterns for which two sub levels of opinion were established by the analysis. The first sub level was comprised of the majority opinions which were a large proportion of the student discussants shared similar views for each of the issues discussed. The second sub level consisted of the non-consensual views, in which few of the participants' reflected similar positions (Poggenpoel, (1998:338: Lacey and Luff, 2004:4; Patton, 2002; Vicsek, 2010).

All of these processes were inductively driven, given the subjective nature of interviews with expressive opinions on which the participants' feelings on mobile phone was derived as well as the subjective analysis of the researcher thoughts and generative meanings of the participants opinions relative to each questions that were put forward. The next discourse now focuses on the findings of the focus groups.

8.3   Discussion of the Main Findings and Their Implications

Reflecting on the research questions raised earlier in this study, it is now possible to summarise and discuss the main findings of the focus group interviews.

8.3.1   University Students' Perceptions of Mobile Phone

The analysis of focus group interviews carried out in two locations; Benson Idahosa University and Delta State University began with the face to face procedures which were followed. The interviews were guided by semi-structured questions (see Appendix 2), recorded in audio format, and transcribed. The analysis of the students' responses to the questions involved comparing their statements for similarities in order to ascertain whether they represented a majority or non-majority (few) opinion. This, in turn, determined the finding to the question asked. This is the basis of constant comparison method.

The summary of the issues identified is organised according to different areas of the benefits of mobile phone usage to the students. The first research question considered whether the socio-

economic status of the students influenced their perceptions and ownership of mobile phone? The evidence emerging from this study indicates that the respondents' background in terms of age, educational orientation and discipline as well as their limited access to landline telephones influenced, to a great extent, their adoption of mobile phone (see Table 5.1). These findings confirmed earlier research by Drotsky et al, (2007), Gayler, (1980), Campbel, (2007:350) who reported that age, social class, education, gender and income influences users perceptions of mobile phone. However, no indication of landline telephones as an influencing factor was found in these studies. Thus, the current study has added another variable to the existing factor in the perceptions of mobile phone technologies.

The second research question on how do university students use mobile phone applications? A number of respondents' expressed preference for musical application, confirming those results of Nurullah, (2009); Furlonga and Cartnel, (2007) who regarded mobile phone as entertainment medium for users' social life through which relaxation and fun can be fulfilled. Moreover, the use of clock and calculator in their device and as self organising were of importance to the respondents. This finding closely supported with the work of Culvin, (2005); Baron and Ling, (2008); Walsh, White and Young, (2008) Simay, (2009) who saw clock, alarms and calculator are important features in mobile phone use and as time management and self organisational entity. Ling and Yuri (2002) micro coordination of mobile phone utilization provide more support on the mobile usage features. Further, the usefulness of social networking sites in the advancement of social connections and sense of belonging were obvious indications of respondents' usage application of their device implying that they cherishes mobile phone as platform for sociability. This finding supported the view of Mc Clatchy, (2006) that students' usage of mobile device helps them develop a sense of belonging and maintain good image of themselves. Goffman's idea of everyday life extend the importance of social networking sites as a virtual communities for users to tell others what they are via posting their profile, visual image of themselves and instant messages to circle of friends network are reflection of online personal behaviour.

The third research question asked do the university students believe that the use of mobile phone influences others perceptions of the users class and socio-economic status?. The respondents opinions were insightful to affirm mobile phone as a device of fashion and status citing for examples, the words complement dressings, fashion gadget, class, expensive, showcase to the world were crucial factors of social influence of mobile device relationships (see Fortunali, 2004; Katz and Sugiyama, 2005; Boyd, 2007:12).

The fourth research question on how do university students use mobile phone in sociality? It was obvious from the responses that mobile phone facilitates sociality and friendship was the most expression of opinions. This finding confirmed the position of research by Green and Singleton, (2009) who argue that mobile phone has crucial place in young people's lives through which friendship development, sense of self and identity performance are fulfilled. Goffman also note that social life is a stage in which social relations is driven by exchange of actions, reactions and social connections, with social networking sites acting as a platform in virtual arena. Additional support found from the work of Olatokun and Bodunwa, (2005) which has shown that student's use mobile phone as a medium of communication for keeping in touch with friends, colleagues, relations and associates and Okafor and Malizu, (2014) also found that students use their device as a tool for socializing, staying in touch with their parents and relatives, and for the promotion of interpersonal relationships.

The fifth research question does university students' perceptions of mobile phone influences their personal communication and mobility? Responses to the question revealed differing opinions on which two lines of analysis were drawn. The first of this was the public contextual mobility of mobile phone use and most of the respondents point to the use of their device anywhere in order to keep track of information and contact with friendships network. This result is consistent with studies conducted earlier. For examples, Pew Internet and American Life Project, (2010) reported that majority of young people use their mobile phone for safety, security and ease of communication in crisis situation and Oksman, (2006; 2010 noted that young people in Finland use mobile phone for safety and security. This was conceptualised as micro-coordination. The second analysis border on the private contextual mobility in which communication was found to be more crucial to the respondents' interactive relations with family and friends through voice calls and in which respondents decision and control behaviour becomes decisive. This finding appear to support Humphrey's (2005) disruption of hegemony; the idea that the person looked at the caller ID before answering the call and maintenance of hegemony involve caller and receiver decision to answer the call or put off the call, and this extends the decision-control process of mobile phone users calling and receiving behaviour. Furthermore, the respondents' reaction to text messages was crucial to indicate, citing for instance, immediate decision making to text back instantly based on convenience. This appear to ally with Humphrey's (2005) caller hegemony in which texter send messages (action) and texting back (receiver action) provide useful illustration of contextual reactions to text messages.

The overall picture emerging from these studies indicates that mobile phone help students in Nigeria to support interpersonal relationships and communication relations with relatives and friends. This finding again underlines the importance of calling and texting to students' interpersonal relationships in Nigeria. As earlier reported in previous study, students in Nigeria send and receive messages, and make and receive calls to parents, guardians and loved ones to sustain interactive relations (Oyewole, 2014). Researches by Western scholars have yielded similar findings on voice communication (talking on mobile phone) and textual communication (text messages) (Dresler-Hawke and Mansvett, 2008, Kamran, 2010, Balkrisnam and Raji, 2012, Zulkefly, 2009). Additional support comes from Dresler-Hawke and Mansvett, (2008) who reported that many of the mobile phone calls made by university students served to maintain friendships, keep in contact with family and social arrangement. Similarly, Zulkefly and Baharudin, (2009) found that students' had a preference for SMS to sustain interpersonal relationships (e.g. with friends, and parents).

With response to research question six on how students use mobile phone for entertainment consumption there were indications of respondents preference for watching television and videos, listening to music and using music player, and chatting in their mobile phone. These findings enhance our understanding of the key factors of entertainment needs and the associated functionalities on mobile phone usability (Furlong and Cartmel, 2007, Kreutzer, 2008, Nurullah, 2009, Jiang, 2011). Further support was drawn from the work of Nurullah, (2009) and Furlong and Cartmel, 2007) who reported that young people exploit the content entertainment of their mobile phone by playing games, downloading images and life styles apps, listening to music, watching videos, watching mobile television, taking photos and photo sharing. All of these are entertainment platforms for mobile users to fulfil their needs for relaxation, fun, pleasantries and sharing jokes. Other findings suggested that mobile phone fulfil students' leisure needs through the wide range of usage features they offer. Among these, the ability to download pictures and movies, and taking pictures are the most common forms of entertainment functions that students use (Green and Singleton, 2009; Matanhellia, 2010).

Furthermore, the current results add to the growing body of literature on students' usage of mobile phone in interactive relations and social life, indicating also the advancement of the social construction of technology theory, which helps in understanding students' perspectives on and reasons for mobile phone adoption and their usage behaviour.

The next phase of the study examines university students' attitudes and usage of smart and

social media sites.

8.4 Quantitative Phase of the Study

Emergent themes from the focus group interviews data analysis (see chapter 5; pp. 127-128) were utilized to develop the research questions which were require to explore the university students' attitudes towards the use of smart and social media sites for sociality and social relationships of social capital. The following research questions were put forward to guide the study and these are; RQ7: Does the socio-economic orientation of the university students' influences access to smart media? ; RQ8 Why do university students own smart media and with what usage experience?; RQ9: How do university students use social media sites for sociality?, and RQ10 What role do social media sites play in the university students' social relationships of social capital?

The concept of social relationships in this study refers to individual students' relational ties on social media sites with bonding and bridging social relationships and of social capital as constructive engagement.

The significance of this study lies on the fact that the introduction of smart and social media sites occurred relatively recently, making them new to the young generation of Nigerians, and their appropriation and use have greatly influenced students' social behaviour. The attempt to address this issue prompted a survey of 600 respondents, made up of 350 respondents from Delta State University and 250 respondents from Benson Idahosa University in Nigerian society through heterogeneous samples and the use of self-completed questionnaire to get their opinions on respective research questions.

In setting the background to the study of smart and social media, a review of the theoretical connection was undertaken. This was based on Manuel Castell's theory of digital networked society which helped underscore the importance of smart media in society, to the emergence of networked individualism to understand the usage connectivity of the system device. The issue of time and distance have become meaningless and the space of flows is what makes the networked society dynamic for which this scenario has been attributed to the influence of smart media (Castell, 2005; Charusmita, 2012; Kollanyi, Molnar and Szekely, 2007).

Furthermore, the influence of social media site has advance sociality and the constructive social relationships of social capital to a new dimension of social connectivity in digital networked

society (see Bourdieu, 1986; Coleman, 1988; Lin, 1999; Brandtzæg, 2012; Xie, 2014).

As some scholars explains, social capital provide the framework for understanding the nature of relationship management of individuals on social media sites, serving as a means to unfold the patterns of students' sociality and social relationships of bonding and bridging social capital (see Schmidt, 2006; Wohn, Lampe et al, 2011).

Besides, Utz and Beukeboon, (2011) described the importance of social media sites in the maintenance of social relationships either for upholding strong ties or fostering weaker social ties, with the size of the students' network as a basis for determining the nature of bonding and bridging social relationships in social media environment, relative to the social capital resources that are available to tap from other relationships network (Siisiniainen, 2000). Even, Coleman, (1988:118) said social capital is an important resource for individuals, and may greatly affect their ability to act and their perceived quality of life. To Putnam, (2000) social capital encompasses a set of social life (networks, norms, and trust) that allows the participant to work together more collectively to achieve the shared-goal. to the study of social media sites with the university students as individual level of social capital. Thus, the individual level of social capital relative to the university students was focus upon in this research.

A further review was undertaken of the social capital measurement and of William's (2006) Internet Social Capital Scales (ISCS) and this was utilised to understand the patterns of social relationships of social capital formation on social media sites and the benefits associated with relational ties of social relationships. Thus the nine items of bonding social relationships and ten items of bridging social relationships were set up as independent variables for which individual resource benefits of respondents choice was assessed.

The self-reported questionnaire data was analyse with descriptive statistics based on Chi-square test and One-way ANOVA tests were used to compare different variables while simple percentage was used to compare differences between gender (between men and women)

8.5 Summary and Discussion of the Main Findings

Analysis of data on research question seven on does the socio-economic orientation of the university students' influences access to smart media?. The result suggests that age was a predictive factor in the university students' ability to access smart media and this was clearly established at BIU and DELSU. This finding confirmed the study of Campbell's (2007:350) who reported that age has a role to play in the adoption of mobile media. Furthermore, the results on whether family income per month influences university students access to smart media was found significant to students in DELSU. Similar finding can be drawn from the study of Pedrozo, (2013) who found from a survey of New Zealanders that income play decisive role in someone ability to own or have access to smart media. A different study in comparison, found that young people disposable income influences the potentiality to smart media (Koutras, 2006:108; U.K.Tschmuck, (2013).

The research question eight asked why do university students own smart media device and with what usage experience. The most important reason to the respondents was to access internet and other system applications. This finding confirmed previous research that found students own smart media device due to the internet access afforded by the system technology (Helena, 2012, Tunmibi, Aregbesola and Asani, 2015). The Pew Internet and American Life Report (2015) found that 15% of Americans aged 18-29 rely on smart media device to access the internet. Similarly, Korst and Sleijpen, (2014) noted that among the reasons young people aged 18-24 years own smart media device was to access the internet.

In relation to the respondents' usage experience of smart media device, there was a clear indication that most respondents had more than five years' experience with smart media device and the finding cut across the demographic groups at BIU and DELSU. Similar findings were reported by Irina, (2011) 217 who found that the majority of the Japanese Business University students in her study had used their mobile device for 10 years and that half of them had used mobile device for more than five years. It should be noted that this finding comes from a society that is more developed and where students have greater access to technological facilities compared to the students in Nigeria. This indicates that the students' educational orientation might have had a role to play in their early adoption of the device and the descriptive features in the English Language made it easy for them to understand the system features and usage functionalities. All mobile media technologies (feature and smart) have descriptive features.

Research question nine looked at the university students' usage of social media sites for sociability. It was investigated with different issues and as measures to assess the students'

opinions. The first of this was that the students should indicate how they use social media sites for their social relations. The finding indicates that respondents' social relations/ connection solely depend on the social media sites and facebook was the most favourable site for social relations by men and women at BIU and DELSU. These findings demonstrate the importance of facebook to the students' social lives and social interactions. These findings largely confirmed the position of prior research on facebook carried out elsewhere. For examples, one study found that Facebook enhance the capacity of university students in Cyprus to maintain and strengthen social ties (Bicen and Cavus, (2011), Lin and TSAI, (2012) reported that Facebook served as a resource offering opportunities for peer group interaction and social integration. Also, Al-Khaddam, (2013) reported that 77% of university students in Saudi Arabia use Facebook and that the site has had more of a personal impact than other social media, and Pempak's (2015) findings also indicates students' preference for Facebook to facilitate their connection with friends, to promote self-presentation, and as a platform to construct their social identities (Manago and Greenfield, 2012; Zhao et al, 2008)

Further support comes from Onyeka, Ibrahim and Dalhatu, (2013) and Eke, Omkwu and Odoh, (2014) who found that facebook served as a platform for students to keep in touch with friends and family members as well as strengthening their interpersonal relationships. These findings are a clear indication that facebook is an important site in the social media arena which enables students in Nigerian society to make themselves known to others in virtual communities (telling other users who they are and what they are) and for self- exhibitions (status updates, display photos in their online albums, describing their personal interest and hobbies, and sharing these alongside other situational activities. Citing the findings of Jensen and Sorenson, (2013) that Facebook provides a platform for connecting with friends among Danish users, of the students social relationships were classified using three ties; strong (parents, family members, close friends) weak (acquaintances and course-mates), and latent (causal). I also adopted a similar position related to the finding of Facebook usage among students at BIU and DELSU in suggesting the possibility of developing online social relationships with both strong and weak ties to strategically actualize and sustain their aspirations in life.

The research question ten examined data on the role social media sites play in the university students' social relationships of social capital and the extent to which students derive social capital resources from relational ties. The research showed clear differences in individual resource benefits being evaluated for bonding and bridging social relationships and in which Bonferronni test of multiple comparisons specify significant resource benefit to students in bonding and bridging social relationships at BIU and DELSU. For examples, in bonding social relationships, the finding for BIU was ''Advisers in SMS to help with decisions'' and in

DELSU, "Trusted persons to solve problems". These results reflect the observation that the students in Nigeria have different path of bonding relational fulfilments suggesting further that emotional support is crucial to the students which could be obtain from family and close friends. These findings have confirmed the position of research elsewhere that "advisers in SNSs to help in making important decisions'' was a major benefit of social capital resources in social relationships (Williams 2006). However, there was no evidence from previous research to support the finding of DELSU.

Furthermore, the data for bridging social relationships was again subjected to Bonferroni test of multiple comparisons with a view to determine specific resource benefit to respondents. The finding for BIU indicates that there was no significant difference among the student resource benefit in their social relationship of bridging social capital. This also indicates that the students surveyed share similar resource gratification in their relational ties of bridging capital. In this situation, the study notes that the ANOVA test was not significant to go ahead to conduct Bonferroni test.   In contrast, the finding for DELSU showed that there was significant difference between individual social resources benefit among men and women students. This necessitated Bonferroni test of multiple comparisons to find out where specifically the students resources benefit lies between individual resources (independent variables) compared. The results revealed that there were four statistically significant resources benefit to students: "Interest in happenings in the environment and beyond''; "A desire to try new things"; Interest in what different people are thinking" and "Reminder that everyone in the world is connected" These findings are thoughtful to suggest that the students at DELSU are conscious of the resources they need from social relationships in networked society

Thus, the current results added to a growing body of literature on bridging social relationships and social capital, and on social media sites play unique role.

8.5.1   Gender Differences in Smart and Social Media Use

The eleven research question examined whether there were any gender differences in smart and social media use among university students. This was informed by the increasing debates that gender has much influence on the appropriation and use of smart media relative to the usage behaviour of social media. (see Bray, 2007; Yates, and Lockley, 2008; Muscanell and Guadagno, 2012).

The current study therefore has found evidence to argue that men and women students in Nigeria use smart and social media for sociality and the advancement of social relationships on social

media arena. For examples, the result on the relations of age and access to smart media device yielded difference between men and women respondents. Thus, at BIU women (73 (26.8%) are more likely than men (62 (22.8%) to have access smart media and at DELSU. the women (39.0%) are more likely than men (30/1%) to have access to social media device. Gender differences were noted on the reasons for owning smart media device to which at BIU the women (39.5%) are more likely than the men (33.6%) perceived access to internet and other system applications as the ownership of smart media device and at DELSU, the women (42%) are more likely than the men (28%) to own smart media device due to preference for access to internet and other system applications.

Gender differences were equally detected on the length of usage experience between men and women at BIU and DELSU. Thus, at BIU, the women (41%) are more likely than the men (15.5%) to have had five (5) usage experience of smart media device and at DELSU the women (25.8%) are more likely than men (13.6%) to have had five (5) usage experience of smart media device.

Furthermore, gender differences were found on the use of social media sites, specifically in relations to facebook for social relations. Thus, at BIU the women (49%) are more likely than the men (36%) to use facebook for social relations on social media sites and at DELSU, the women (69%) are more likely than the men (25%) to use facebook as a platform for social relations. Similar, gender differences in network size of friendship connections were found at BIU and DELSU for which at BIU, the women (60%) are more likely than the men (28%) to have network size of over 200 of friendship connection and at DELSU, the women (49%) are more likely than the men (23%) to have network size of above 200 friendship connection.

On the device to access social media sites, gender differences were noticed at BIU and DELSU, and on which at BIU, the women (69%) are more likely than the men (62%) to use the internet enabled mobile device to access social media sites. In contrast, at DELSU, the men (75%) are more likely than the women (59.3%) to embrace the internet enabled mobile device to access social media sites. These respective gender differences arose as a result of the statistically significant relationships between the dependent variable (DV) and independent variables (IV) on the analysis of data relating respective research question. Moreover, these findings confirmed earlier research on the relations of gender as an intervening variable in smart media appropriation and use, and social media usage behaviour (see Boyd, (2007; Goudreau, (2010; Muscanell and Guadagno, 2012; PerlRoth and Miller, 2012; Christina, 2013; Maikaslivilli, Ujmajuridze et al, 2013; Park and Lee, 2014)

8.6:   Conclusion

This section has three main aims. The first is to summarize the research approaches and the outcomes of the thesis, thereby demonstrating that the research questions were successfully addressed. The second is to discuss the limitations of the study. The third is to suggest possible trajectories for future research in the area of smart and social media usage behaviour.

8.7:   Re-visiting the Thesis

Castells digital networked society has already arrived, with mobile media technologies leading people around the world to assume new dimensions in their social life and social behaviour. Thus, the digital networked society is leading to the social fragmentation of individual networks, as a result of which today's social relationships are undergoing redefinition in terms of formation and maintenance.

This study therefore set out to examine the attitudes of Nigerians towards mobile media technologies with university students being the focus of inquiry. The aim was to determine the extent to which the system technologies have influenced the students' social lives and social behaviour. The study undertook two phase approaches to handle the research. The first of which was the focus group interviews (i.e. the qualitative) with the students in two investigative locations explored their feelings about mobile phone (feature phone) with particular attention to the functionalities of the device. Thirty three students took part in the discursive interview and guided by six research questions (see pp. 11).

The interview data were subsequently transcribed, coded by hand and analysed by comparing respondents' responses in order to establish the main opinions in terms of those held by the majority and the non-majority. The findings suggest that there were different benefits of mobile phone to the students, and that these benefits were in different forms and functions (see chapter five). The study took cognisance of the theory of social construction of technology SCOT and of grounded theory to strategically generate a theoretical framework for the study. The themes established from the focus group interviews laid the foundation (see 127-128) for the second phase of the study. The results of the interviews formed the basis for the formulation of the research objectives and research questions to examine the attitudes of university students towards smart and social media, in the context of Castells digital networked society..The survey of students that was carried out in BIU and DELSU involved a heterogeneous procedure to ensure the representative spread of questionnaire across the various faculties and departments of each University. The completed questionnaires were collated, run on

crosstabulation and the respondents' data were analysed for Chi-square test and One way-ANOVA test were performed to determine the nature of the relationships between the dependent variables (questions investigated) and the measures to determine the respondents opinions for each item being investigated (the independent variables) to obtain predictable outcome in terms of significant relationship. Bonferronni test of multiple comparisons was applied to comparing independent variables for specific outcomes in terms of benefit and simple percentage to determine percentage differential where there was significant relationship between variables being tested.

The study's findings demonstrate the significant benefits of smart and social media to the students. In particular, internet access was identified as a basis for smart media ownerships and usage experience an indication of students' ability used the device to advantages and functionalities. And it was also found that smart media helped student build network size of friendship connections. Furthermore, the study examined the students usage behaviour of social media sites for sociality and building social relationships of either bonding and bridging social capital, relative to the resources derivation from relationships with the network of friends.(measured in terms of network size) This significance demonstrates the roles of smart and social media sites, as medium that positively influence the everyday lives of the students in Nigerian society.

8.8   Limitations of the Study

Evidences abound from the study that the introduction of mobile phones and social media sites in Nigerian society has contributed to the advancement of sociality and the social relationships of the university students. The data generated through focus group interviews with students in two universities: BIU and DELSU coupled with the follow-up survey of 600 students, comprising 350 at DELSU and 250 at BIU yielded an insightful understanding of the usage behaviour of the students regarding mobile phones technologies and social media sites. Having been carried out in Nigeria, a Third World society with poor telecommunications infrastructure and services delivery prior to 1999, this current study attempted to filled the gap in knowledge in this area.

Nevertheless, this study has inherent limitations, like all of the studies reviewed. These limitations are therefore isolated here and discussed. First, the results represent the university students in the specific studied locations, with defined sampling strategies for each university population. Thus, the findings are limited to BIU and DELSU and cannot simply be generalized. The conclusion here is that the findings do not represent the entire opinions of all

young people in Nigeria. Second, the methodologies of data collection were specific to this study. For examples, the use of the convenience sampling procedure to select participants for the focus group interviews does not cover the whole student populations while the use of the heterogeneous technique to find survey respondents was also not representative of the entire university population in Nigeria. The overall implications of the findings that emerged are specific to the respondents' population. Third, the construction of bonding and bridging social capital resources and the individual resources benefits rests on Williams (2006) Internet Social Capital Scales which were specifically adapted to this study to test the likelihood of the various benefits to the respondents in their network of social relationships, relative to Third world environment. Fourth, cultural perceptual limitations might affect users' views of mobile phone and social media in all cultures. Researchers like West, Chester and Eltantany, (2015) and Chen, (2013) carried out useful studies on cultural influences in new media adoption and use. In Nigeria, mobile phone and social media are new to Nigerians and therefore, users cut across cultural and linguistic groups. Their perceptions on what the system technologies means to them may vary from user to user. This brings to the fore the ideals of the social construction of technology (SCOT) theory which says that the use of technology is subjective in terms of users' interpretative process which is based on their unique needs and the technology's functionalities.

8.9: Suggestions for Further Research

Due to the limitations of this study, further research can be conducted in certain areas in relations to the usage behaviour of mobile phone and social media sites. First, the question whether mobile phone are changing the language of conversation among young people in Nigeria is worth investigating. This issue is raised because of students' recent chat with the researcher in which they said:

> "It says Sir, sure u fyn. Sir, hop unjoyin ur leave Sir? Bye 4 nw.
>
> Another said Ok sir bt I will help u to record dem o".

These chats are thought provoking and lead to the argument that related research is needed to examine the extent to which students in Nigerian society are using mobile phone to instigate new words and new meaning of English Language expressions.

The findings from this study have shown that the sociality of university students has improved with the use of mobile technologies and engagement in social media sites, in addition to forging social relationships with other social groups and with social capital

dimensions. It is, however, important to examine whether the mobile media technologies have had displacement effects in terms of young people use of existing media forms and interpersonal contact, i.e. face-to-face interaction in Nigerian society. Smartphones are multimedia devices that have integrated all of the features of traditional media to become richer system entity. This has prompted a number of the concerns: First, scholars have debated the effects of the new media of technology which tends to displace the old media of the technological environment (see, Kayany and Yelsma, 2000, Dutta-Bergman, 2004, Lee and Cheung, 2004, Nguyen and Western, 2006). Second, there is the possibility that young people could be using smartphones and social media differently from their counterparts in the Western world. Third, the assumption that young people form the crux of the mobile audience of new media as opposed to being a static audience of the old media still needs to be followed up in order to ascertain the extent of such mobility among students. Fourth, social capital is becoming a new area of academic inquiry, which to date has mostly been conducted in Western societies. Thus, research is still needed in the Nigerian context to underscore the extent to which young are increasing their social capital through the accumulation of resources in relationships management, referred to as the social relationships of individual formation. Fifth, the abuse of privacy in social media sites is viewed with much concern by the researcher, and this is an issue which the students in Nigeria are yet to become aware of, currently, there is little understanding of the implication of disclosure about their personal identity. Research is therefore advocated to ascertain the extent to which students' privacy is abused or encroached upon in social media sites, perhaps to draw the attention of the Nigerian Government to the negative effects of social media as well as the sensitization of Nigerians to the dangers of the disclosure of information about themselves.

These suggestions notwithstanding, this researcher believes that there are useful lessons to be learned from this research. First, the adoptions of mobile media technologies and social media platforms have opened up wider opportunities for Nigerians to benefit from the technologies of the Western world as well as from social media. Sociality and relationships management among young people have gone beyond the physical relationships of face to face contact to virtual communities where freedom reigns and it has become possible to connecting with a wide variety people and building networks of social groups. This suggests that the university students have become digital natives in their own way of sociality due to their ability to exploit the new media world to their advantage. Second, the coming of mobile media technologies has engendered a network society in which the concept of mass society has given way to networked individualism and social fragmentation. Third, the social media sites

have become platforms for the formation of social capital with relational ties of bonding social relationships in which closeness, emotional attachment and communication relations defined individuals' relationships in the network. Also, bridging social relationships have expanded social relationships in more diverse forms, with less emotional attachment and communication relations between individuals in the network circle with this type of relationship. Bridging social relationships provide opportunities for individuals to meet people far and wide. Both bonding and bridging social capital provide a specific set of resources for individuals in the network to tap for their benefit.

Fifth, the engagement of social media sites in sociality has created autonomy and identity for individuals in the network, albeit with the loose of privacy becoming a worrisome concern in today's digital network society. The loss of privacy here means that people can access users' profile to get information and knowledge about them.

8.10   Contribution to Knowledge in Mobile Media Research

The study of university students' perceptions and usage behaviour of mobile media technologies has advance contributions to knowledge in four identifiable areas. These are: First, the adoption of mobile media (mobile phone and smart media) in Africa and Nigeria appears to be reaching appreciable level of saturation as evidence from available data on mobile phone ownership and subscribers to networks (see p. 15 on Africa with 781 million and further projection to 930 millions in 2016 and p.16 on Nigeria with 145.4 million as at 2015, representing 103.4 percent of the country's population. All of these developments occur in an environment of poor landline telephones infrastructure and service delivery, for which majority of Africans and Nigerians in particular were unable accessible. These unprecedented spread of mobile media technologies require inquiry in order to understand its benefits to users in the continent, including Nigeria. Thus, the study on the university students' perceptions and use of mobile media technologies was aimed to fill a gap by providing literature on the ownership and usage behaviour of the system devices relative to sociality, communication relations and forging social capital of structural relationships on social media sites.

Second, three theoretical positions were advanced to gain insight into how university students take on and use mobile media technologies within the context of their own environment. The theories are: i. social construction of technology theory (SCOT) to underscore the relations of mobile media technologies and society, in which three principles of the theory provides the framework to understand students' interaction with their device. The first of this is

interpretative flexibility through which the focus group interviews of students were critical to explore the students' opinion. The second is the students as relevant social group in Nigeria networked society. Their opinion provided useful thoughts about the system technologies in terms of values and meanings they attached to the device usage. The nature of mobile media technological design and configuration could potentially influence the students' perceptual field in giving meanings to their device. Third, the socio-cultural context of the students could drive the kind of value they give mobile media device as an object of domestication in their daily affairs.

Furthermore, Castells digital networked society theory was utilised to understand the relations of smart media technology and contemporary human societies. The concept of human societies is reflective of individuals who leaves and conduct their lives in the networked society. Thus, the students at BIU and DELSU are part of networked society and of diverse socio-cultural background and social class. The students in both universities who are men and women represent different age categories in the network. These characteristics helped significantly in the questionnaire development regarding demographic information of the students (see Appendix 4: Survey Questionnaire).

Besides, the students are engaging the smart media device to advance their social life and social interaction beyond the face-to-face interpersonal relationships to more active social connections in terms of friendships building. The students are also forging relational ties on social media sites, to bonding and bridging social relationships with the aim of beneficial social capital resources. Thus, the survey questionnaire took to assess the patterns of students' social capital and of bonding and bridging social relationships for which the William's (2006) Internet Social Capital Scale (ISCS) helped uncover the structural relationships of the students at BIU and DELSU in social media sites and the resources accruable from such relationships. All of these theories advance the literature on mobile media research and all the theories constitute the thrust of sociological connection (see Yates, 2007) and Lee, (2013) said better understanding on the relations between mobile technologies and society require increased sociological interest.

Emerging from the thesis is third contribution and it border on mixed methodologies with findings regarding the university students' perceptions and usage behaviour of mobile (feature phone and smart media) and social media was based on two paradigms of analysis (Jensen, 2009) and of sequential components. The first of this is the case-based analysis involving the focus group interviews of students at BIU and DELSU and use of constant comparative methods to obtain consensual opinions on respective research questions (see chapter five on the

findings relating to qualitative analysis of focus group interviews at BIU and DELSU. The second is the code-based analysis of self-completed questionnaire arising from the survey of students at BIU and DELSU and of statistical analysis through Chi-square test, One-way ANOVA, to achieve statistical significance between variables relative to the research questions as well as the simple percentages to establish gender differences in the usage of the issues being examined (see chapter six and seven of the quantitative component).

Necessary to point out here is the role of focus groups interviews that has helped in designing and identifying key issues for the development of questionnaire which was of course the main methodology. The idea was to use focus groups more as an exploration of the topic before embarking on the main survey

Both paradigm of analysis provide wider viewpoints to affirm the students' usage ability of mobile and social media sites, reaffirming as well, the validity of the research questions. All of these discursive positions point to what De Silva's (2010) said and it states each research method tells it's own story, answering research questions that the other cannot while Banks, (2012) made similar observation stating that the importance of using existing qualitative and quantitative research in a single academic inquiry help provide holistic interpretations and validity of the research findings or generating the satisfactory ring of truth relative to the issues under investigation. This implies that the use of mixed methods in the thesis has promoted the methodological principles in new media research and contribution to the study of mobile media and social media in society.

The mixed methods is widely viewed by scholars as the third methodological movement in social sciences research since the 1980s and on which literature in the field are gathering momentum. (see Small, 2009, Bulsara, 2012; Hall, 2012).

The fourth contribution is the advancement of mobile media research within the existing philosophy of social science tradition, and on which the study of university students attitudes towards the system technologies, and as a new paradigm of communication and other usage features exemplifies constructive role of critical research practice and social science doctrine in the thesis. Thus, the interaction of inductive process – what the students thinks about mobile media technologies in terms of subjective reasoning and expression of opinions through focus group interviews and deductive process through objective knowledge based on observable data from questionnaire administration and statistically tested through Chi-square test, One-way ANOVA to arrive at specific statistical outcomes and percentage to uncover gender differences

(men and women) students at BIU and DELSU relative to the usage patterns of smart media, sociality and social capital and social relationships in social media sites are critical paradigm to establish the linkage between mobile media and social science research (see chapter five, six and seven of the thesis).

The four discursive contributions provide the framework on which the relations of Nigeria university students (as subjects) and mobile media research (as object) can be understood suggesting that the students possess the digital skills to exploit the multiple features of the system device to their advantage and benefit.

This thesis concludes that the study on university students' usage perceptions and usage behaviour of mobile media technologies has make contributions, both analytical and empirical, in the advancement of mobile media research and theoretical positions. Thus, it is hoped that future researchers in the field of mobile media technologies will benefit from this thesis, both in Nigeria and other societies around the world..

APPENDICES

Appendix 1: Ethic Approval for Focus interviews

University of Leicester   RESEARCH ETHICS REVIEW

Section I: Project Details

1. Project title:	A Study of University Students Perceptions and Usage Behaviour of Mobile Phones in Nigeria
Statement of Research Purpose	To find out how University students in Nigeria use their mobile phones in everyday life.
Project Aims/ Research questions:	To conduct investigation of how University students thinks about mobile phones and they way they use it within the context of their own society for which three research questions are the focus of exploration.
Proposed methods:	Two methods have been proposed to handle the investigation. These are first phase, focus group discussion interview and second phase, the survey.
Method of recruiting research participants	Recruitment of participants will be drawn from two Universities; Delta State University and Benson Idahosa University, Nigeria. Students aged from 18-26 years
Criteria for selecting research participants	Selection of students for focus group discussion interview will be chosen from different faculties in Delta State University. The number of students will be nine males and nine females for two group sessions. Fifteen students i.e. seven males and seven females at Benson Idahosa University are also to be chosen form different difficulties. The survey sampled at Delta State University will be 350 students to be selected
Estimated number of Participants	Eighteen students: nine males and nine females of two group sessions at Delta State University and a
Estimated start date	01/08/2011
Estimated end date	31/08/2011
Will the study involve recruitment of participants from outside the UK?	If yes, please indicate from which country(s). Yes. Nigeria.

APPENDIX 2

QUALITATIVE FOCUS GROUP INTERVIEW GUIDE

Duration of Discussion Session: 90 minutes.

The interview is designed to explore University students' perception and usage behaviour of mobile phones in Nigeria for which your participation in providing objective information is solicited.

Before proceeding to the discourse, please read the consent form that states among others that your role in the interview is voluntary and therefore you are free to withdraw if dissatisfied after going through the form.

Thank you for participating in the discussion interview.

Mode of Personal Identification:

Do not mention your name. But simply say I am from the department of.............................
…………………….. and present level……………...

Now the interview begins.

1.   Background Information about Access to Landline Telephone.

Question:
1.   Have you had access to landline telephone, be it at home or somewhere else?

2.   Ownership Status of Mobile Phones

Questions:

2.   Do you possess mobile phones?
3.   How long have you been using mobile phones?
4.   What informed your decision to buy/obtain mobile phones?
5.   How did you get money to buy mobile phones?
6.   If you did not yourself, who bought it for you?
7.   When you got your mobile phones, were there specific reasons why you thought you needed it? What were they?

8.   What brand of mobile phones do you use?
9.   Are there any specific reasons why you have that brand of mobile phone?
10.   Could you talk about the different ways you have use your mobile phone?
11.   Are there any particular features or applications that are particularly important to you?.

3.   Perceptions of Mobile Phones Utility: Personal and Social.

12.   Having mobile phone has enhanced your life in any ways, if so, could you talk about these?

 To follow up: Do you think of mobile phones as being helpful in your social life and why?

13.   How often do you make standard phone calls in your mobile phones?
14.   Whom do you call most?
15.   For what reasons do you make calls on your mobile phones?
16.   How frequent do you engage in texting and give reasons?
17.   Whom do you text and why?
18.   What other applications do you use in your mobile phones?
19.   What are they?
20.   Could you give specific reasons why you use them?

4.   Perceptions of Mobile Phones as Self Display and Identity Device
21.   Do you think of your mobile phones as a 'fashion' gadget and why?
22.   To some people mobile phones is a device of status and pride.

How do you view your mobile phones and give reasons?

23.   Do you personalize your mobile phones? How and why

5.   Perceptions of Mobile Phones as Media
24.   Do you use your mobile phones for entertainment and why?
25.   Which type(s) of entertainment do you use most and give reasons for choice of usage?

6.   Mobile Phones as Mobility and Spatial Flexible Device
26.   Where do you use your mobile phones for instance at home, on campus and publicly and Why?
27.   If you receive calls when with a friend or friends, what will do?
28.   How do you take on call when physically your parents and siblings around?
29.   Do you read your text messages in the presence of others and text back instantly?.

7.   General Perceptions on Mobile Phones
30.   In what way has the use of mobile phones affected our ways of life and behaviour?
31.   Has mobile phones use transform your behaviour and social relation and in what way?

32.   I heard some users saying that using mobile phones makes them feel good and cheerful.

Now, what about you? Did you feel the same way and why?

33.   Generally, how do you fund your mobile phones used.

8.   Virtual Interpersonal Communication Relation and Mobile Phones Use
34.   Has mobile phones text messaging kept short of your physical interaction with

parents, love ones and course-mates?.

Please comment--

 ----

9. Relation of Landline Telephones and Mobile Phones

35. i. Have you ever used a landline telephone?

If positive, how long did use i? ....
Could you also explain how you used landline phones to meet your communication needs?------

----

-- If negative,

why have you not use it or subscribe to landline telephones service? Please comment and give

candid opinion---

----

36. Based on your experience, do you think mobile phones usethreaten landline telephones,

given the nature of system utility and functions?

Your view please---

----

37. What is your overall opinion on the significance of mobile phones use in our society? Please

give insightful comment--

----

10. Conclusive Perceptual Assessment of Mobile Phones Usage Behaviour

38. As mobile phones users, what is the overall significance of mobile phones?

Please provide your opinion on this and with usable practical experience---------------------

----

We have come to the end of the discursive interview. So much thanks for your participation.

Please see the Co-ordinator of this interview for your gift.

RESEARCH ETHICS REVIEW

Section I: Project Details

1. Project title:	A Study of University Students Perceptions and Usage Behaviour of Mobile Phones in Nigeria
Statement of Research Purpose	To find out how University students in Nigeria use their mobile phones in everyday life.
Project Aims/ Research questions:	To find out what kind of social relationship do University students explore in social networking sites (bonding and bridging) via the usage of internet enabled mobile devices: smartphones or internet enabled mobile phones?
Proposed methods:	The use of quantitative-based survey questionnaire to handle the investigation. This is the second phase field data collection.
Method of recruiting research participants	Survey participants will be drawn from two Universities; Delta State University and Benson Idahosa University, Nigeria. Students aged from 18-26 years
Criteria for selecting research participants	Selection of students to be sample will be chosen from different faculties in Delta State University. The survey sampled at Delta State University will be 350 students to be selected from different faculties and Benson Idahosa University 250 students to be selected from different faculties as well.
Estimated number of Participants	The distribution of questionnaire will be split equally i.e. 175 males and 175 females in Delta State University (Total 350) and 125 males and 125 females for Benson Idahosa University (Total 250) The completed questionnaire will determine the rate of differential between males and females usage patterns of social networking sites in social relationship formation and usage behavior.
Estimated start date	June 3rd, 2013
Estimated end date	August 30th, 2013
Will the study involve survey participants from outside the UK?	If yes, please indicate from which country(s). Yes. Nigeria.

APPENDIX 4

QUESTIONNAIRE FOR SURVEY DATA COLLECTION

Read Informed Consent

Dear Respondent,

You are requested to participate in the survey research designed find out how the University student experience and use internet enabled mobile devices such as smartphones or mobile phones with internet connection for social relationships in social networking sites and forms of cultural related interest.

To take part in this research, you are required to give your consent. To this end, your participation is voluntary and you may wish to withdraw from the survey at any point during the survey. Any information or details gathered in the study will be strictly confidential.

I have read and understand the above consent requirement and desire of my own free will to participate in this study. As your consensual position, please tick the column of your choice below.

Yes	( )
No	( )

Please, do not write your name(s) in the questionnaire.

Thank you for your participation in the survey

Section One: Demographic Information about yourself. (Please circle one answer)

1. Gender:

Male ( )

Female ( )

2. Age:

18-20 ( )

21-25 ( )

26-30 ( )

Above 30 years ( )

3. Year of Study (Please tick one)

First year (100 Level) ( )

Second year (200 Level) ( )

Third year (300 Level) ( )

Fourth year (400 Level) ( )

Fifth year (500 Level) ( )

Postgraduate:

 PGD ( )

 MA or MSc ( )

 PhD ( )

4. Your Family Income: (Please tick one)

Under N18,000:00 per month ( )

N21,000:00- 44,000:00 per month. ( )

N45,000- N65,000 per month ( )

N66,000- N85,000 per month ( )

N86,000- N90,000 per month ( )

N91,000-N100,000 per month ( )

Above N101,000 per month ( )

5. Which of the following family status could you identify with? (Please choose one option)

a. Upper class   ( )   b. Middle class   ( )   c. Lower   ( )

Section Two: Ownership and Usage Experience of Smartphone

6. For what reason do you owned mobile device with internet platform? (Please tick the options that meet your opinion)

1. Internet access internet   ( )

2. Mobility of usage   ( )

3. Flexibility of usage features   ( )

Section Three: Smartphones Usage Experience

7. How long have been using smartphones? (Please tick the option that applies to you)

a. Under 1 year   ( )

 b.1 - 2 years   ( )

c..3 – 4 years   ( )

d. Above 5 years   ( )

Never   ( )

Section Three: Use of Smartphones in Social Media Sites and Social Activities

Social Relationships and Sociality

8. To what extent has mobile devices usage help you in creating and maintaining social relationships? (Please tick the option that applies to you) 5- Strongly Agree 4- Partially Agree 3- Agree2- Quite Agree 1- Don't Know

Make new friends	5	4	3	2	1
Build friendship connection	5	4	3	2	1
Maintain friendship I already have	5	4	3	2	1
Re-unit with old friends	5	4	3	2	1
Sustain relation with romantic partner	5	4	3	2	1
Connect friends and course mates on campus	5	4	3	2	1

Identity and Social Media Sites

9. Could you say whether your social network consists of people you have met or have not?

(Please choose the option that meet your opinion) 5- Strongly Agree 4- Agree 3- Neither

Agree   2- Disagree 1- Strongly Disagree

Social networks consist those I have met face- to face	5	4	3	2	1
Social networks comprise of people met face- to-face and the internet	5	4	3	2	1
Social network mainly consist of people I have through the internet	5	4	3	2	1
Social network consist of people known to me personally	5	4	3	2	1
Social network consist those I have not met at all	5	4	3	2	1

10. Which of this device do you use to access social networking sites (Please tick one option of your choice)

1. Mobile Devices with Internet Connection (Smartphones)   (   )

2. Personal computer (desktop) via internet access   (   )

3. Laptop with internet network connection   (   )

4. Cybercafé   (   )

5 Network with internet subscription via modem   (   )

Social Networking Sites for Identity and Sociality

11. Which of these social networking sites do you use to sustain relations on social network? Please tick the option applicable to you,

Facebook   (   )

Myspace   (   )

Linkedin   (   )

Twitter   (   )

Friendster   (   )

Blog   (   )

Others (Please specify) ---------------------

12. How many total connections do you have in your network? (Please tick one figure)

150-200   (   )

100-150   (   )

50-100   (   )

1-50   (   )

If none of these, please, indicate the figure---

Social Relationships in Social Media Sites and Social Capital

Bonding relationships

13. To what extent does the following factor best describe your relations with people in your circle of social network?. Please choose from the option according to your opinion5- Strongly Agree. 4- Agree 3- Don't know or Not sure 2- Disagree 1- Strongly Disagree

1. There are several people in SNSs I trust to keep solve my problem   5 4 3 2 1

2. There is someone in my SNSs I can turn to for advice about making
   important decisions   5 4 3 2 1

3. When I feel lonely, there are several people in my SNSs I can talk to.   5 4 3 2 1

4. The people I interact within my SNSs would be good job references for me.   5 4 3 2 1

5. If I needed an emergency financial assistance, I know someone in my SNSs
  to me   5 4 3 2 1

6. The people I interact with in my SNSs would put their reputation on
  the line for me.   5 4 3 2 1

7. The people I interact with in my SNSs are those that are of benefit me.   5 4 3 2 1

8. I do not know people in my SNSs well enough to get them to do anything
  important.   5 4 3 2 1

9. The people I interact with in my SNSs would help me fight injustice   5 4 3 2 1

Bridging Relationships

14. How best could you describe your relations with people who are in your social network? Please choose from the following options according to opinion) 5- Strongly Agree 4- Agree 3- Don't know or Not sure 2- Disagree 1- Strongly Disagree

1.   Interacting with people in my SNSs make me interested in things that
    happen in the environment and beyond   5 4 3 2 1

2.   Interacting with people in my SNSs make me want to try new things   5 4 3 2 1

3.   Interacting with people in my SNSs make me interested in what people
    unlike me are thinking.   5 4 3 2 1

4.   Talking with people in my SNSs makes me curious about other places on
    the world   5 4 3 2 1

5.   Interacting with people in my SNSs makes me feel like part of a larger
    Community   5 4 3 2 1

6.   Interacting with people in my SNSs makes feel connected to bigger
    picture   5 4 3 2 1

7.   Interacting with people in my SNSs reminds me that everyone in the world

	is connected	5 4 3 2 1
8.	I am willing to spend time to support SNSs community activities.	5 4 3 2 1
9.	Interacting with people in my SNSs gives me new people to talk to.	5 4 3 2 1
10.	Through my SNSs I come in contact with new people all the time.	5 4 3 2 1

Interactivity and Frequency of Contacts in Social Media Sites

15. How many times do you communicate with people in your social network? (Please tick the option that reflect your opinion) 5- Family members 4- Friends 3- Course mates\Campus Friends 2- Colleagues 1- Acquaintances

1. 1-to- 3 times per day	5	4	3	2	1
2. 4 to 6 times per day	5	4	3	2	1
3. 2 to 5 hours per week	5	4	3	2	1
4. 5 to 10 hours per week	5	4	3	2	1
5. 10 to 20 hours per week	5	4	3	2	1

Section Five: General Perceptions about Internet Usage Connectivity and Social Network Activities and Social Relations in your Smartphones

16. The best three things about the internet usage in smartphones in social network relationships?

1.---

2.---

3.---

The worst three things you dislike about internet use in your smartphones in social network relationships.

1.---

2.---

3.---

Once again thank you for spending time to complete the questionnaire

Appendix 5: Participant Information and Consent Form

Dear Student,

I write to request your participation in a 90 minutes discussion interview on University students' perceptions and usage behaviour of mobile phones in Nigeria. The exploratory discussion is an important component of a PhD fieldwork.

Your input in the discussion will provide a more understanding of how students in Universities use mobile phones in Nigerian society. The discussion will be on audio record and to make transcription of the interview easier.

Your confidentiality will be protected as all recorded discussions will be treated in confidence and strictly for this research. All transcripts relating to this discussion will be kept secretly. Your participation in this data collection is voluntary and therefore consenting to take part in this discussion will be appreciated and rewarding to the study.

Statement of Consent

- That you have read and understand the content of the information relating to the request for participation in the discussion.

- That you are free to contact my supervisors: Prof. Barrie Gunter (Email: bg45@le.ac.uk) and Dr. Saltzis Kostas.(Email: ks82@le.ac.uk) if you have any concerns on this discursive interview.

- That you have fully understands the discussion will include audio recording.

- That you have agreed to participate in the study.

I am happy to participate in the focus group discussion in order to contribute to the information required for the study.

Name(s) of Student:…………………………………………………………

 Signature:………………………………….…..

Date……………………………………

Name of Researcher/Moderator: Oghogho Uyi OSAZEE-ODIA

BIBLIOGRAPHY

Abro, Mujocb-ur-Rahman and Zhenfang, Li (2013) Influence of self-presentation on bridging social capital in SNSs: a moderating effect of self-presentation Research on Humanities and Social Sciences, Vol. 3, No. 19/

Abayneh, Ruth A and Steinberg, Ms, (2013) Impact of smartphones in society www.academia.edu/56984998/The-Impacts-of-Smartphones [Accessed 5 September, 2014]

Adams, R. C. (1989) Social survey methods in mass media research London: Lawrence Erlbaum Associates Publishers.

Adaja, Tokunbo and Ayodele, Felix, (2013) Nigerian youths and social media: harnessing the potentials for academic excellence Singaporean Journal of Business Economics and Management Studies, Vol. 1, No. 6

Afp Relaxnews, (2013) How smartphones are on the verge of taking over the world http://www.nydailynews.com/life-style/smartphones-world-article-1.1295927 [Accessed 22 September, 2014]

Alder, P. S and Kwon, S, (2002) Social capital: prospect for a new concept The Academy of Management Review, 27, 1 pp. 17-40

Ae-Ree, Kivi and Mitomo, Hitoshi, (2010) Influences of mobile phone text messaging on communication in Japan, Korea and Taiwan: A comparative analysis ITS 15th Biennial Conference Berlin, Germany

Advantages and disadvantages of the survey method http://wrting.colstate.edu/guides research/survey/com2dl.cfm. [Accessed 10 January 2011] CIA: The World FactBook https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html. [Accessed 10 July 2011]

Aginam, Emeka, (2015) 84% of smartphones in Nigeria have internet connection-Erisson study http://www.vanguardngr.com/2015/04/84-of-smart-phones-in-nigeria-have-internet- connection- ericsson study [Accessed 20 June, 2015]

Aguado, Miguel Joan et al, (2009) Mobile media implicit cultures: towards a Characteristization of mobile entertainment and advertising in digital convergence landscape Observatorio (OBS) Journal 8 pp. 336-352

Ahlquist, Josie, (2013) The sunny side of students on social media http://www.josieahlquist.com/2013/12/01/socialmediasunnyside/ [Accessed 26 January, 2015]

Ahn, Jane (2012) Teenagers' experiences with social network sites: relationships to bridging and bonding social capital The Information Society: An International Journal, 28:2, pp. 99-109.

Ahonem, Tomi. (2005, 2008) Understanding the 6th and 7th media http://communities dominate.blogs.com/brands/2005/10/understanding.html. [Accessed 19 October, 2010]

Ahmed, Abdul-Azim, (2014) Religion-there's an app for that http:// www. onreligion. co. uk/ religion-theres-an-app-for-that/ [Accessed 21 August, 2015]

Ahmed, Ishfag and Qazi, Tchmina (2011) Mobile phones adoption and consumption patterns of University students in Pakistan International Journal of Business and Social Sciences Vol. 2, No.9 (Special E2013dition), May, pp. 205-213.

Ahmed, Suleiman A (2014) Social Networking site usage as a tool for social capital and academic adjustment in Nigerian context 21st Century Academic Forum Conference Proceeding 2014 Conference at Harvard.

Akoglu, Leman et al (2012) Quantifying reciprocity in large weighted communication networks www.cs.cmu.edu\lakoghlu\phbs\12padkdd-reciprocity.pdf. [Accessed 15 March 2013]

Ajanaku, Lucas. (2010) Nigeria's GSM market is saturated says GLO chief http://www.compassnewspaper.com/NG/index.php?option=com.content&view= article [Accessed 19 August 2010]

Ajidahun, Beatrice, (2014) Students' perceptions of cell phones and emotional behaviour of undergraduates in Nigerian Universities Journal of Educational and Social Research Vol. 4 No. 6 September

Aker, Jenny C. and Mbiti, Issac M. (2010) Mobile phones and economic development in Africa Center for Global Development Working Paper 211, June, www.cgdev.org

Aki, Aida (2014) Youth at forefront of global internet use http:// blogs. voanews. com/ techtonics/2014/03/07/youth-at-forefront-of-global-internet- use/ [Accessed 12 September, 2014]

Akintaro, Samson (2013) War:---In the Nigerian Telecoms Industry www. ittelecomdayest. com/cover-July.htm [Accessed 5 October 2013]

Akwule, Rymond (1991) Telecommunications in Nigeria Telecommunications Policy, June pp. 241-247

Akyildiz, Milge and Argan, Mein, (2015) Using online social networking: students' purposes of facebook usage at the University of Turkey www.aabri.com/ LV11 Manuscripts/LV11094.pd [Accessed April, 2015

Alao, Charles (1998) Development of telecommunications infrastructure in Africa network evolution, present status, and future development. Africa Media Review Vol. 2 No. 3, pp.19-34

Al-Azzam, B. and Al-Quran, (2009) Phone ring tones in Jordan: a sociolinguistics analysis International Journal of Academic Research, Vol.1, No. 2, November, pp. 226-231

Al-Harrasi, Abir S and Al-Badi, Ali H, (2014) The impact of social networking: a study of the influence of smartphones on college students Contemporary Issues in Education Research-Second Quarter Vol. 7, November 2

Al-Hassan, Zakin (2008) Mobile Phone uses for Kuwait University students. Issue. No. 16, February, pp. 24-25

Ali, Imtiag (2013) Smartphones in developing nations http://www. techbead.com/ smartphones-in-developing-nations/ [Accessed 21 April, 2013]

Aljasir, Shuaa, Woodcock, Andree and Harrison, Sandra (2013) Facebook in Saudi Arabia: some aspect of facebook usage by Saudi University students International Journal of Engineering and Technology, Vol. 5, No. 1, February

Al Qudah, Khalid (2008) Mobile phone ownership and usage among students of Jordanians Universities University of Sharjah Journal for Humanities and Social Sciences, Vol. 5 No. 2, pp. 69-100

Allen, Danielle (2012) What we should be doing with diversity on our college campus http://www.ias.edu/about/publications/ias-letter/articles2013-summer/a.   [Accessed 15 January, 2014]

Alfawareh, Hejab and Jusoh, Shaidah (2014) Smartphones usage among University students: Najran University case International Journal of Academic Research, Vol. 6, No. 2 March

Alter, Lloyd, (2015) Think of the smartohones as society's glue http://www.mnn.com/green-tech/computers/stories/think-of-the-smartphone-as- society-new-glue [Accessed 20 March, 2015].

Amada, K (2012a) Technology adoption and ownership of IT ECAR Research Study 6 net.educause.edu/ir/library/pdf/ers 10064.pdf [Accessed 20 August, 2014]

Amada, K (2012b) The age of the smartphone: communication behind a screen http://ageofthesmartphone.blogspot.com/2012/04/gender-differences-in-technology- use.html. [Accessed 20 August, 2014]

Amaefule, Everest (2010) Mobile subscriber base hits 78,5 million-N.C.C. Vanguard, April 7, pp.15

Ambrose, David M and Anstey, John R (2010) Questionnaire development: demystifying the process International Management Review Vol. 6 No 1

Ames, Morgan G, Go, Janet, et al (2011) Understanding technology choices and values through social class. CSCW, March, pp.19-23

Amobi, I. (2011) Assessing global digital divide through computer ownership, literacy, access and usage of new media by Nigerian youths https://profteri. wordpress.com/ 2011/07/02/assessing-global-digital-divide-through- computer- ownerships - literacy-access-a [Accessed 26 June, 2015]

Ana, M and Aleman, Martinez, (2014) Social media go to college http://www.changemag.org/ Archives/Back%20Issues/2014/January-February%202014/socialmedia_full.html [Accessed 12 October, 2014]

Anderson, Keith (2001) Internet use among college students: an exploratory study. *Journal of American College Health*, Vol. 50, No. 1.

Anderson, N. (2007) Cell phones becoming quickly entertainment devices http://arstechnica.com/gadgets/2007/12/cell-phones-quickly-becoming-portable-entertainment- devices [Access 12 June, 2014].

Androuldakis, I. (2010) What do University students know (or don't) about security in their mobile phones. 18th Telecommunications forum TELFOR, Serbia Belgrade, November 23-25

Angelini, Paolo and Sciandra, Andrea (2013) Pixel vs. Font: facebook and young people's self-presentation Italian journal of Sociology of Education, 5 (1)

Anugwara, B. (2013) Smartphones can bridge digital divide in Africa http://www. mynewswatchtimesng. com/smartphones-can-bridge-digital-divide-africa/ [Accessed 15 June, 2015)

Aoki, Kumiko and Downes, Edward, (2003) An analysis of young people's use of and attitudes toward cell phones Telematics and Informatics, 20 pp. 349-364

Ardalan, Kavous (2008) Technology: a paradigmatic look. American Review of Political Economy, June, pp.1-18

Arandilla, Rachel, (2015) How smartphones invasion changed the way we live http://www.aomobi1.com/web-designer/07/how-the-smartphone-invasion-changed-the- way-we-live.html [Accessed 20 April, 2015]

Arpit, Loya and Anand, Bhati, (2013) A study into usage pattern of smartphone owners among students and service class International Journal of Engineering and Management Sciences, Vol.4 (2) pp. 187-192 [Accessed 16 March 2014]

Arthur, Charles, (2014) Smartphone explosion in 2014 will see ownership in India pass US http://www.the guardian.com/technology/2014/jan/13/smartphone-explosion-2014-india-us-china-firefoxos-android [Accessed August 16, 2014]

Ashiq, Huma, Manmood, Tariq Malik and Siraj, Abdul Sybed (2013) Use of mobile communication and its affect on social capital of college going teenager IMPACT: International Journal of Research in Humanities, Arts and Literature, Vol. 1, Issue 3, Aug. pp. 45-60.

Aquino, Judith, (2012) Gen Y: the next generation of spenders file:///H:/PrintArticle.aspx.htm [Accessed 15 September, 2014]

Arminen, IIkka, (2007) Mobile communication society Acta Sociologica 50, 4

Arthur, Charles (2014) Smartphones explosion in 2014 will see ownership in India pass US http://www.theguardian.com/technology/2014/jan/13/smartphone-explosion-2014-india- us-china-firefoxos-android [Accessed 12 September, 2014]

Averianova, Irina (2011) A cell phone in the classromm: a friend or a foe? EUROCALL 2011-The CALL Triangle; Student, Teacher and Institution.

Axe lsson, Ann-Sofo, (2010) Perpetual and personal: Swedish young adults and their use of mobile phone. New Media and Society 12 (1), pp. 39-54.

Azza, Abdel-Azim Mohamed Ahmed, (2015) Online bonding and bridging social capital via social networking sites Global Media Journal Arabian Edition Fall/Spring Vol. 4, Nos. 1-2, pp. 138-163

Babbie, Earl, (2005) The basics of social research (3rd Edition) U.S.A: Thomson Wadworth

Backer, Elisa (2010) Using smartphones and facebook in a major assessment: the student experience e-journal of Business Education and Scholarship of Teaching, Vol. 4, No. 1 pp. 19-31

Badger, Emily, (2012) How smartphones are turning public places into private ones http://www.citylab.com/tech/2012/05/how-smart-phones-are-turning-our-public-places-private-ones/2017/ [Accessed 15 April, 2015]

Baek, Joon Sang and Cho, EuuJi (2012) Enrichment of social relations in collaborative service: social networks and sociability cumulushelsinki2012.org/…..06-Enrichment- of-social –relations.pdf. [Accessed 11 November, 2012]

Bailey, Justin, Loink, Michael W and Bensky, Nicole E (2011). Can your smartphone do this: a new methodology for advancing digital ethnography https://www. amstat.org/sections/ SRMS/Proceedings/y2011/.../400174.pdf [Accessed 15 December, 2014].

Bajko, Robert (2011) Mobile telephone usage and perception during group meetings Conference for Information Systems Applied Research, 2011 CONISAR Proceedings, v4 n1837 [Accessed 20 March 2014]

Baker, Joseph (2013) How students benefits from using social media http://www.edudemic.com/how-students-benefit-from-using-social-media [Accessed 24 September, 2014]

Balganesh, Shyamkrisha, (2003/2004) Freedom and the internet: a review of the internet galazy by Manuel Castells International Journal of Communication Law and Policy, Issue 8, Winter

Balakrishnan, Vimala and Yeow, Paul H. P. (2007) Texting satisfaction: does age and gender make a difference? International Journal of Computer Science and Security, Vol. 1, Issue 1

Balakrishnam, Vimala (2009) A look into SMS usage patterns among Malaysian youth. Human IT, 10: 2, pp. 55-80.

Banerje, Neelotpaul and Dey, Art Kumar (2013) Identitfying the factors influencing users' adoption of social networking websites—a study of facebook International Journal of Marketing Studies, Vol. 5, No. 6

Banerjee, Tasher, (2016) Five unusual ways in which Indian use mobile phones http://www.bbc.com/news/world-asia-india-26028381 [Accessed 17 February, 2016]

Bank, Mark (2012) Msclintyre, Bourdieu and the practice of jazz Popular Music 31, pp.69-86

Bantilan, M.C.S and Padmaja, R (2008) Empowerment through social capital build-up: gender dimension in technology update Expl Agric, Vol. 44, pp. 61-80

Bargh, John A and McKenna, Katelyn Y.A. (2004) The internet and social life Annual Rev. Psychol. 55 X-X, pp. 1-23.

Baryman, Alan (2008) Social research methods (third edition) New York: Oxford University Press.

Barkhuus, Louise and Polichar, Valerie E (2010) Empowerment through seamfulness: smartphones in everyday life Sringerlink.com: Accessed 19 November 2013.

Barkhuus, Louise and Tashiro, Juliana (2010) Student socialisation in the age of facebook CHI April 10-15 Altanta, Georgia U.S.A

Barot, Digvijay, Wadkar, Kedar A and colleagues, (2014) An empirical assessment of smartphones usage amongst students and Professors International Journal of Business and General Management, Vol. 3, Issue3, July pp.19- 28

Basturk, Nazmi (2014) Growth in smartphone sector, social media set to last http://www.dailysabah.com/money/2014/04/21/growth-in-smart-phone-sector-social-media- set-to-last [Accessed 12 September, 2014].

Bazeley, Pat (2002) Issues in mixing qualitative and quantitative approaches to research Presented at 1st Conference-Qualitative Research in Marketing and Management, University of Economics and Business Administration, Vienna, 10th April www. researchsupport.com.au\mmissues.pdf. [Accessed 13 August 2013].

Beale, Russell (2005) Supporting social interaction with smartphones citeseerx.ist.psu.edu/ viewdoc/ download?doi-10-1-1.pdf [Accessed 24 April, 2014]

Beal, Vangie, (2008) The difference between a cell phone, smartphone and PDA http://www.webopedia.com/DidYouKnow/Hardware_Software/smartphone_cellphone_pda.asp [Accessed November, 2014]

Bell, Genevieve< (2000) 'No more SMS from Jesus: Ubicomp, religion and techno-spiritual practice' in (eds) Dourish, P. And Friday, Ubicomp LNCS 4206, pp. 141-158

Belwal, Rakesh and Belwal, Stiweta (2009) Mobile phone usage behaviour of University students in Oman 2009 International Conference on New Trends in Information and Service Science http://ieeexplore.ieee.org/stamp/stamp.isp?tp=$am. [Accessed 20 October 2010].

Belisle, Jean-Francois (2009) Three types of convergence- is the future friendly http://fbelisle.com/2009/05/three-types-of-convergence-is-the-future-friendly/ [Accessed 17 November 2013]

Ben-Harushi, Orit (2010) Communication patterns within social networks: a case of Australian women PLATFORM: Journal of Media and Communication ANZCA Special edition (April), pp. 6-22.

Bennett, Shea (2013) 54% of young adults prefer smartphones for social media (and 29% use Twitter) [Study] http://www.mediabistro.com/alltwitter/young-adults-twitter_b48307[Accessed 20th September, 2014].

Bennett, Shea (2014) 87% of UK University students use social media apps [STUDY] http://www.adweek.com/socialtimes/uk-student-apps/500553 [Accessed 3 March, 2015]

Bennett, Sue, Maton, Karl and Kervin, Lisa (2008) The 'digital natives' debate: a critical review of the evidence British Journal of Educational Technology, Vol. 39 No.5, pp. 775-786

Beninger, Kelsey, Fry, Alexander, Jago, Natalie and co-researchers (2014) Research using social media: users' views Publication of NatCen Social Research, London: www.natcen.ac.uk [Accessed 8 August, 2014].

Berger, Auther Asa. (2000) Media and communication research methods; an introduction n to qualitative and quantitative approaches. London: Sage Publications.

Berends, Mark, Mokhar, Christine and Zottola, Geneviene (2008) How social capital varies among charter schools , examing relationships to academic rigor, homework and engagement from students' perspectives. Paper presented at the Annual Meeting of the American Educational Research Association, New York, U.S.A.

Bernroider, Edward W., Krumay, Barbara and Margiol, Sehastian, (2014) Not without my smartphone addiction on smartphone usage 25th Australasian Conference on Information Systems, 8th-10th Auckland, New Zealand

Bernl, (2014) JAMES Study: smartphones are becoming increasingly important to young people https://www.swisscom.ch/en/about/medien/press-releases/2014/10/20141030-MM- James- studie.html [Accessed 22 September, 2014]

Bernocco, Amada, (2013) What role do smartphones play in your life? http://liupostpioneer.com/2013/04/24/what-role-do-smart-phones-play-in-your-life [Accessed May, 2015]

Berry, Dave (2014) Smartphones on campus http://www.colegeview.com/admit/?p-2478[Accessed 16 August, 2014]

Bertel, Troebels Fiback (2013) Mobile communication in the age of smartphones: process of domestication and re-domestication A Dissertation Submitted to the Ph.D School, IT University of Copenhagen, September.

Bexley, Emmaline, Marginson, Simon, and Wheelahan, Lessa (2007) Social capital in theory practice Publication of the Centre for the Study of Higher Education, The University of Melbourne, November

Bicen, Huseyin and Nadire, (2011) Social network sites usage habits of undergraduate students: case study of facebook Procedia-Social and Behavioural Sciences 28 pp. 943-947

Bijker, Wiebe (1992) The social construction of fluorescent lighting or How artefact was invented in its diffusion stage .in (eds) Bijker, Wiebe and Law, John Shading Technology/Building Society: Studies in Socio-Technical Change. Cambridge: Massachusetts: The MIT Press.

Bijker, W. E. (2001). Social Construction of Technology. In N. J. Smelser & P. B. Baltes (Eds.), International Encyclopedia of the Social & Behavioral Sciences. Vol. 23, pp. 15522-15527. Oxford: Elsevier Science Ltd.

Biswadew, (2012) Social media and social networks (Network Society: Manuel Castells) File\\H\Network Society (Manuel Castells0-Social Media and Social Network.htm [Accessed 12 October, 2014].

Blanaru, Cristina (2013) Research: smartphones, most sought for gadgets for Romanian youth http://www.adhugger.net/2013/11/08/research-smartphones-sought-gadgets-romanian-youth/ [Accessed 12 September, 2014]

Boase, Jeffrey and Wellman, Barry (2006) The strenghth of internet ties Pew Internet and American Life Project, Washington D.C. January 25.

Bodker, Mads, Gimpel, Greg and Hedman, Jonas (2014) The user experience of smartphone: a consumption values approach technology diffusion. http:// citeseerx. ist.psu.edu/viewdoc/ download?doi=10.1.1.472.30&rep=rep1&type=pd f [Accessed 6 August, 2014]

Bojie, Hennie, (2002) A purposeful approach to the constant comparative method in the analysis of qualitative interviews Quality and Quantity 36 pp.391-409.

Bolin, Goran and Westlund, Oscar (2009) Mobile generations: the role of mobile technology in the shaping of Swedish media generations. International Journal of Communications, 3, pp.108 -124

Bolton, R.N. et al (2013) Understanding Generation Y and their use of social media: a review and research agenda Journal of Service Management, 24 (3) p.245-267

Bourdieu, P (1986) 'The forms of capital' In Handbook of Theory and Research for the Sociology of Education (Ed) J.G. Richards, New York: Greenwood Press pp. 241-258

Boulos, Kamel M. N, Wheeler, Steve and colleagues, (2011) How smartphones are changing the face of mobile and participatory healthcare: an overview, with example from eCAALYX BioMedical Engineering Online, 2011 10:24.

Bourn, Douglas, (2008) Young people, identity and living in a global society Development Education and Research, Issue 7, Autumn

Bouvier, Gwen (2012) How facebook users select identity categories for self-presentation Journal of Multicultural Discourse, 7:1, pp. 37-57

Boyd, Danah (2007) Why youth (heart) social network sites: the role of networked publics in teenage social life Youth, Identity and Digital Media (ed. Buckingham) Cambridge, MA: MIT Press

Boyd, Danah (2007) Social networks sites: public, private, or what? Knowledge Tree 13 May http://kt.flexiblelearning.net.au/tkt2007/?page-id~28. [Accessed 12 November 2012]

Boyd, Danah (2006) Identity production in a networked culture: why youth heart MySpace American Association for the Advancement of Science, February 19

Boyd, Danah (2004) Friendster and publicly articulated social networking Conference on Human Factors and Computing Systems (CHI 2004), Vienna: ACM, April 24- 29

Boyd, Danah (2014) Its complicated: the social lives networked teens New Haven and London: Yale University Press.

Boyd, Danah and Ellison, Nicole B (2007) Social networks sites: definition, history and scholarship http://www. hetcaucus. org/ events/2007/youths/20070503transcript.pdf. [Accessed 1 November, 2012]

Brandtzaeg, Petter Bae and Heim, Jan (2009) Why people use social networking sites (eds) Ozok, A.A. and Zaphiris, P Online Communities, LNCS 5621 pp.143-152

Brandtzaeg, Petter Bae, Heim, Jan and Kaare, Biirgit Hertzberg (2010) Bridging and bonding in social networking sites-investigating family-based capital Int. J. Web Based Communities, Vol.6, No. 3.

Brandtzaeg, Peter Bae and Nov, Oded (2013) Facebook use and social capital: a longitutidinal study. Proceedings of the Fifth International AAA1 Conference on Weblogs and Social Media

Bratland, Erik (2009) Identity and competence in the network society Conference Paper, Presented at the 11 West Pomeranian Educational Congress, 19-21 October, University of Szezecin, Poland

Bray, Franscsca, (2006) Gender and technology Annual Review Anthropology 16 pp. 17-53

Brey, Philip (2006) Evaluating the social and cultural implications of the internet SIGCAS Computers and Society Vol. 36 No, 3 September

Bridgestock, Laura, (2013) What drives students' social media usage? http://www.topuniversities.com/blog/what-drives-students-social-media-usage [Accessed 4 March, 2015]

Brivio, Eleonora (2009) Self presentation in blogs and social networks Annual Review of Cybertherapy and Telemedicine, Volume 7

Broddason, Thorbjorn (2006), Youth and new media in the millennium. Nordicom Review, No. 41 April 21

Brook, John (2013 Smartphone are replacing friendships http://www.techplistalk.com/2013/06/smartphones-replacing-friendships/html [Accessed 24 july, 2014]

Brooke, Chris (2014) End of the landline? Mobile revolution means home phone no longer seen as essential http://www.dailymail.co.uk/news/article-2675731/End-landline-Mobile-revolution- means -home-phone-no-longer-essential.html.[Accessed August 26, 2014]

Brown, Joels H and Caston, Marianne (1995: 469) On becoming 'At Risk' through drug education: how symbolic policies and their practices affect students. Evaluation Review, Vol. 19, No. 4 pp. 451-492

Brown, Arnold (2011) Relationships, community, and identity in the new virtual society. THE FUTURIST, March-April

Bsharah, Muwafag, Gasymeh, Al-Mothana and Abdehlrahman, Mahmond, (2014) The Relationships between the use of social networking sites (SNS) and perceived level of social intelligence among Jordanian University students: the case of facebook International Journal of Psychological Studies, Vol. 6, No. 3

Bulger, Danielle, (2011) The male vs female debate goes mobile https://blog.compete.com/2011/11/29/the-male-vs-female-debate-goes-mobile/ [Accessed 14 March, 2015]

Bulsara, Caroline, (2015) Using mixed methods approach to enhance and validate your research https://www.nd. edu.au/ downloads/ research/.../ mixed_methods_bulsara.p. [Accessed 12 August, 2015].

Bundaru, Anca (2013) Social media landscape in Romania http://www. digitaleastfactor. com/social-media-landscape-in-romania/ [Accessed 12 September, 2014]

Bundt, Bettina, (2010) Smartphones and their users Mastee Thesis Submitted to the Department of Journalism, Media and Communication, Universitet of Stockholms

Burhanuddin, Abe, (2007) Smartphone, a modern lifestyle convergence http://www. Thejakartapost.com/news/2007/08/2/smartphone-modern-lifestyle-convergence [Accessed 17 November 2013]

Burke, Moira, Kraut, Robert and Marlow, Cameron (2011) Social capital on facebook: differentiaiting uses and users CHI, MAY 7-12, Vancouver, BC, Canada Burns, Robert B (2000) Introduction to research methods London: Sage Publications

Burton, Lynda, (2007) Survey research: choice of instrument, sample John Hopkins University, Batimore, U.S.A.

Cabral, Jacjyn, (2011) Is Generation Y addicted to social media? The Eton Journal of Undergraduate Research in Communications Vol 2, No. 1 Spring

Caliser, Fethi, Atahan, Leveat and Saracoglu, Micay (2013) Factors affecting social network sites usage on smartphones of students in Turkey. Proceedings of the World Congress on Engineering and Computer Science Vol. 11. WCECS 2013, 23-25 October, San Franscisco, USA

Cameron, Roslyn (2009 A sequential mixed model research design: design, analytical and display issues International Journal of Multiple Research Approaches, Vol.3, No. 2

Campbell, Marilyn, (2005) The impact of the mobile phone on young people's social life Paper Presented to the Social Change in the 21st Century Conference, Centre for Social Change Research, Queensland University of Technology, October 28

Campbell, Scott W and Russo, Tracy C (2003) The social construction of mobile telephony: application of the social influence model to perceptions and uses mobile phones within personal communication networks. Communication Monographs, Vol.70. No.4, December, pp. 317-334

Campbell, Scott W. (2007) A cross-cultural comparison of perceptions and uses of mobile telephony. New Media and Society 9, pp. 343-363

Campbell, Scott, (2007) Perceptions of mobile phone use in public settings: a cross-cultural comparison. International Journal of Communication 1, pp. 738-757

Campbell, Scott and Jong, Jin Park (2008) Social implications of mobile telephony: the rise of personal communication society. Sociology Compass 2/2, pp. 371-387

Cana, Mentor (2003) Social construction of technology versus technological determinism http://www.kmentor.com/socio-tech-inf/2003/04/ social constructionism-vs-tech.html [Accessed 19 November 2010]

Caren, Allie, (2014) Redefining what it means to talk in the age of smartphones http://www.npr.org/blogs/alltechconsidered/2014/06/22/323568848/redefining-what-it-means-to-talk-in-the-age-of-smartphones [Accessed 28 April, 2015]

Carmichael, Matt, (2012) Stat of the Day: Mobile Phones Overtake PCs http://adage.com/article/adagestat/mobile-phones-overtake-number-pcs-key-global-market/232304/ [Accessed 22 January, 2016]

Caruana, Albert and Magri, Emmanuel (1996) The effects of dogmatism and social class variables on consumer ethnocentrism in Malta Marketing Intelligence and Planning
14/4, pp. 39-44

Carroll, Jennie, Howard, Steve, Vetere, Frank et al (2001) Identity, power, and fragmentation cyberspace: technology appropriation by young people ACIS Electronic Library Service Proceedings Papers 6

Carroll, Jannie et al (2002) Just what do the youth of today want? Technology appropriation by young people. 2002 IEEE Proceedings of the 35th Hawaii Internationalonference on System Sciences

Carroll, Jennie, Howard, Steve et al (2002) A field study of perceptions and use of mobile telephone by 16 to 22 year olds. The Journal of Information Technology Theory and Application, (JITTA), 4.2,pp.49-61

Castro, Felipe G and Coe, Kathryn, (2007) Traditions and alcohol use: a mixed-methods analysis Cultural Diversity and Ethnic Minority Psychology, Vol.13, No.4 pp.269-284

Casey, Bian Mengwei, (2012) Linking psychological attributes to smartphone addiction, face-to-face communication, present absence and social capital Graduate Project Submitted to Faculty of Graduate School, The Chinese University of Hong Kong in Partial Fulfillment for the Degree of M.Sc. in New Media

Castell, Manuel, Ferdinandez, Mireia, Qiu, JackLinhuan, and Sey, Araba, (2007) Mobile communication and society: a global perspective London: The MIT Press.

Castel, Manuel (2014) Towards a sociology of the network society www.metn. edu.tr/n/ gediki/network society.pdf [Accessed 21 Aril, 2014]

Chaffey, Dave, (2015) Global social media research summary 2015. http://www. smartinsights. com/social-media-marketing/social-media-strategy/new global-social-media-research [Accessed 18 May, 2015]

Chan, Chai Ling, (2013) Smartphones and networked individualism http://www. stanforddaily.com/2013/ 10/24/smartphones-and-networked- individualism/ [Accessed 15 May, 2014]

Chan-Olmsted, Sylvia M, Cho, Moonhee and Lee, Sangwon, (2013) User perceptions of social media: a comparative study of perceived characteristics and user profiles by social media. Online Journal of Communication and Media Technologies, Vol, 3, Issue 4, October

Chang, Hui-Jung, (2010) Social networking friendships: a cross-cultural comparison of network structure between Myspace and Wretch. Journal of Cultural Science Vol. 3 No. 2 Internet Research Method 1

Charoenruk, Duagtip (2013) Communication research methodologies: qualitative and quantitative methodology http://utcc2.utcc.ac.th\ localuser\pdf\ Documents49\ quantitative-and- qualitative methodologies.pdf [Accessed 26 August, 2013].

Charusmita (2012) Castells network society and its assessment http://formediaand development. blogspot.com/2012/02/castells-network-society-and- its.html [Accessed October, 2010].

Chasanah, Hidayalul Anna, (2012) Friend-ing facebook: revisiting facebook and college students social capital International Conference on Communication, Media, Technology and Design 09-11 May, Istanbul Turkey

Chen, Brian (2011) What it means to be 'always on' a smartphone http:\\www.npr.org\2011\07\14\137472487\what-it-means-to-be-always-on-a-smartphone. [Accessed 16 April, 2014]

Chen, Chi Ling, (2013) Smartphones and networked individualism http\\www.stanforddaily.com\2013\10\24\smartphones-and-networked individualism [Acessed 16 April, 2014]

Chen, Yi-Fan and Katz, James (2009) Extending family life to school: College students use of the mobile phone. Int,J. Human-Computer Studies, pp. 179-191

Chen, Yi-Fan, (2016) Mobile media dependency: private consumption in public spaces Ppaer Submitted to the 8th Media in Transition Conference on Public Media, Private Media

Cheng, Justin, Romero, Daniel and co-authors, (2015) Predicting reciprocity in social networks www.cs.cornell.edu/home/kleinber/socialcom11-recip.pdf [Accessed 25 March, 2015]

Chesbrough, Ronald, (November, 2009) College Students and Service: A Mixed Method Exploration of Motivations, Choices, and Learning Outcomes A DISSERTATION Presented to the Faculty of The Graduate College at the University of Nebraska In Partial Fulfilment of Requirements For the Degree of Doctor of Philosophy

Cheung, Renee (2012) The mobile identity: social effects of mobile devices on identity formation www.wiredcrow.com/wp-content-upload/2012/011Cheung.pdf [Accessed 24 June 2013]

Chiluma, Innocent and Uba, Christian, (2015) 'Texting and Christian practice' in Yan, Z (ed) Encyclopedia of Mobile Phone Behaviour, Hirsley RA: IGI Global

Christina, (2013) Gender differences in social media http://smartsavvysocial.com/gender-differences-in-social-media [Accessed 13 January, 2015]

Clipson, Timothy W, Wilson, Ann S and DuFrene, Debbie D, (2012) The social networking area: battle of the sexes Business Communication Quarterly 2012 75: 64

Coffe, Hilde and Geys, Benny (2007) Towards an empirical characterisation of bridging and bonding social capital Voluntary Sector Quarterly, Vol. 36, No. 1 March

Collins, Philippa, Rahilly, Kitty, Richard, Ingrid and Third, Am and (2011) The benefits of social networking services Publication of the Co-operative Research Center for Young People, Technology and Wellbeing, Australia. http:\\53.amazonawa.com\...\The-Benefits-of-Social-Networking-Services-amazonS3 [Accessed January 2013]

Coleman, James S (1988) Social capital in the creation of human capital The American Journal of Sociology, Vol. 94, Supplements: Organisations and Institutions: Sociological and Economics Approaches to the Analysis of Social Structure, pp. S95– S120

Conner, Oliver, (2013) Why do people use social media? http://www.onepoll.com/10-reasons-people-use-social-media [Accessed 24 February, 2015]

Convey, Ian and Cox, Diane (2013) A review of research ethics in internet-based research 194.81.19/OJS/index.php/prhe/article/viewfile/100/192. [Accessed 11 October 2013]

Cooper, Carol (2009) The blurring of interpersonal and mass communication –generation net and the cell phone. American Communication Journal, Vol. 11 No. 1 Spring P.

Correa, Teresa, Hinsley, Amber W and Zuunga, Homero Gil de, (2010) Who interacts on the web? The intersection of users' personality and social media use Computers and Human Behaviour 26 pp. 247-253

Corrine, Martin (20090 Camera phone and photography among French young users. "Mobile 2.0: Beyond Voice" Pre Conference Workshop at the International Conference Association (ICA), Chicago. Illinois, May 20-21

Cornell. Scott, (2014) Characteristics of s smartphones http://small business.chron. com/ characteristics-smartphone-62286.html [Accessed 12 November, 2014]

Crampton, Thomas (2011) Social media in China: the same, but different http://www.chinabusinessreview.com/social-media-in-china-the-same-but-different/ [Accessed 12 September, 2014]

Crawford, Susan P (2011) The new digital divide http://www. nytimes. com/2011/ 12/04/opinion/Sunday/internet.ac [Accessed 12th January, 2014].

Creswell, John W. (1994) Research design: qualitative and quantitative approaches London: Sage Publications

Creswell, John W. (2013) Controversies in mixed methods research www.sagepub.com\upm-data\40426-chapter15.pdf. [Accessed 28 August 2013]

Creco, Linda Del (1987) Questionnaire development: 2. Validity and reliability CMAJ, Vol.136 April 1, pp. 669-700

Cummings, Jonathon N et al (2002) The quality of online social relationships Communications of the CAN, July Vol.45 No7, pp.103-108

Cundiff, Gretchen (2013) The influence of RAP/HIP-HOP music: a mixed-method analysis on audience perception of misogynistic lyrics and the issue of domestic violence The Eton Journal of Undergraduate Research in Communications, Vol. 4, No. 1 Spring

Croin, Mike 2010) Smartphones rise from gadget to tool of necessity http:\\trilive.com\x\pittsburghtrib\business\s-668540.htm [Accessed 16 April, 2014]

Czaja, Ron (1998) Questionnaire pretesting comes of age Marketing Bulletin, 9 Article 5, pp. 52-66

Daliri, Hassan and Shahanavar, Sara, (2011) The role of gender in social capital formation. Pakistan Journal of Social Sciences 8 (4) pp.205-207

Darke, Peta, Shanks, Graeme and Broadbent, Marianne (1998) Successfully completing case study research: combining rigour, relevance and pragmatism. Info Systems J, 8. P. 273-289

Das, Biswajit Sahoo and Jyoti, Shankar Sahoo, (2011) Social networking sites: a critical analysis of its impact o personal and social life Internationa Journal of Business and Social Science, Vol. 2, No. 14

Dave, Berry (2013) Smartphones on campus http:\\www.collegeview.com/admn/?p-2478 [Accessed 26 November 2013]

Davis, Tim (2014) The impact of social media http:// www. Practical participation.co. uk/yes/what/what_does_it_change [Accessed 12 November, 2014]

Dawson, Shane (2008) A study of the relationship between students' social networks and sense of community Educational Technology and Society 11 (3), pp. 224-238

Dewitt, David, Deckard, Steve, Berndt, Chard et al, (2003) Role of educational factors in college students' creation worldview. Faculty Publications and Presentations. Paper 16. http://digitalcommons.liberty.edu/bio_chem_fac_pubs/16 [Accessed 10th September, 2014]

Dewing, Michael (2010: 2012) Social media: an introduction Social Service Division, Parliamentary Information and Research Service, http://www. parl.gc.ca/ content/lop/researchpublications/2010-03-e.pdf [Accessed 10th September, 2014]

De Silva, Tracy-Anne, (2010) Benefits of mixed methods in environmental reporting research http://apira2010.econ.usyd.edu.au/conference_proceedings/APIRA-2010-147-DeSilva-mixed-methods-in-environmental-reporting.pdf [Accessed 20 September, 2015]

De Vos, A.S. (1998) Combined quantitative and qualitative approach in (eds.) De Vos A. S. Research at grass roots: a primer for the caring primer professions J. L. Van Schaik, Academic

De Vos, A. S. and Fouche, C. B (1998) General introduction to research design, data collection methods and data analysis in (eds.) De Vos, A. S. Research at Grassroots: a primer for the caring professions J. L. Van Schaik, Academic

De Vos, A.S. and Van Zyl, C.G. (1998) The grounded theory methodology in (eds.) De Vos, A.S. Research at grass roots: a primer for the caring professions J. L. Van Schaik, Academic

Di, Huanshuang (2011) The measures for China's University students applying social capital to Graduate employment International Education Studies, Vol. 4, No. 4, November

Ditchfield, Hannah, (2015) Interrogating identity, self and social media Paper Presented at the New Directions in Media Research, University of Leicester, June 12

Dijck, Jose Van (2013) 'You have one identity': performing the self on facebook and linkedin Media, Culture and Society 35 (2) pp. 199-215

Dimitriadou, Anastasia, (2013) The formation of social capital for Refugee students: an exploration of ESOL Settings in two further education www.educatejournal. org/index.php/ educate/article/download/78/75 [Accessed 21December, 2014]

Dissinger, Peter, (2014) The smartphone as a social crutch in modern college life http://www.studlife.com/forum/2014/11/06/the-smartphone-as-a-social-crutch-in-modern- college- life/ [Accessed 21 April, 2015]

Doghevi, Emmanuel, K (2010) More in Africa Use Mobile Phones that any other continent. http://www.ghanabusinessnews.com/2010/01/04/more-Africa-use-mobile-phones-than-any-other-continent [Accessed 06 December 2010]

Dogbevi, Emmanuel K and Quandzie, Ekow, (2011) World's 5.3 billion mobile phone users send 6.1 SMS in 3 years. http://www.ghanamma.com/2011/3/11/world----[Accessed 22 June 2011]

Donald, Christiana, (2010) End of 2010: 5.3.billion mobile users; 2 billion internet users—the rise of 3G http;//wwwery.com/2010/1/2010.internet-and-mobile-stats.[Accessed 22 June 2010].

Donner, Jonathan (2008) Research approaches to mobile phone use in the developing world: a review of literature. The Information Society 24, pp. 140-159

Drakel, Bruce, (2014) Americans with just basic cell phones are a dwindling breed http://www.pewresearch.org/fact-tank/2014/01/09/americans-with-just-basic-phones- are-a-dwindling-breed/ [Accessed 23 January, 2015]

Dresler-Hawke, E and Minsvett, J, (2008) Mobiel phones: enhancing social communicationin young adults's lives Presentation at the Australian and New Zealand Marketing Academy Conference, Sydney Autralian pp. 1-7

Drost, Ellen A (2011) Validity and reliability in social science research. Education Research and Perspectives, Vol. 38. No. 1, pp. 105-123

Drotsky, GAP, Rensburg, Janse B V. and Jager, JW De (2007) Influence of income on tertiary students acquisition of cellular products ACTA Commercii pp. 281- 293

Dube, Jon, (2012) Why smartphones are the future of social networking http://www.forbes.com/sites/jondube/2012/05/08/why-smartphones-are-the-future-of-social-networking// [Accessed 14 January, 2015]

Duffy, Michael (2013) Smartphones in the Arab spring: a revolution in news gathering Smartphones in the Arab spring/Matt J Duffy. Academia reporting news.edu. [Accessed 31 December 2012]

Durell, Richard (2014) The impressive effects of smartphones on society http;\\www.bitrebels.com\technology\the-efects-of-smartphones-on-society. [Accessed 16 April, 2014]

Dutta-Bergman, M. J. (2004). Complementarity in consumption of news types across traditional and new media. Journal of Broadcasting and Electronic Media 23 (4), 425-447

Eaton, Kit (2011) The next smartphone revolution say hello to your new personal assistant (updated) September 26. file///t./smartpone-revolution-say-hello-your-new-personal-assistant-updated.htm [Accessed 29 December 2012]

Economides, Anastasios and Grousopoulu, Amala (2007) Use of mobile phones by male and female Greek students International Journal of Mobile Communication (IJMC) Vol. 6 No.6, pp.729-749

Ecyclebest, (2015) Smartphones as tool for education: getting smart with smartphpnes http://www.ecyclebest.com/resources/smartphones-as-tools-for-education [Accessed 4 May, 2015]

Edegoh, Leo, Asemah, Ezekiel and Ekanem, Ita Bassey, (2013) Facebook and relational management among students of Anambra State Univeristy, Uli, Nigeria. International Review of Social Sciences and Humanities, Vol. 6, No. 1 pp. 205-216

Edwards, Gemma (2010) Mixed method approaches to social network analysis National Centre for Research Methods, NCRM/015, January

Edwards, Rosalind, Franklin, Jane and Holland, Janet, (2003) Families and social capital: exploring the issues. Publication of Families and Social Capital ESRC Research Group, London: South Bank University, February.

Eid, Mahammed and Ward, Stephen J.A. (2009) Ethics, new media, and social networks Global Media Jornal- Canadian Edition Vol. 2, Issue 1, pp. 1-4.

Elareshi, Mokhtar Hassan, (2011) The study of satellite TV channels as news services in Libya: as study of university students, Thesis Submitted for the Degree of Doctor of Philosophy, University of Leicester, United Kingdom.

El Gamal, Hebatallah (20100 Network Society: a social evolution powered by youth Global Media Journal, Arabian Edition, Vol. 1, No 1, Fall/Winter, pp.16-26

El-Khalili, Sara, (2015) Mobile technology: bridging the African digital divide http://nehandaradio.com/2015/05/18/mobile-technology-bridging-the-african-digital- divide. [Accessed 20 June, 2015]

Ellison, Nicole B, Lampe, Cliff and Steinfield, (2007) Social networks sites and society: current trends and future possibilities http://www. msu. steinfie/ Ellison LampeSteinfield20092009.pdf [Accessed 21, November 2013]

Ellison, Nicole, Steinfield, Charles and Lampe, Cliff (2007) The benefits of facebook 'friends' social capital and college students' use of online social networks sites Journal of Computer-Mrdiated Communication, 12 pp. 1143-1168

Ellison, Nicole, Steinfield, Charles and Lampe, Cliff (2006) Spatially bounded online social networks and social capital: the role of facebook Paper Presented at the Annual Conference of the International Communication Association (ICA) June 19-23, Dresden, Germany

Ellison, Nicole, Steinfield, Charles and Lampe, Cliff (2013) Calling all facebook friends: exploring request for help on facebook Proceedings of the Seventh International AAA1 Conference on Weblogs and Social Media

Ellison, Nicole, Steinfield, Charles and Lampe, Cliff (2010) Connection strategies: social capital implications of facebook-enabled communication practices New Media and Society, XX(X) pp. 1-20

Ellison, N, Wohn, Donghee Y, Khan, Laeeq M and Fewins-Bliss, Ryan, (2012) Reshaping access: an overview of research on access to higher education, social media and social capital https://www.msu.edu/~nellison/ReshapingAccessToDistrib.pdf. [Accessed 12 May, 2015]

Ellison, Nicole (2013) Facebook use on campus: a social capital perspective on social network sites onlinesocialnetworks-blogsport.com\facebook-use-on-campus [Accessed April 15, 2013]

Ellison, Nicole, (2013) Future identities: changing identities in the UK- the next 10 years Publication by Government Office for Science/UK Government's Foresight Project

Ellison, Nicole and Boyd, Danah, (2013a) Sociality through social network sites http://www-personal.umich.edu/~enicole/Ellisonboyd2013_scan4.pdf

Ellison, Nicole, Gray, Rebecca, Vitak, Jessica, Lampe, Cliff and Fiora, Andrew T, (2013b) Getting all facebook friends: exploring requests for help in facebook Proceesdings of the Seventh International AAA1 Conference on Weblog and Social Media

Ellison, N, Vitak, J, Gray, R and Lampe, C, (2014) Cultivating social resources on social network sites: facebook relationship maintenance behaviours and their role in social capital. Retrieved from: http://www-personal.umich. edu/~enicole/ EllisonVitak GrayLampeJCMC_InPress_ToDistrib.pdf [Accessed 10 October, 2014]

Ellison, N, Wohn, Yvette, D and Greenhow, Christine, M, (2014) Adolescents' visions of their future career, educational plans, and life pathways: the role of bridging and bonding social capital experiences Journal of Social and Personal Relationships Online 20 January

Ellison, N, Wohn, Yvette, D and Brown, Michael G, (2014) Social media and college access Interaction, July-August, 2014. http://mags. acm.org/ interactions/ july_august_ 2014/?pg= 64#pg64

Ellwood-Clayton, Bella, (2006) All we need is love—and a mobile phone: texting in the Phillipines. Cultural Space and Public Sphere in Asia, Seoul Korea pp. 357-369

Eke, Helen N, Omekwu, Obiora Charles and Odoh, Nneka Jennifer, (2014) The use of social networking sites among the undergraduate students of University of Nigeria, Nsukka

Ekwu, ¯Joseph 2008 Communication and Information Technology in Nigeria. http:// josephekwu. wordpress.com/ 2008/04/07/ communications-and-information-tech-- [Accessed 09 September 2010]

Ellwood-Claydon, Bella, (2015) Texting and God 21st.century.**phil**-inst.hu/passagen_engl4_ ellwood.pdf [Accessed 25May, 2015]

Erdem, Mukaddes, (2013) Usage purposes and perceived effects of social networks Journal of Education, 28 (3) pp. 137-150

Erickson, Tammy, (2012) How mobile technologies are shaping a new Generation http://hbr.org/2012/04/the-mobile-re-generation/ [Accessed 10 October, 2014]

Erier, Brittany, (2013) Smartphones are a man's best friend http://tv.cos.ucf.edu/blog/?p=6796 [Accessed 15 March, 2015]

Ertan, Ash, (2014) The determinants of social capital on facebook. Science and Technology Policies Research Center, TEKPOL Working Paper Series, Middle East Technical University, Turkey

Etikan, Ilker, Musa, Sulaiman Abubakar, Alkassim, Rukayya Sunusi, (2015) Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, Vol. 5, No.1, 2016, pp.1-4.

Evans, Mark, Hopper, Susan and co-researchers (2013) Gender as a predictive factor for tasks completed using smartphones. Conference 2013 Proceedings, February 12-15, Fort Worth, TX, USA

Evers, Clifton W, Albury, Kath, Byron, Paul and Crawford, Kate (2013) Young people, social media, social networking sites and sexual communication in Australia: "This is funny, you should watch it". International Journal of Communication, 7 pp. 263-280.

Eynon, Rebecca, Fry, Jenny and Schroeder, Ralph (2013) The ethics of internet research www.sagepub.com/upm-data/49617-Eynon-et-al-SHB-OF-ORM.pdf. [Accessed 12 October, 2013]

Ezeah, Greg H and Edogor, Obiorah E, (2013) Social media use among students of Universities in South-East, Nigeria. IOSR: Journal of Humanities and Social Science, Vol. 16, Issue 3 Sep – Oct. pp. 23-32

Ezumah, Bellarmine, A (2013) College students'use of social media: site preference performances, uses and gratifications theory revisited. International Journal of Business and Social Science, Vol. 4 Np. 5 May

Facht, Ulrika (2012) Smartphones have increased use of social media and computer games http://www.eurkalert.org/pub releases/2012-06/uog-shi06212/php. [Accessed 8 September, 2014]

Faull, Jennier (2013) People twice as likely to use social media on smartphones than on tablets http://www.thedrum.com/news/2013/05/30/people-twice-likely-use-social-media-smartphones-tablets [Accessed 23 September, 2014]

Fendelman, Adam (2014) How are cellphones different from smartphones? http:// cellphones. about. com/ od/ coveringthe basic/qt/cellphonesvsmartphones.htm. [Accessed 5 September, 2014]

Falaki, Hossein, Mahjan, Ratul et al, (2010) Diversity in smartphone usage MobiSys 10 June, 15-18

Fan, Si and Lee, Quynh (2011) Developing a valid and reliable instrument to evaluate users' perception of web-based learning in an Australian University context. MERLOT Journal of Online Learning and Teaching, Vol. 7, No. 3 September

Faulkner, Xristine and Culwin, Fintan (2004) When fingers do the talking: A study of texting messaging. Available online: www..sciencedirect.com. [Accessed 30 September 2010]

Fenton, Natalie (2013) The internet and social networking in James Curan, Natalie Fenton and Des Freedman (eds) Misunderstanding the Internet. London: Rouledge

Field, Andy (2005) Discovering statistics using SPSS. London: Sage Publication.

Fink, Carton, Mattoo, Aadit and Rathindran, Ranndeep (2003) An Assessment of Telecommunications reform in Developing Countries. Information Economics and Policy 15, pp. 443-466

Fiske, Alan Page (1992) The four elementary forms of sociality: framework for a united theory of social relations. Psychological Review, Vol. 99, No. 4, pp. 689-728

Fiske, Alan Page (2014) Human sociality: the inherent sociality of Homo sapiens http://www.sscent.ucla.edu/anthro/faculty/fiske/relmodov.htm. [Accessed July23 2014]

Flew, Terry (2002) New media: An Introduction. U.K. Oxford University Press.

Foster, Ann (2010) Social networking sites can help build, maintain friendships http://www.pennlive.com/bodyandmind/index.ssf/2010/02/social-networking_sites- can-the.htm. [Accessed 21 March, 2015].

Fox, Stuart, (2010) Technlgy changing way we practice religion http://www. nbcnews.com/id/ 38126658/ns/technology_and_science-science/t/technology-changing-way-we-practice-religion/ [Accessed 21 August, 2015]

Fox, Sarah, (2011) Tapping the youth market http://www.hktdc. com/inf/vp/a/hke/en/ 1/1/1/1X07IJ96/Hong- Kong-Economy/Digital/ [Accessed 26 July 2011]

Flynn, Mary, (2010) Smartphones put prayer in your pocket http://muslimvillage.com/2010/07/24/4961/smartphones-put-prayer-in-your-pocket/ [Accessed 21 November, 2011]

Francis, Prasad Deva (2013) Impact of SNS on social capital (sociability) of college students Asia Pacific Journal of Research, Vol. 111 Special Issue: X October

Frankel, Mark S and Siang, Sanyin (1999) Ethical and legal aspects of human subjects research on the internet. A Report of a Workshop, June 10-11, Washington, D.C.

Freeman, Kate, (2012) Why smartphones-obsessed generation Y can't put down their phones http://mashable.com/2012/12/12/martphone-obsessed-generation-y/ [Accessed May 2, 2015]

Frenzel, Louis, (2006) The cell phones- now that's entertainment http://electronicdesign.com/communications/cell-phone-now-thats-entertainment [Accessed 12 June, 2014]

Friederick, Hunter (2014) Smartphones: an integral part of society http://sbstatesman.com/2014/04/15/ smartphones-an-integral-part-of-society [Accessed April 21, 2014]

Fried, Ina, (2012) In US, slightly more women than men are using smartphones http://allthingsd.com/20120507/slightly-more-women-than-men-in-u-s-using-smartphones/ [Accessed 16 March, 2015]

Furlong, Andy and Cartmel, Fred (2007) Young people and social change: new perspectives U.K: Open University Press.

Gaag, Martin van der and Snijers, Tom (2014) Proposals for the measurement of individual social capital www.stats.ox.ac.uk/--/Sniders/WHF9-Snijders-vdGaag.pdf [Accessed November, 2014]

Gai, Bo, (2009) A world through the camera phone lens: a case study of Beijing camera phone use Know Techn Pol, 22, pp. 195-20

Ganguin, Sonja and Hobltiz, Anna, (2012) Mobile media - mobile creativity? Comunicado & Sociedude, Vol 22 pp. 33-43

Gannon, Emma (2014) The social lives of networked teens http://weare social.net/blog/2014/03/social-lives-networked-teens/ [Access 10 September, 2014]

Garton, Laura, Haythornthwaite, Caroline and Wellman, Barry (1997) Studying online social networks JCMC 3 (1) June.

Gayler, H. J. (1980) Social class and consumer spatial behavior: some aspects of variation in shopping patterns in metropolitan Vancouver, Canada. Transactions of the Institute of British Geographers, New Series, Vol. 5, No. 4

Gbenga-IIori A.O and Ibiyemi, T.S. (2010) Directing the digital dividend towards bridging the digital divide in Nigeria. European Journal of Scientific Research Vol.45 No. 1, pp. 079-088

Gemmil, Erin and Peterson, Michael, (2008) Technology use among college students: implications for student affairs Professionals. NASPA Journal, Vol. 43 No. 2.

Gerritsen, Marinel, Nickerson, Catherine et al (2010) English in product advertisement in non-English speaking countries in Western Europe: product image and comprehension of the text. Journal of Global Marketing 23:4, pp. 349-365

Gibson, Ryan, (2013) Generation Y and social media http://www.generationy.com/generation-y-social-media/ [Accessed 20 September, 2014]

Giesen, Deidre, Meertens, Vivian, Vis-Visschers, Rachel and Beuikenhorst (2012) Questionnaire development. A Publication of Statistics Netherland, Henri Faasdreef 312, The Hague

Gilbert, Eric and Karahalios, Karric (2009) Predicting tie strenghth wit social media CHI, April 4-9 Boston, Massachusetts, U.S.A.

Gifkins, Kim and Suttor, Natacha, (2013) Social media, research ethics and your research Presented at the ECU Researc Week, 16th to 30th September

Gill, Pam (2009) Castells' transformation for the rise of 'Network Society': implications for Stakeholders in educational environments. Access to Knowledge: A Course Journal, 1 (2)

Gillspie, David F and Mileti, Dennis S (1981) Heterogeneous samples in organization research Sociological Methods and Research, Vol.9 No. 3, February pp.375-388

Glasow, Priscilla A (2005) Fundamentals of survey research methodology. MITRE Publication, Washington C3 Center, McLean, Virginia, April

Glau, Elizabeth, (2011) Smartphones: personal assistant or leash? Tuesday April 19. file///t./smartphones-personal-assistant-or-leash.html. [Accessed 29 December 2012]

Globacom Launches Nigeria's First 3G Network http://www. telecomsight.com/ file/52264/ Globacom- launches-nigeria-first-3g-net [Accessed 30 June 2010].

Gillham, Bill (2000) Developing Questionnaire. London: Continuum.

Gorman, L and McLean, D (2003) Media and society in the twentieth century: A historical introduction. Oxford: Blackwell Publishers.

Gonsalves, Antone, (2010) Social network use by smartphones jumps http://www. informationweek.com/mobile/mobile-devices/social-network-use-by-smartphones-jumps/d/d-id/1087330? [Accessed 15 January, 2015]

Goudreau, Jenna, (2010) What men and women are doing on facebook http://www. forbes.com/2010/04/26/popular-social-networking-sites-forbes-woman-   time-facebook-twitter.html [Accessed 6bJanuary, 2015]

Granovetter, Mark S (1973) The strength of ties. American Journal of Sociology Vol. 78 Issue 6 May, pp.1360-1380.

Granovetter, Mark S (1983) The strenghth of ties: a network theory revisited. Sociology Theory, Volume 1, pp. 201-233

Gravetter, F.J and Wallnau, L.B. (2005). Essentials of statistics for the behavioural sciences (5th ed.) Belmont, CA: Wadsworth.

Green, Eileen and Singleton Carrie (2009) Mobile phones and Friendship. Sociology Review, Vol.18. No .2, November, pp.10-1

Green, E. E and Singleton, C, (2009b) Mobile connections: an exploration of the place of mobile phones in friendships. Sociological Review, 57 (11) pp. 125-144

Green, Nicola and Haddon, Leslie (2009) Mobile Communications; An Introduction to new media. U.K.: Oxford University Press

Grenaway, Lesley (2011) Using case study in research- how to tell a good story File:///G./Using case study in research-How to tell a'good&#0 [Accessed 9 September, 2013]

Griffiths, Hugh (2014) How the ubiquity of today's smartphones make an ideal platform for delivering campus-based services www.rms.inci.com/files/datasheets/Ombiel-whitepaper.pdf [Accessed 25 April, 2014]

GSMA Analysis: Country overview: Nigeria, June http://draft. content. gsmaintelligence. com/AR/ /assets/ 4161587/ GSMA- M4D- Impact-Country- Overview-Nigeria.pdf [Accessed 22 January, 2016]

Guion, Lisa, Diehi, David C, and McDonald, Debra (2012) Triangulation: establishing the validity of qualitative studies edis.ifas.ufi.edu\fy394. [Accessed 15 August 2013]

Guidance on Research Ethics for Research Involving Human Participants. http://www 2.le.ac.uk/offices/ ssds/sd/pgrd/resources/ethics [Accessed 21 January 2011]

Gunter, Barrie (2000) Media research methods: measuring audiences, reactions and impact London: Sage Publications

Gunter, Barrie (2012) 'The quantitative research process' in (ed) Klaus Bruhn Jensen A handbook of Media and Communication Research: qualtative and quantitative methodologies (second Edition). London: Rouledge

Hackbert, Peter H (2012) The smartphone as economic development tool: a preliminary investigation www.sbrconference.com/uploads/PHX2012,Hackbert-Peter.pdf [Accessed April 10, 2014]

Haddon, Leslie, (2002) Youth and mobiles: the British case and further questions Revista de Estudios de Juveatud Juno, No. 57 pp.115-124

Haddon, Leslie (2007) More than a phone: emerging practices in mobile phone use amongst children. Proceedings of the Conference,, 27-29, Communication in the 21st Century: The Mobile Information Society, September, Budapest, 2007

Haddon, Leslie (2008), Young peoples' diverse use of multimedia mobile phones. 2008 Conference of the International Communication Association on Communication for Social Impact, Montreal, May, 22-26.

Haddon, Leslie (2002) Youth and mobiles: The British case and further questions. Revista de Estudios, de Juvenud, Jun 10, No. 57, pp. 115-24.

Haeger, Heather, (2014) Bridge or barrier: the impact of social media on engagement for first generation college students http://cpr.iub. edu/uploads/ AERA14%20 Bridge%20or% 20Barrier% 20Paper.pdf [Accessed 25February, 2015]

Hakoama, Mikiyasu and Hakoyama, Shotaro, (2011) The impact of cell phone use on social networking and development among college students. The American Association of Behavioural and Social Journal, Volume 15, pp. 1-20

Hall, Kathleen Holly and Sivakumanran, Thillaitarajan, (2014) Social media use among international students. ISEJ: International Students Exerience Journal, Vol. 2 (1) Spring

Hall, Ralph, (2012) Mixed methods: in search of a paradigm http://auamii.com/ proceedings_ phuket_2012/hall.pdf [Accessed 12 August, 2015]

Haneefa, Mohammed and Sumitha, E (2011) Perception and use of social networking sites by the students of Calicut University. Kerala DESIDOC, Journal of Library and Information Technology, Vol.31, No. 4, July, pp. 205-301

Hanley, Michael (2011) College students more connected than ever through their smart phones file:/// C:/Users/Hp/ Downloads/ 2011-03-college- students-smart.pdf [Accessed 8 August, 2014]

Hanley, Michael (2013) College student smartphone usage hits 74%: tablet ownersip at 30% Th-ebooks.s3.amazonaws.com/Hanley-Ball-State-College-Student-Call-Phone-Study-Summary February-902002013.pdf [Accessed 23 July, 2014]

Hansen, Anders, Cottle, Simeon, Negrine, Ralph and Newbold, Chris, (1998) Mass communication research methods. New York: Palgrave

Haswell, Clive (2014) The Middle East's smartphone generation http://ourviews.sc.com/the-middle-easts-smartphone-generation/ [Accessed 8 September, 2014].

Hayman, Ira, (2014) Cell phones are changing social interaction https://www. psychologytoday. com/blog/ mental-mishaps/ 201401/cell-phones-are- changing-social-interaction [Accessed 12 May, 2014]

Haythornthwaite, Caroline (2002) Srong, weak and latent ties and the impact of new media The Information Society, 18 pp. 385-401

Hargittai, Eszter and Kim, Su Jung, (2010) The prevalence of smartphones use among a wired group of young adults. Institute for Policy Research, Northwestern University, Working Paper Series WP-11-01.

Harley, Dave, Winn, Sandra Perberton, Sarah and Wilcox, Paula (2007) Using text to support students' transition to University. Innovation in Education and Teaching International, Vol. 44, No. 3 August, pp. 229-241.

Harper, Elizabeth, (2013) Social media demographics and what they mean http://sproutsocial. com/insights/social-media-data-demographics/ [Accessed 22 January, 2014]

Harper, Greg (2008) It rings, sings, downloads, uploads, But can you stand it? The New York Times, February, 20.

Harwell, Michael R. (2013) Research design in qualitative/quantitative/mixed methods www.sagepub.com/upm.data/41165-10.pdf. [Accessed 23 August 2013]

Harrison, Richard and Thomas, Michael, (2009) Identity in online communities: social networking sites and language learning. International Journal of Emerging Technologies and Society, Vol. 7, No. 2 pp. 109-124

Hassan, Robert (2004) Media, politics and network society Berkshire: Open University Press Hassan, Yousuf, Zaidi, Mustafa and co-authors (2012) Smartphones application development using HTML5 and related technologies : a trade off between cost and quality. International Journal of Computer Science Issues, Vol. 9, No. 3, May.

Haste, Helen (2005) Joined-up texting: the roles of mobile phones in young people's lives. Nestle Social Research Programme: Report No 3 Published February

Helena, (2012) Reasons for using internet smartphones http://zeendo.com/info/reasons-for-using-internet-on-smartphones/ [Accessed 21 June, 2014]

Hemmer, Heidi (2009) Impact of text messaging on communication. Journal of Undergraduate Research, Minnesota State University, Mankato U.S.A. Henderson, Michael and co-authors (2014) Ethics and social media http://newmediaresearch.educ. monash.edu.au/ lnmrg/blog/ethics-social-media- research-do-we- know-what-we-are-doing. [Accessed 5 November, 2014]

Henderson, Taylor and Thomson, (2002) In touch: young people, communication and technologies. Information, Communication and Society,5.4. pp. 496-512

Hesse-Biber, Sharlene and Griffin, Amy J (2013) Internet-mediated technologies and mixed methods research: problems and prospects. Journal of Mixed Methods Research, 43 14 August.

Hew, Khe Foon and Chung, Wing Sum, (2012) Use of facebook: a study of Singapore students experience. Asia Pacific Journal of Education 32 (2) pp. 181-196

Hill, Rebecca (2014) Social media use raise questions of ethical guidance for researchers http://www.researchresearch.com/index.php?option=com_news&template=rr2col&view=article_&artic2col&view-article&articleleId=1335481 [Accessed 3 November, 2014]

Hillsberg, Alex (2014) Social media and smartphone facts: review of why men look for business and love while women seek games and knowledge reviews. Finances online.com/ review-of-social- media-and-smartphone-usa. [Accessed September, 2014].

Hingorani, Kamal E, Woodard, Donald and Askari-Danesh (2012) Exploring how samrtphones supports students' lives. Issues in Information Systems, Vol. 13, Issue 2, pp. 35-40

Hinton, Perry R, 2004) Statistics Explained 2nd Edition. London: Rouledge

Hiyawote, Eshatu (2011) The role of facebook in building social capital. A Thesis Submitted to the School of Social Woek, Addi Ababa University in Partial Fulfillment of the Requirement for Degree of Masters in Social Woek (MSW) July

Hjuorth, Larrisa (2009) The big bang: An example of mobile media as new media. A.C.M. Computer Entertainment, Vol. 7. No. 2, Article 19, June, pp. 1-13

HKCS announces survey results on smartphones using and consumption habits of HK students. http://www.hkcs.org.hk/en-hk/misc/press.../2013/104-1-1eng.pdf. [Accessed 25 April, 2014]

Hofer, Matthias and Aubert, Vivian (2013) Perceived bridging and bonding social capital on twitter: differentiating between followers and followees Computers in Human Behaviour, 29 pp. 2134-2142

Hogan, Bernie, (2010) The presentation of self in the age of social media: distinguishing performances and exhibitions online. Bulletin of Science Technology and Society 30:377

Holtzhausen, Somarie (2001) Triangulation as a powerful tool to strengthen the qualitative research design: the resource-based learning career preparation programme (RBLCPP) as case study. Presented at the Higher Education Close Up Conference 2, Lancaster University, 16-18 July

Horstmanshof and Power, (2005) Mobile phones, SMS, and relationships http://epublications. bond.edu.au/hss-pubs/75. [Accessed 20 June 2011].

Housley, Sharon, (2015) The advent of access: how smartphones have changed the world http://www.notepage.net/learning-center/how-smart-phones-have-changed-the-world.htm [Accessed 20 March, 2015]

Hwang, Ha Jim (2013) Preliminary investigation of smartphone usages in Kazakhstan. Advanced Science and Technology Letters, Vol. 35 (Software) pp.40-45

Hub, Searle (2006) Mobile phones uses: Two channels in a medium and potentiality of ritualized use. Paper presented at the annual meeting of the International Communication Association, Dresden, International Congress Centre, Germany, June 16

Hudson, James M and Bruckman, Amy (2006) Using empirical data to reason about internet research ethics. Conference onComputer-Supported Cooperative Work, 18-22, September, Paris, France

Hughes, Christina (2013) Qualitative and quantitative approaches to social research http://www2. warwick. ac.uk\fac \soc\sociology\staff\academicstaf\ch...pdf. [Accessed 1 September, 2013]

Humphrey, Lee (2007) Mobile social networks and social practice: a case study of Dodgeball Journal of Computer Mediated Communication, 13 (1)

Hussein, Ashatu (2009) The use of triangulation in social sciences research: can qualitative and quantitative methods be combined? Journal of Comparative Social Work, 1.

Hussein, Naveed (2014) Why smartphone cameras can be a menace as well ass blessing http://blob.smartphoneslab.com/why-smartphone-cameras-can-be-a-meance-as-well-as-blessing [Accessed August, 2014]

Hutsen, Mathew (2009) Facebook friends: too many, too few? https://www. psychology today. com/blog/psyched/200901/facebook-friends-too-many- too-few [Accessed 21 March, 2015]

Hu, Elise. (2014) What to do with your smartphones while you are having dinner http://www.npr.org/blogs/alltechconsidered/2014/03/24/293508375/what-to-do-with-your-smartphone-while-youre-having-d [Accessed 21 April, 2015]

Huun-Chae, Chung, (2014) Smartphones: a gift to society http://www. koreatimes.co.kr/ www/news/nation/2015/03/181_170621.html [Accessed 20 March, 2015]

Hsu, Phoenix and Hsu, Elizabeth, (2013) Survey seen as showing worrying trends on youth smartphone use http://focustaiwan,tw/news/asoc/201307150034.aspx [Accessed 24 December 2013]

Ibrahim, Nasiru, Salisu, Mohammed and Popoola, Abiodun, (2014) Use of smartphones among medical students in the clinical years at a medical school in Sub Sahara Africa: a pilot study. Journal mtm 3: 2 pp. 28-34

Ida, Rachmah (1999) The social construction of technology and the development of satellite Telecommunication in Indonesia. Kebudayaandan Politik, Th XII. No. 3, Juli pp. 23-30

Igarashi, Tasuku, Takai, Jiro and Yoshida, Toshikazu, (2005) Gender differences in social network development via mobile phone text messages: a longitudinal study. Journal of Social and Personal Relationships 22: 691

Inam, Adeel, (2014) Smartphones take the lead in today's connected world http://www.teehwalls.com/smartphones-take-lead-today's-connected-world/ [Accessed 21 August, 2014]

Ioannidis, Stratis and Chaintreau, Augustin (2009) On the strenghth of weak ties in mobile social networks. SNS '09 March Naremberg, Germany.

Iordache, Dragos and Lamanauskas, Vincentas, (2013) Exploring the usage of social networking websites: perceptions and opinions of Romanian University students. Information Economical, Vol.17 No. 4 [Accessed 14 February, 2014]

Ipsy, Ira (2012) Impact of new media on family. File://G:/Impact of new media on Family Relationships.html [Accessed 20 January 2012]

Ismail, Izvwan (2013) TRENDS: power of Mobile internet http://www.nst.com.my/life-times/tech/trends-power-of-mobile-internet-1.596. [Accessed 16 November, 2014]

Ito, Mizuko and Okabe, Daisuke (2010) Intimate connection: contextualising Japanese youth and mobile messaging. http://www.itofisher.com/mito/archives/itookabe/texting.pdf. [Accessed 2 October 2010]

Ito, Mizuko and Okabe, Daisuke (2004) Personal, portable, pedestrian: lesson from Japanese mobile phone use. Paper presented at Mobile Communication and Social Change,:2004 International Conference on Mobile Communication,.Seol. Korea October, 18-19

Ito, Mizuko and Daisuke, Okabe (Online) Mobile phones: Japanese youth and the replacement of social contract. http://www.Itofisher.com/PEOPLE/mito/mobile. [Accessed 27 June 2010]

Iwhiwhu, Enemute Basil, Rutenyan, Oghenero et al (2010) Mobile phones for library services in Delta State University, Abraka. http;//www.unl.edu/iip/iwiwhu-rutanyan-eghwubare.htm. [Accessed 24 May 2010]

India to top world youth market 2011. http:// economictimes.indiatimes.com/features/brand-equity/india-top-world'syouth. [Accessed 24 August 2010]

Jain, Rajesh (2005) The many uses of mobile phones. http;//www. refiff.com/money/ 2005/mar/24/guest/htm. [Accessed 28 May 2010]

Jamal, Arwa, Sedie, Reham et al (2012) Patterns of use of 'smart phones' among female medical students and self-reprted effects. Journal of Taibah University Medical Sciences, 7 (1) pp. 45-49

Jena, R. K. (2014) The impact and penetration of smartphone usage in student's life. Global Journal of Business Management, Vol. 8, No. 1, June

Jansen, Cory. (2014) Smartphone. http://www.techopedia.com/definition/2977/ smartphone [Accessed 23 November, 2014]

Jensen, Klaus Bruhn, (2002) The complementary of qualitative and quantitative methodologies in media and communication research (eds) A Handbook of Media and Communication Research, London: Rouledge, pp. 254-272

Jensen, Linna Jakob and Sorensen, Anne Scott (2013) 'Nobody has 257 Friends' strategies of friending, disclosure and privacy on facebook. Nordicom Review Vol. 34 Number 1, June, pp. 49-62

Jerpi, Laura, (2014) Mobile phones and society- how being constantly connected impacts our lives. http:// source. southuniversity. edu/mobile- phones-and-society- how-being- constantly- connected-impacts-our-lives-137313.aspx [Accessed 14 April, 2014)

Jiang, Hao and Carroll, John M. (2009) Social capital, social network and identity bonds: a reconceptualization. C&T '09, June 25-27, University Park, Pennsylvania, U.S.A.

Jiang, Hui, (2010) Young people's adoption and consumption of a cultural commodity-iphone. MSc Dissertation Submitted to the Department of Media and Communication, London School of Economics and Political Science, August

Jick, Todd D (1979) Mixing qualitative and quantitative methods: triangulation in action Administration Science Quarterly, Vol. 24, No. 4 Qualitative Methodology (Dec.) pp. 602-611

Jidenma, Nmachi (2013) Internet Access in Nigeria Set to Triple by 2013 http://thenextweb.com/africa/2011/06/17/internet-access-in-nigeria-set- [Accessed 19 September 2013]

Jidenma, Nmachi (2014) How Africa' mobile revolution is disrupting the continent http://edition.cnn.com/2014/01/24/business/davos-africa-mobile-explosion/ [Accessed August 15, 2014]

Jin, Borae and Peia, Jorge, (2010) Mobile communication in romantic relationships: mobile phone use, relational uncertainty, love commitment and attachment styles. Communication Reports, 23: 1, pp. 39-51

Jisoo Ha and Park, Judy (2011) An investigation of korean youth subculture styles of the 2000s. International Review of Social Sciences and Humanities, Vol. 1 No. 2, pp. 1-16

Johansson, Rolf (2003) Case study methodology. A key speech at the International Conference "Methodologies in Housing Research" Organised by the Royal Institute of Technology in co-operation with the International Association of People-Environment Studies, Stockhom, 22 -24, September

Johnson, Burke R. and Onwuegbuzie, Anthony (2004) Mixed methods research: a research paradigms whose time has come. Educational Research, Vol.33, No. 7, October, pp. 14-26

Jones, Alan and Bissell, Christopher (2011) The social construction of educational technology through the use of authentic software tools. Research in Learning Technology, Vol. 19 No. 3 November, pp. 285-297

Jones, Michael and Alony, Irit (2011) Guilding the use of grounded theory in Doctoral studies-an example from the Australian film industry. International Journal of Doctoral Studies, Vol. 8

Jordaan, D.B. and Suruijal, J (2013) Social effects of mobile technology on Generation Y Students. Mediterranean Journal of Social Sciences, Vol. 11, October

Judah, Eugene (2011) Telecoms growth is a point agenda. The Nigerian Observer, Tuesday January (online). http://nigerianobservernews.com/ 2501202011/ news/other%20 News/othernews 14.htm l. [Accessed 25 January 2011]

Junco, Reynoi, Merson, Dan and Salter, Daniel W. (2010) The effect of gender, ethnicity, and and income on college students' use of communication technologies. Communication, Behaviour and Social Networking, Vol. 13, No. 6

Jung, Brain (2014) What are the benefits of smartphone technology http:\\smattbusiness. chron.com\ benefits-smartphone-technology-57037.html. [Accessed 16 April, 2014]

Jung, Gwangjae (2012) The impact of smartphone adoption on consumers' switching behaviour in broadband and cable TV services. WEJ International European Academic Conference Proceedings, Zagreb, Croa October 14-17 [Accessed April 4 2014]

Jung, Yumi, Gray, Rebecca, Lampe, Cliff and Ellison, Nicole (2013c) Favours from facebook friends: unpacking dimensions of social capital. CHI '13 April 27-May, 2 Paris, France.

Junco, Reynoi, Merson, Dan and Salter, Daniel W. (2010) The effect of gender, ethnicity, and and income on college students' use of communication technologies. Communication, Behaviour and Social Networking, Vol. 13, No. 6

Jyoti, Choudrie and co-researchers, (2014) Investigating the adoption and use of smartphones in the UK: a silver-surfers perspective Twenty Second European Conference on Information Systems, Tel Aviv

Kalyani, S (2013) On and Off the Internet: an exploratory study of youth social capital in Chennai in the online era. www.academia.edu/.../On-and-Off-the Internet-An Exploratory-stud... [Accessed 26 September 2014].

Kalpidou, Maria Costin, Dan and Morris, Jessica (2011) The relationship between facebook and the well-being of undergraduate college students. Cyber Psychology, Behaviour and Social networking, Vol.14 No. 4

Kamran, Sohail (2010) Mobile phone: calling and texting patters of college students in Pakistan. International Journal of Business and Management, Vol. 5 No. 4 April, pp. 26-35.

Kaplan, Andreas M and Haenlein, Michael (2010) Users of the world, unite! The challenges and opportunities of social media. Business Horizons 53, pp. 59-68

Karanasios, Stan (2010) Applying the social construction of technology perspectives to ICT users at the bottom of the pyramid. American Conference on Information Systems (AMICIS), 2010 Proceedings

Kashyap, Rahul, (2014) Top 7 reasons reason why using smartphones http:// latestmobilebuzz. com/ 2014/05/01/top-7-reasons-why-people-using- smartphones/ [Accessed 22 September, 2014]

Kasteler, Jordan, (2010) How core components of social media made us a connected world http://searchengineland.com/how-core-components-of-social-media-have-made-us-a-connected-world-49092 [Accessed 22 March, 2015]

Katz, James (2007) Mobile media and communication: some important questions. Communication Monograph, Vol.74,. No. 3, September, pp. 389-394.

Katz, James and Sugiyama, Satomi, (2005) Mobile phones as fashion statements: the co-creation of mobile communication's public meaning. LingPederson.opd, 11.49

Kawulich, B. B. (2004) Data analysis techniques in qualitative research, in (ed.) Darla Twale Journal of Research in Education, 14 (1) p. 96 – 113

Kavanaugh, Andrea, Sheetz, Steven, Quck, Francis and Kim, Joon, B (2010) Cell phone use with social ties during crisis: the case of the Virginia Tech Tragedy. Presented at 75th International Conference on Information Systems for Crisis Response and Management: Defining Crisis Management 3.0 Seattle, WA. USA

Kayany, J., & Yelsma, P. (2000) Displacement effect of online media in the socio-technical contexts of households. Journal of Broadcasting and Electronic Media, 44 (2), 215-229.

Kazeem, Olatunde and Atli, Adline (2010) Zain, MTN, GLO, and the struggle for market share. http;//thenationonlineng.net/web3/news/3749.html. [Accessed 29 August 2010]

Keegan, Gerard, (2014) The survey method. http://www. gerardkeegan.co.uk/ resource/ surveymeth1.htm [Accessed 14 June, 2014]

Kelly, Kate, Clark, Belinda, Brown, Vivienne and Sitzia, John (2003) Good practice in the conducting and reporting of survey research. International Journal for Quarterly in Health Care. Vol.13.No.3, pp. 261-266

Kendrick, James, (2012) Smartphone of the not-too-distant-future, your personal assistant file///t./Smartphone of tne net-too-distant-future,your personal assistant-ZDnet.htm. [Accessed 29 December 2012]

Kennedy-Eden, Heather (2014) Do smartphones brings us closer? A family life and vacation perspective. eProceedings of the ENTER 2014 PhD Workshop in Dublin, Ireland. [Accessed 10 April 2014]

Kevi, Dey (2010) Uses of mobile phones in everyday life are just expanding day-by day. articles /uses-mobile-phones-everyday-life-expanding.html [Accessed 28 May 2010]

Khalaf, Simon, (2014) The rise of mobile addict http://flurrymobile. tumblr.com /post/115191945655/ the-rise-of-the-mobile-addict [Accessed 2 May, 2015)

Kiesler, Sara et al (2002) Internet evolution and social impact. IT and Society, Volume 1 Issue 1, Summer, pp. 120-134.

Kim, Hee-Woong, Zheng, Jun Raymond and Gupta, Sumeet (2011) Examing knowledge contribution from the perspective of an online identity in blogging communities. Computers in Human Behaviour 27 pp. 1760-1770

Kim, Hyo-Jeong and Kim, Jin-Seop, (2015) The relationship between smartphone use and subjective musculoskeletal symptoms and University students. Journal of Physics Ther Science Vol. 27, No 3

Kimberlin, Carole and Winterstein, Almut (2008) Validity and reliability of measurement instruments used in research. Am J Health-Syst Pharm, Vol. 65, Dec. 1, pp. 2281-2284

Kincsei, Attila (2007) Technology and society in the information age. Education and Culture, NETIS, Budapest, April

Kitamura, Satoshi (2013). The relationship between use of the internet and traditional information sources: an empirical study in Japan. http://sgo. sagepub.com/content/3 /2/2158244013489690 [Accessed 8 September 2013]

Klein, Hans K and Kleinman, Daniel Lee (2002). The social construction of technology: structural consideration. Science Technology and Human Value, Vol.27. No. 1 Winter, pp. 28-52.

Klein, Thamar and Olbrecht, Meike (2011) Triangulation of qualitative and quantitative methods in panel peer review research. International Journal for Cross-Disciplinary Subjects in Education (UCDSE) Vol. 2, Issue 2 June.

Knudsen, Brian, Florida, Richard and Roussen, Denise (2014) Bridging and bonding: a multi- dimensional approach to Regional social capital. www.creativeclass. com/rfcggb/ articles/ Bridging-and-bonding.pdf. [Accessed 22 September, 2014].

Kollianyi, Bence, Molner, Szlard and Szekely, Levence, (2007) Social networks and the network society. NETis. Budapest July.

Koroleva, Ksenia, Krasnova, Hahanna et al (2011) It's all about networking: empirical Investigation of social capital formation on social networking sites. Thirty Second International Conference on Information System, Shanghai

Korvorst, Marjolein and Sleijpen,Ger, (2014) Most young people online with smartphone. http://www.cbs.nl/en/menu/themas/dossier/jongeren/publicaties/artikelen/archief/2014 -/4079-wm.htm [Accessed 22 September, 2014]

Koutras, Eleni (2006) The Use of Mobile Phones by Generation Y Students at Two Universities in the City of Johannesburg. A Master Thesis Submitted to the University of South Africa, June

Kraut, Robert et al (1998) Internet paradox: a social technology that reduces social involvement and psychological well-being? American Psychologist, September, pp. 1017 – 103

Kuedo, Kumar Kavi, Suutoo, Rajen et al (2013) Impact of social networking on youth: case study of Mauritius EJISDC, 56, 6, 1-7

Kujath, Carlyn (2011) Facebook and Myspace: complement or substitute or face to face Interaction? Cyberpsychology, Behaviour and Social Networking, Vol. 14, No. 1-2

Kurkujarvi, Anna, (2013) Why do we love our smartphones so much http://conversation. nokia.com/2013/01/11/fanboy-fervor-why-do-we-love-our-smartphones-so-much/ [Accessed 5 September, 2014].

Kushchu, Ibrahim (2007) Positive contribution of mobile phones to society. A Publication of the Mobile Government Consortium International, United Kingdom.

Kushin, Mathew James and Yamamoto, Masahiro, (2010) Did social media really matter? College students' use of online media and political decision making in the 2008 election Mass Communication and Society, 13, pp. 608-630

Kuss, Dana J and Griffiths, Mark D (2011) Online social networking and addiction- a review of the psychologies. Int J Environ Res Public Health, September 8 (9), pp. 3528-355 [Accessed 28 February, 2007]

Krekovic, Slavomir (2003) New media culture: internet as a tool of cultural transformation in Central and Eastern Europe. Visiting Fellow Conferences, Vol. X1V/6 JWM Junior V Ladge,

Lam, Louis, (2012) An innovative research on the usage of facebook in the higher education. context of Hong Kong. The Electronic Journal of e-Learning, Vol. 10, Issue No. 4

Lampe, Cliff, Ellison, Nicole and Steinfield, Charles (2008) Changes in use and perception of facebook. CSCW08, November 8-12, San Diego, Californai, U.S.A.

Larson, James (2013) Smartphone use in Korea now exceeds use of desktop PCs. www.koreainformationsociety.com/.../smartphone-use-in-korea-now-exc [Accessed 16 April, 2014]

Lauchner, Heidi, Paterson, Margo and Krupa, Terry (2012) Using constructivist case study methodology to understand community development processes: proposed methodological questions to guide the research process. The Qualitative Report, Vol. 17, Article 25, pp. 1-22

Lawson-Borders, Gracie, (2011) Making the connections: digital media and integrated networking. Global Media Journal, Vol. 11, Issue 19, Fall

Lee, A.J (2013) Mobile technology, co-production and society: the curious case of convergent mobile technology
https://www.tasa.org.au/wp-content/uploads/2013/11/Lee.pdf

Lee, Nicole, (2015) THE 411: feature phones vs. Smartphones http://www.cnet.com/news/the-411-feature-phones-vs-smartphones/ [Accessed 12 March, 2016]

Lee, P., & Leung, L. (2004) Assessing the displacement effects of the internet. Paper presented at the International Conference on Internet Communication in Intelligent Societies, School of Journalism & Communication, Chinese University of Hong Kong, July 8-10.

Lee, Uichin, Lee, Joonwon et al, (2014) Hooked on smartphones: an exploratory study on smartphones overuse among college students. CHI, April 26-May,1

Lee, Yu-Kang, Chang, Chn-Tuan, Lin, You and Cheng, Zho-Hong (2013) The dark side of smartphone usage: psychological traits, compulsive behaviour and technostress. Computers in Human Behaviour, 31 pp. 373-383

Leiter, Melissa, (2014) Why people use social media? http://www.melissaleiter.com/why-do-people-use-social-media/ [Accessed 14 November, 2014]

Leonard, Madeleine (20060 Children, childhood and social capital: exploring the links. Sociology, Volume 39 (4) pp. 605-622

Leonard, Rosemary and Bellamy, John (2014) The relationships between bonding and bridging social capital in Australian Christian churches. www.istr.org/resource/rcmgr/ bangkok-papers/ Leonard.pdf [Accessed 14 September, 2014]

Lew, JY (2014) The effect of smartphones on social interaction www.academia.edu\....\The-effect-of-smartphones-on-social-interaction [Accessed 16 April, 2014]

Lin, Angel (Online) Gendered billigual communication practice: Mobile text messaging among Hong Kong college students. http://journal.fibrecultural.org/ issu6/issue6-lin.html. [Accessed 10 September 2010]

Lin, Nan (1999) Building a network theory of social capital Connections 22 (1) pp. 28-51.

Lin, Ying, Tsai and Yea-Ra, (2012) The impact of social networking services on college students' social relationships. International Journal of Arts and Commerce, Vol. 1, No. 4 September

Ling, Rich (2000) We will be reached: The use of mobile telephony among Norwegian youth. Information Technology and People, 13 (2), pp. 102-120.

Ling, Richard (2010) Texting as life phase medium. Journal of Computer-Mediated Communication, 15, pp. 277-292

Ling, Rich and Haddon, Leslie (2001) Mobility telephony, mobility and the coordination of everyday life. "Machines that become us". Conference at Rutgers University, April 18 and 19

Lipton, Bruce I (2014) Never alone: the technological reality of Generation Y. http://www.acacamps.org/campmag/1411/never-alone-technological-reality-generation Y [Accessed 19 November, 2014]

Litchfield, Steve, (2010) Defining smartphone – part 1. http://www. allaboutsymbian.com /features/item/defining_the_smartphone.php [Accessed 13 March, 2015}

Livingston, Alan, (2004) Smartphones and other mobile devices: the swiss army knives of the 21st century. Educause Quarterly, Vol. 27 No. 2 pp.46-52

Livingstone, Sonia (2008) Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. New Media and Society, 10 (3) pp. 393-411

Lotto, Eleonora, (2014) Towards a theory of social capital definition: its dimensions and resulting social capital types. socioleconomics.org/Papers/Lotto 1C.pdf [Accessed 15 January, 2015].

Loviheim, MLA (2005) Young people and the use of internet as transitional space. Online-Heidelberg, Journal of Religions on the internet 1.1

Low, Elizabeth, (2010) Singapore youths hungry for more of mobile. http://www.marketing-interactive.com/news/21301. [Accessed 24 August 2010]

Lundberg, Niclas (2014) Smartphones and (smart) people. www.diva-portal.org\smash\get\diva2.630313\FULLTEXT. [Accessed 16 April, 2014]

Lundguist, Arlene R, Lefebrve, Emily J and Garramone, Sara J, (2014) Smartphones: fulfilling the need for immediacy in everyday life, but at what cost? International Journal of Humanities and Social Science, Vol. 4, No. 2, Special Issue- January [Accessed October 12 2014]

Luthar, Breda and Kropinik, Ssmo, (2011) Class, cultural capital and the mobile phone Sociology dasopis/Czech; Sociological Review Vol. 47, No.6

Luthers, Breda and Kropivnik, (2011) Class, cultural capital, and the mobile phone Sociological ustav AV CR, vvi, Praha

Luthers, Marika (2009) Becoming more like friends: a qualitative study of personal media and social media. Nordicom Review 30, 1, pp. 201-21

MacGregor, Karen, (2015) Social capital and 'grit' help poor students to succeed www.universityworldnews.com/article.php?story=20150925161144888 [Accessed June, 25, 2016]

Madden, Christopher, (2010) The use of smartphones among students in relation to their education and social life. www.amazon.co.uk. By Subject. Engineering..Teaching Aids [Accessed 21 August, 2015]

Madell, Dominic E and Muncer, Steeven J (2007) Control over social interactions: an important reason for young people's use of the internet and mobile phones for communication? CyberPsychology and Behaviour, Vol. 10, No. 1

Madianou, Mirca, (2014) Smartphones as polymedia. Journal of Computer-Mediated Communication, 19 pp. 667-680

Mahmood, Abd El-Basit and Auter, Philip J (2009) The interactive nature of computer-mediated communication. American Communication Journal, V.11, No.4, Winter

Makashvilli, Makhaz, Ujinajuride, Beka et al, (2013) Gender differences in the motives for the use of Facebook. Asian Journal of Humanities and Social Sciences, Vol. 01 Issue 03 August

Malinen and Ojala (2012) Maintaining the instant connection—social media practices of smartphones users. o.coop.2012.grenoble-inp.fr/pdf-papers/Malinen-34pdf. [Accessed 30 April, 2014]

Manago, Adriana M, Graham Michael B et al (2008) Self-presentation and gender on MySpace. Journal of Applied Developmental Psychology 29 pp.446-4458

Manago, Adriana, Taylor, T and Greenfield, P. M. (2012) Me and 400 friends: anatomy of college students' facebook networks, their communication patterns, and well-being. Developmental Psychology, Online First Publication, January 30

Mandel, Elliot (2011) Socializing and smartphones. http:/www.nextgenjournal.com/2011/06/socializing-and-smartphones/ [Accessed 24 April, 2014]

Manjunatha, S (2013) The usage of social networking sites among the college students in India. International Research Journal of Social Sciences, Vol. 25 (5) 15-21, May

Manjunatha, S (2013) A sociological study on the influence of social networking sites on the interpersonal relationships of college students in Bangalore and Mysore cities of India. International Research Journal of Social Sciences Vol. 2(6) June, pp. 12-19

Manuel, Castells (2000) Toward a sociology of the Network Society. Contemporary Sociology, Vol.29, No. 5 September

Manuel, Castells (2004) Informationalism, networks, and the network society: a theoretical blueprint (ed.) Manuel, Castells in The Network Society: a cross-cultural perspective Northamption, MA: Edward Elger.

Martinez-Aleman, Ana M, (2014) Social media go to college. http://www.changemag.org/ Archives/Back%20Issues/ 2014/January-February% 20214/ socialmedia/ February-full/htm [Accessed 21 January, 2015]

Martini, Alaina (2014) Smartphones a must for college students. http://www.fastweb.com/ student-life/ articles/ 3431-smartphones-a-must-for-college- students. [Accessed 8 September, 2014]

Masrom, Maslin and Usat, Selisa, (2013) Understanding students' behaviour on the use of online social networking. Proceedings of the 4th International Conference on Computing and Informatics, ICOCI 28-30 August, Malaysia Paper No. 099

Matanhellia, Priyanka, (2010) Mobile phone use by young adults in India: a case study Dissertation Submitted to the Faculty of the Graduate School, University of Maryland, College Park, for the Award of Doctor of Philosophy

Mayfield, Antony (2013) What is social media? An e-book. www.repromax.com/docs/ 113/854427515.pdf [Accessed 10th September, 2014]

Mayer, Adalbert and Puller, Steven L (2008) The old (and girl) network: social network formation on University campuses. Journal of Public Economics 92 pp.329-347

Mazman, Gitzin and Usluel, Yasemin, (2011) Gender differences in using social networks. TOJET: The Turkish Online Journal of Educational Technology, Vol.10 Issue 2 April

Mclintvre, Douglas (2014) Over 85% of generation Y own smartphones http://247walst.com/ consumer-electronics/2014/09/06/over-85-of-generation-y-own-smartphones/ [Accessed 8 September, 2014]

McIntyre, Karen, (2014) The evolution of social media from 1969 to 2013: a change in competition and a trend toward complementary, niches sites. The Journal of Social Media in Society 3 (2) Fall

Meyer, Christine Benedichte (2001) A case in case study methodology. Field Methods, Vol. 13, No. 4 November, pp. 329-352

Meyer-Sage, Philip (2012) South African network society. http//blog.sagesouthafrica. co.za/tag/south-african-nework-society [Accessed 25 December, 2013]

McQuiston, James M (2013) Social capital in the production gap: social networking services and their transformational role in civil engagement. A Thesis Submitted to the Kent State University in Partial Fulfillment of the Requirement for the Degree of Doctor of Philosophy [Accessed 20 February, 2014]

Mills, Jane, Bonner, Ann and Francis, Karen (2006) The development of constructivist grounded theory. International Journal of Qualitative Methods, Vol. 5 (1)

Moore, Hannah, (2012) The impact of smartphones on peer-to-peer text messaging and bulk SMS. http://www. panacesmobile. com/ the-impact-of-smartphones-on-peer-to-peer-text-message- and-bulk-sms [Accessed August 25, 2014]

Moreno, Megan A, Goniu, Natalie and Co-Authors (2013) Ethics of social media research: common concerns and practical considerations. CyberPsychology, Behaviour and Social Networking Vol. 16, Number 9

Morphitou, Ria N and Morphitis, Avros (2014) The use of smartphones among students in relation to their education and social life. ICICTE 2014 Proceedings

Mothar, Mohd M. N, Hassn, Abu Musa B, Hassan, Haji Salleh and Osman, Nizam M (2013) The importance of smartphone's usage among Malaysian Undergraduates. IOSR Journal of Humanities and Social Sciences, Vol. 14, Issue 3 (July-August) pp.112-118

Murphy, Joe, Link, Michael W and co-researchers, (2014) Social media in public opinion research: report of the AAPOR Task Force on Emerging Technologies in Public Opinion. Research Publication of the American Association for Public Opinion Research, May, 28

Mustafa, Siti Ezaleila and Hamzah, Azizah (2011) Online social networking sites: a new form of social interaction. International Journal of Social Science and Humanity, Vol. 1, No. 2 July

Mwanza, Kelvin (2014) Social media use picks pace in Africa with more smartphones. http://afkinsider.com/42468/social-media-use-picking-pace-africa-smartphones/ [Accessed 20 September, 2013]

Mafirakurewa, Mernat, (2009) 550% mobile phone growth in Africa. http://www.africnews. com/site/350-mobile-phone-growth-Africa/list.messages. [Accessed 22 June, 2011]

Macro, (2004) A report on mobile phone usage among the teenagers and youth in Mumbai. Publication by Market Analysis and Consumer Research Organisation, April-May

Maldonado, Marrisa, (2015) The facebook anxiety. http://psychcentral.com/lib/the-anxiety-of-facebook/00019448 [Accessed 21 February, 2015]

Manjunatha, S (2013) The usage of social networking sites among the college students in India. International Research Journal of Social Sciences, Vol. 2(5), May, pp. 15-21

Martins, Corrinne, (2008) Camera phone, mobile pictures and sociability: evidence from French young users. Credoc. 2008, The diffusion of ICT in French society, CGTI/Arcep. Available at www.arcep.fr

Martin, Kelvin and Stewart, Douglas, (2010) The youth culture and cell phones. http://www. mobile_phoneinvestigations.net/article/1-the-youth-culture-and-cell-phone [Accessed 24 June 2011]

May, Harvey and Hearn, Greg (2005) The mobile phone as media. International Journal of Cultural Studies Vol. 8 (2), pp. 195-211

Matanhelia, P (2010) Mobile phones use by young adults in India: a case study. Doctoral Dissertation 2010 College of Journalism, University of Maryland, College Park.

Maton, Bennett S (2010) Beyond the 'digital natives' debate: toward a more nuanced understanding of students' technology experiences. Journal of Computer Assisted Learning 26, pp. 321-331

Mathew, Stollak, J, Vandenberg, Amy, et al (2011) Getting social: the impact of social networking usage on grades among college students. Proceedings of ASBBS Vol.18, Number 1

Mastafa, EzaleilaSiti and Hamzah, Azizah, (2011) Online social networking: a new form of interaction. International Journal of Social Science and Humanities, Vol. 1 No. 2 July

McCarthy, Brad, (2011) Social media and your changing worldview. http://thenextweb.com/socialmedia/2011/05/02/social-media-and-your-changing-world-view\ [Accessed 16 May 2015]

McClatchey, Shannon (2006) The consumption of mobile services by Australian University students. International Journal of Mobile Marketing June, Vol. 1 No. 1

McKenna, Katelyn Y. A. Green, Amie S and Gleason, Marei (2002) Relationship formation on the internet: what's the big attraction. Journal of Issues, Vol 58, No. 1 pp. 9-31

McKeown, Kelvin, (2012) The strenghth of weak ties in social networking: seek to be worth knowing. http://www.leadershipcloseup.com/2012/12/14/strength-of-weak-ties-in-social- networking-seek-to-be-worth-knowing/ [Accessed 10 May, 2015]

McTear, Michael (Online) Personal assistant on smartphones: re-inventing the wheel? re-inventing-wheel-and-smartphones.pdf. [Accessed 29 December 2012]

Mehdizadeh, Soraya (2010) Self-presentation 2.0: narcissism and self-esttem on facebook. CyberPsychology, Behaviour and Social Networking, Vol. 13, Number 4, pp. 357-364

Mertems, Donna M and Hesse-Biber, Shardene, (2012) Triangulation and mixed methods Research: provocative positions Journal of Mixed Methods Research 6 (2) pp. 75-79

Mishra, Sushma, Draus, Peter, Leone, Gregory J and Caputo (2012) Exploring understanding factors influencing daily usage of facebook for undergraduate college students: a research model. Issues in information Systems, Vol. 13, Issue 1, pp. 350-360

Mobile phones and youth: A look at the U.S. market. International Telecommunications Union ITU Report, February 2004

Mobile overtakes fixed: implications for policy and regulation: ITU 2003. http://www.itu.int/osg/spu/ni/mobileovertakes/index.html. [Accessed 08 August 2010]

Mobile phone technology-The development. http://wiki.media-culture.org.au/index. php/mobile-phone-technology.[Accessed 11 May 2010]

Mok, Diana, Carrasco, Juan-Antonio and Wellman, Barry (2010) Does distance still matter in the age of internet. group.chass, utoronto.ca/netlab/wp.content/upload/2012/05/Does- Distance-Still-Matter-in- the-age-of-Internet.pdf. [Accessed 30 December 2012]

Morris, Meredith R, Teevan, Jaime and Panovitch, Katrina (2010) What do people ask their social networks, and why? a survey of status message Q A and Q behaviour. CHI, April 10-15 Atlanta, Georgia, U.SA.

Mothar, Noor, M .M, Musa, B. et al (2013) The importance of smartphone\s usage among Malaysian undergraduates. OSR Journal of Huanities and Social Sciences (IOSR-JHSSS) Vol.14, Issue 3 (July-August) pp. 112-118

Muscanell, Nicole L and Guadgno, Rosanna E (2012) Making new friends or keep the old: gender and personality differences in social networking use. Computer in Human Behaviour 28 pp.107-112

Nadkarni, Ashwini and Hofmann, Stefan G. (2012) Why do people use facebook? Personality and Indivdual Differences, 52 pp. 243-249.

Nagin, Perry, (2012) How smartphones are impacting your friendships. http://mic.com/ articles/4051/how-smart-phones-are-impacting-your-friendships [Accessed 21 April 2015]

Nam, Sang-Zo (2013) Evaluation of University students' utilization of smartphone. International Journal of Smart Home, Vol. 7, No. 4 July

Naphtal, Akin, (2014) Should internet penetration in Africa stand at just 16 percent. http://mobileworldmag.com/should-internet-penetration-in-africa-stand-at-just-16-percent/ [Accessed 26 June, 2015]

Naser, Jack Hecht and Weiner, Richard, (2007) Call if you have trouble: mobile phones and safety among college students. International Journal of Urban and Regional Research, Vol. 31:4, pp. 863-73

Nasser, Badreya and Al Jenaibi, Abdulah, Use of social media in the United Arab Emirates: an initial study. Global Media Journal, Arabian Edition Summer/Fall Vol. 1 No.2, pp. 3-27

National economic empowerment and development strategy (NEEDS). Abuja: National Planning Commission, 2006.

Ndege, (2013) New smartphone market thrives in Nigeria – phone. http//www. nairaland.com/1067923/new-smartphone-market-thrives.ni… [Accessed 13 September 2013]

Neelamar, M and Chitra, P (2009) New media and society: a study on the impact of social networking sites on Indian youth. Estudos em Communicao no6 Dezembro de. pp. 125-145.

Newell, Mattson and Bayrak, Ergin, (2010) The innovation of smartphones. www.edu\-ebayrak\teaching\599F10\PR\mattsonp\.pdf w.bc f.usc [Accessed 21 December 2013]

Nguyen, A and Western, M, (2006) The complimentary relationship between the internet and traditional mass media: the case of online news and information. Information Research, 11 (3), 1-18.

Nicoleta, Clau (2013) The impact of new media on society. www.researchgate. net/..../215489586-The-Impact-of-new -media-on-society. [Accessed 11 September, 2013]

Niedermann, Adrian (2012) Smartphones in contemporary society. Mhtml:file:// H:Smartphones in Contemporary Society Samuel's Techno-log/mht [Accessed 20 December, 2013]

Niemandt, C.J.P.(2013) A network society, social media, migration and mission. Missonalia 41:1 (April) pp. 22-39

Nigerian Communications Commission (2010). Determination of dominance in selected communications market in Nigeria. Publication of NCC

Nnadozie, Chuma Opera, et al (2015) Use of smartphones amongst final year students' in school of industrial and applied sciences (SIAS) IN Federal Polytechnic, Nekede-Owerri, Imo State, Nigeria. International Journal of Computer and Organization Trends, Vol. 16, No. 1, Jan.

Nnama, Emmanuel Chukwuma (1991) Present status of the telecommunications industry in Nigeria: A brief on the Nigerian Communications Commission (N.C.C.). Nigerian Communication Commission, July.

Nowak, Peter, (2015) Smartphones in Africa: more common with English speakers. http://alphabeatic.com/smartphones-in-africa/ [Accessed 28 June, 2015]

Ntui, Anichiet and Edem, Nkoyo (2011) Mobile phone etiquette in Nigeria: The case of Calaber municipality, Nigeria. www.irma-international.org/viewtilte/45405.pdf. [Accessed 29 September 2013]

Nurullah, Abu Sadat (2009) The cell phone as an agent of social change. Rocky Mountain Communication Review,. Vol. 6,.No. 1, August, pp.19-25.

Obodi, Abraham (2011) Merits and Demerits of Globalisation. Nigerian Observer Newspaper, (online edition) Wednesday April 13,

Ofcom report, (2015) UK now smartphones society. http://consumers.ofcom.org.uk/news/uk-now-a-smartphone-society/ [Accessed 6 August, 2015]

Ogunlesi, Tolu (2014) Youth and social media in Nigeria. 20 RJR 33 August

Okabe, Daisuke (2004) Emergent social practices situation and relations through everyday camera phone use. Paper presented at Mobile Communication in Seoul, Korea , October 18-19.

Okafor, Godson O and Achukwu, Lorrento Ngozi, (2014) Social media and changing socio-cultural values among Nigerian University undergraduates: a study of Nnamdi Azikiwe University. International Journal of Arts and Education Research, April-May, Vol. 3 Article no. 1, pp. 910-924

Okafor, Godson O and Malizu, Chinonye Faith, (2014) Mobile phone use patterns among University undergraduates in Nigeria. International Journal of Advanced Research IJOAR.org

Oketola, Dayo, (2013) 25% of Nigerian nobile subscriber use smartphone-TNS. http://www.punchng.com/business/technology/25-of-nigerian-mobile-subscribers-use-smartphones-tns/ [Accessed August 24,2014]

Okonji, Emma (2010) Nigeria: our new brand will bridge digital iviede. Airtel. http://allafrica.com/stories/201011230805.html. [Accessed 18 March 2011]

Oksman, Virpi, (2006) Yo ung people and senior in Finish mobile information society. Journal of Interactive Media in Education, November 3

Oksman, Virpi, (2010) The mobile phone: A medium itself. VTT Publications 737, Finland Technical Research Centre of Finland.

Olsen, Wendy (2004) Triangulation in social research: qualitative and quantitative methods can really be mixed. Research.apc.org\images\5\54\Triangulation.pdf. [Accessed 13 August 2013]

Omawumi, Hassan, Niran, Oluwanranti and Oluseyi, Sola (2009) Evolution of Nigeria's telecommunications policy. Journal of Mobile Communications Vol.3 Issue 1, pp. 1-6

Onwuegbuzie, Anthony and Leech, Nancy (2005) On becoming a pragmatic researcher: the importance of combining quantitative and qualitative research methodologies. Int. J. Social Research Methodology vol. 8, No. 5 March, pp. 375-387

Onwuegbuzie, Anthony and Leech, Nancy (2006) Linking research questions to mixed methods data analysis procedures. The Qualitative Report, Vol. 11, No. 3, September, pp. 474-498.

Onwuegbuzie, Anthony J and Combs, Julie (2011) Data analysis in mixed research: a primer. International Journal of Education, Vol. 3, No.1 E13

Onyeka, Ndidi Camila, Ibrahim, Dahiru Sajoh and Dalhatu, Bulus, (2013) The effect of social networking sites usage on the studies of Nigerian students. The International Journal of Engineering and Science (IJES), Vol.2 Issue 7 pp. 39-46

Oosthuizen, M. J. (2013) Research methodology. www.gheensu.ca\ samp\sampresourcs \.....\documents\....04chapter3.pdf. [Accessed 12 August, 2013]

Opinionpanel Research, (2007) Social network sites and students: monitoring social network websites and the explosive rise of facebook among students. http://www. youthsight.com/ media-centre/wp-content/uploads/press/Social NetworkResearch.pdf [Accessed 21 November, 2014]

Oram, Andy, (2009) What sociologist Erving Goffman could tell us about social networking and Internet identity http://radar.oreilly.com/2009/10/what-sociologist-erving-goffma.html [Accessed 10 February, 2016.

Orikinla, (2011)] Young and mobile: the smartphone generation http://www. nairaland.com /629937/young-mobile-smartphone-generation [Accessed 12 March, 2016]

Oyewole, Abdulhafeez, (2014) Why mobile phones are useful to students. http://campuspotalng.com/education/article-mobile-phones-useful-students/25311[Accessed 16 March, 2105)

Packs, Malcolm R and Floyd, Kory, (19960 Making friends in cyberspace. Journal of Communication, Winter, 46, 1; ABI/INFORM GLOBAL pp. 80

Pain, Rachel, Grundy, Sue and Gill, Sally, (2005) So long as I take my mobile: mobile phones, urban life and georagraphies of young people's safety. International Journal of Urban and Regional Research, Vol. 29:4 December, pp. 814-830

Palachi, Anthony, Mbatia, Paul Nyaga et al (2011) Are mobile phones changing social networks? A longitudinal study of core networks in Kerala. New Media and Society 1-20

Palmer,Jimmy (2012) The role of gender on social network websites http://writingandrhetoric.cah.ucf.edu/stylus/files/kws2/KWS2_Palmer.pdf [Accessed 26 August, 2015]

Pang, N and Zuang, S, Vu, S and Foo, S (2014) Smartphone use by adults in Singapore. Isg2014.org/paper-pdf No.324.pdf. [Accessed 8 August, 2014]

Papacharissi, Zizi (2014) A networked self: identity performancr and sociability on social network sites tigger.uic.edu/-ziz/site/Research-files/ch12.pdf. [Accessed January 5, 2014]

Pappalardo, Luca, Rossetti, Giulio and Pedreschi (Online) How well do we know each other?: detecting tie strenghth in multidimensional social networks. www. giuliorossetti. net/about/ wp-content/ plugins..../download.pdp. [Accessed 18 November, 2012]

Park, Namsu and Lee, HyunJoo (2014) Gender difference in social networking on smartphones: a case study of Korean college students smartphone user'. International Telecommunications Policy Review, Vol. 21, No. 2 June pp. 1 – 18.

Paten, Leysia, Salzman, Marilyn and Young, Ed (2000) Going wireless: behaviour and practice of new mobile phone users. C.S.C.W. 00, December, 2-6

Pattakos, Alex, (2015) Meaning of friendship in a social networked world. http://patimes.org/the-meaning-of-friendship-in-a-social-networked-world/ [Accessed 21 March, 2015]

Pattin, Tony (2013) Smartphones: how do they make you feel? CHI'13 April 27- May 2, Paris, France

Pedersen, Per E, Nysveen, Herbjorn and Thorbjornsen, Helge (Online) Adoption of mobile, model development and cross-service study. http;//Static. googlusercontent.com/ external-content/untrusted- icp/research.googlecontent/en/pubs./archive/33289.pdf. [Accessed 03 November 2010]

Pedrozo, Sueila (2013) New media use in Brazil: digital inclusion or digital divide? Online Journal of Communication and Mobile Technologies Vol. 3 Issue 1

Peia, Marie (2010) Integrating the old with the new: understanding the social construction of cell phone technology. http://repository.upenn.edu/uhf-2010/15 [Accessed 18 August 2013]

Pempek, Tiffany A, Yevdokiya, A et al, (2009) College students' social networking experiences on facebook. Journal of Applied Developmental Psychology 30 pp. 227-238

Pereira, L (2011) The communication systems integrating social network ties seer. perspectivasonline.com.br Vol.1 numero 2

Perone, Jennifer and Tucker, Lisa (2003) An exploration of triangulation of methodologies: quantitative and qualitative methodology fusion in an investigation of perceptions of transit safety. www.nctr.usf.edu\pdf\416-081-082.pdf. [Accessed 28July 2013]

Perry, Samantha, (2015) Bridging Africa's digital divide. http://www. africantrader.co/index. php/business-news/infrastructure/bridging-africas- digital-divide [Accessed 23 June, 2015]

Pesluk, Alan, Shannon, Li-Jen and Quinnipiac, Wendy Ceccucci (2011) An empirical study of cell phone and smartphone usage. Issues in Information Systems, Vol.XII, No. 1, pp.407-417

Peter, Meghan, (2012) Why the future of social is in the palm of your hand http://mashable.com/2012/05/05/future-social-mobile/ [Accessed 14 April, 2015]

Pettigrew, Jonathan, (2009) Text messaging and connectedness within close interpersonal relationships. Marriage and Family Review, 45, pp. 697-716

Pettijohn, T. F.H., LaPiene, K. E et al, (2012) Relationships between facebook intensity, friendship contingent self-esteem and personality in U.S. college students. Journal of Psychological Research on Cyberspace, 6 (1) article 1

Petroczi, Andrea and Nepusz, Tamas and Bazso, Fulop (2007) Measuring tie-strength in virtual social networks. http://www.insna.org/Connection-Web/Volime27-2--/5/Petroczi.pdf. [Accessed 19 November, 2012].

Pew Internet and American Life Project, (2006) The strength of internet ties. Pew Internet and American Life Project, January, 25

Pew Research Center, (2010) Social media and mobile internet use among teens and young adults. http://pewinternet.org/report/2010/Social-Media-and-Young-Adults.aspx

Pew Internet and American Life Project Report (2010) Teens and mobile phones. http://pewinternet.org/Report/2010/Teens-mobile-phones.aspx

Pew Research Center, (2011) College students and technology http://www. pewinternet.org/ 2011/07/ 19/college-students-and-technology/ [Accessed 23 March, 2015]

Pew Internet and American Life Project (2011) Social networking sites and our lives. http://pewinternet.org/Reports/2011/Technology-and-social networks.aspx

Pew Internet and American Life Project (November 2011) Why American use social media pewinternet.org

Pew Internet and American Life Project, (2012) Digital differences. http://pewinternet.org/ Reports/2012/Digital-differences.aspx

Pew Internet and American Life Report (2013) Smartphones ownerships-2013. http://www. pewinternet. org/2013/06/05/smartphone-ownership-2013/

Pew Internet and American Life Report (2015) U.S. smartphone use in 2015. www.pewinternet.org/ 2015/04/01/us-smartphone-use-in-2015 [Accessed 18 April, 2015]

Pew Research Center, (April 2015) Cell phones in Africa: communication in lifeline www.pewresearch.org [Accessed 28 June, 2015]

Pezzolla, Daniel (2013) Exploring the role of social media on social behaviour www.nedsi. org/proc/ 2013/proc/p1211130003.pdf [Accessed September, 2014]

Phulari, S. S, Khamitkar, S. D. and co-researchers (2010) Understanding formulation of social capital in online social network sites (SNS). International Journal of Computer Science Issues, Vol. 7, Issue 1, No. 3, January

Phrasisombath, Ketkesone (2009) Sample size and sampling methods http//www. gfmer.ch/ Activites- internationales- FrLaos/PDF/ Sample-size-methods- Phrasisombath-Laos-2009.pdf [Accessed 12 Febrary, 2016]

Picardo, Jose, (2012) Why students need a global awareness and understanding of other cultures. http://www.theguardian.com/teacher-network/2012/sep/25/students-global-awareness-other-cultures [Accessed 17 May, 2015].

Poggenpoel, M. (1998) Data analysis in qualitative research in (eds.) Research at grass roots: a primer for the caring professions. J. L. Van Schaik, Academic.

Poland, Ashley (2014) Uses of smartphone applications science.opposingviews.com\uses-smartpohes-applications.13119.html [Accessed 16 April, 2014]

Pon, Bryan, Timo and Kenny, Martin, (2014) One ring to unite them all: convergence, the smartphone and the cloud. hcd.ucdavis.edu/facility/webpages/Kenny/articles/files/One Ring to Unite Them All.pdf [Accessed 112 March, 2015]

Pramis, Joshua (2013) Number of mobile phones to exceed World population by 2014. www.digitaltrends.com>Mobile [Accessed 27 September 2013]

Prensky, Marc, (2001) Digital natives, digital immigrants. On the Horizon (MCB University Press, Vol. 9 No. 5 October

PrincetonOne, (2014) Understanding Generation Y: what you need to know about the Millennials. www.PrincetonOne.com [Accessed 15 November, 2014]

Priest, Susanna Horning (1996) Doing Media Research: An Introduction. London, Sage Publications

Provencher, Kaitlin and Moniz, Kimberly, (2013) Social media overview. http://webcomm.tufts.edu/social-media-overview13/ [Accessed 21 March, 2015]

Punch, Keith F (2005) Introduction to Social Research: Quantitative and Qualitative Approaches, Second Edition. London: Sage Publications

Puro, Jukka-Pekka, (2004) The communicative and social aspect of mobile phone in (eds) Katz, James and Aakhus, Perpectual contact, mobile communication, private talk and public Performance Cambridge University Press

Purwandari, Betty, Hall, Wendy and De Roure, David (2010) The impact of the mobile web in developing countries. Web Science Conference, April 26-27 Raleigh, NC, USA

Q1: 2010 Nigerian Communications Acts, 2003. A Publication of the Federal Government of Nigeria. Quarterly Summary of Telecomm Subscribers in Nigeria: Jan.10 – March, 2011. Published by Nigerian Communications Commission, NCC. http://www. ncc.gov.ng. [Accessed 16 July 2011]

Quan-Haase, Anabel, (2008) Instant messaging on campus: use and integration in University students' everyday communication. The Information Society, 24, 2, pp. 105-115

Quan-Hasse, Anabel and Young, Alyson, L (2014) The uses and gratifications (U&G) approach as a lens for studying social media practice. www.academia.edu/.../ The_Uses_and_Gratifications_U_and_G_Approach. [Accessed 16 September, 2014]

Quinn, Stephen and Bethell, Deaken, (20060 Connected but not online: a snapshot of Generation Y in Australia. Asia Pacific Relations Journal , Vol. 6, No. 1

Rafael, Vicente (2006) 'The cell phone and the crowd'In (eds) Hui, W endy Kyong Chun and Keenan, Thomas, New Media and old media: A history and Theory reader pp. 297-313. London: Roulegde

Rafaeli, Sheizaf and Ariel, Yaron, 2014 Assessing interactivity in computer-mediated Research. http://gsb.haifa.ac.il/~sheizaf/Interactivity_Rafaeli&Ariel.pdf [Accessed 21 December, 2014]

Rafaeli, Sheizaf and Sudweeks, Fay (2006) Networked interactivity. Journal of Computer-Mediated Communication, Vol. 2, Issue 4

Rahman, Naseem, (2014) The usage and online behaviour of social networking sites among international students in New Zealand. The Journal of Social Media in Society 3 (2) Fall

Raman, Salma and Azhar, Sarwar (2011) Xpressions of generation Y: perceptions of the mobile phone service industry in Pakistan. Asia Pacific Journal of Marketing and Logistics, Vol. 23 No. 1, pp. 91-107

Rambe, Patient (2013) Converged social media: identity management and engagement on facebook mobile and blogs. Australasian Journal of Educational Technology, No. 29 (3)

Ransford, Marc (2012) Smartphones use by collegians dramatically increases as mobile internet use soars. file://C/Users/Uyi ODIA/Documents/Smartphones use by college students.[Accessed 17 April, 2014]

Rasmusson, Jim, Dahigren, Fredrik et al, (2004) Multimedia in mobile phones- the ongoing revolution. Erisson Review No.2

Raskoff, Sally, (2009) Communication evolution, mobility, cell phones, and PDAs http://www. everydaysociologyblog.com/2008/09/ communication-e.html [Accessed March, 2016]

Raymond, Shane (2014) Smartphone hardly used for calls. http://www.telegraph. co.uk /technology/ mobile-phones/ 9365085/ Smartphones-hardly-used -for-calls. html. [Accessed 8 September, 2014]

Razzaghian, Mariya (2013) Triangulation in Social Sciences Research. http://opendoorspk. blogspot.com/2013/02/ triangulation-in-social- sciences....[Accessed 12 September, 2013]

Rezha, Azir, Maksom, Zulisman and Naim, C.P, (2014) Tackling design issues on elderly smartphone interface design using activity entered design approach ARPN Journal of Engineering and Applied Sciences, Vol.9, No. 8 August

Richard, James (2009) The social consequences of smartphones and mobile data networks. Netgeek.me/Storage/..../Socia%20Consq%20Smartphones%20Paper.pdf [Accessed 16 April, 2014].

Richman, Shane (2014) Smartphones hardly used for calls. http://www.telegraph. co.uk/technology/ mobile-phones/9365085/Smartphones-hardly- used-for-calls.html [Accessed 21 Apri 2014]

Richter, Alexander and Koch, Michael (2008) Functions of social networking services. www.kooperationssysteme.de\......\coop08-richter\coc-functions-of-soci. [Accessed September 2013]

Riley, Patrick (2013) Social construction of technology. people. lischool. berkeley.edu_ patrick/Assign1-Riley-patrick.pdf. [Accessed 27 August 2013]

Ringrose, Jessica, Gill, Rosalined, Livingstone, Sonia and Harvey, Laura (2012) Qualitative study of children, young people and sexting. A Report Prepared for the NSPCC

Rippin, Hannah, (2005) The mobile phone in everyday life. Fast Capitalism 1.1.http://www.uta.edu/huma/agger/fastcapitalism/1-1/rippin.htm [Accessed 04 June 2011]

Robello, Jagdish, (2010) Global wireless subscriptions reach 5 billion. http://www.isuppl.com/ mobile-wireless-communications/news/pages/global [Accessed 24 June, 2011]

Roberts, Ken (2012) The leisure of young people in contemporary society. ARBOR, Vol. 188– 754marzo-abril

Roca, Arnau (2013) How smartphones changed our lives. http:\openthoughtsmarter. blogs.uoc.edu\ how-smartphones-changed-our-lives. [Accessed 16 April, 2014]

Rodriguez, Salvador, (2015) 1 in 5 millennials access the internet exclusively through mobile devices. http://www.ibtimes.com/1-5-millennials-access-internet-exclusively-through-mobile-devices1880194 [Accessed 10 May, 2015]

Roman, Anthony (2006) Texting God: SMS and religion in Philippines. http://www. freinademetzcenter.org/ pdf/Texting%20 God%20SMS%20and %20Religio n%20in% 20the%20 Philippines.pdf [Accessd 22 May, 2011]

Roman, Anthony (2015) God texting: Filipino youth response to religious SMS. www.freinademetzcenter. org/pdf/SMS&Religion.pdf [Accessed 25May, 2015]

Roos, J. (1993) 300 000Yuppies?, mobile telephones in Finland. Telecommunications Policy, August, pp. 446-458

Rosen, Christine, (2004) Our cell phones, ourselves. The New Atlantis, The Journal of Technology Society

Rosen, Rebecca (2012) 59% of Young People Say the Internet Shaping Who They Are. http://www. the atlantic.com/ technology/ archive/2012/06/59-of-young---[Accessed 13 September 2012]

Roslan, Saiful Baharin, (2011) The importance of internet to students. http://tripleidiots. blogspot. com/2011/04/ importance-of-internet-to-students [Accessed 2 May, 2015]

Roy, Tapas (2012) Mobile phone and youth subculture. Society Today Vol. No. 1 September

Sagiyama, Satomi, (2009) Fashion, the mobile phone and interpersonal communication: a study of symbolic meanings of the mobile phone amongst college students from different cultures. http:// miha2.ef.uni-Ij.si/cost 298/gbc2009- proceedings/ paper/Po77.pdf: [Accessed 01 June, 2011]

Sabatini, Fabio and Sarracino, Francesco, (2014) Will facebook save or destroy social capital? An investigation into the effect of online interaction on trust and networks. GESIS Working Paper, 2014/30

Safiollah, Saface, Alimohammed, Javadi and Maryam, Javadi (2009) Effect of internet on social capital. World Academy of Sciences, Engineering and Technology 36

Sahota, Dawinderpal (2014) Africa gets smart: continent prepares for device revolution. http://www.teecoms.com/209421/africa-gets-smart-continent-prepares-for-device-revolution [Accessed 14 July, 2014]

Sajithra, K and Patil, Rajindra, (2013) Social media – history and components. IOSR: Journal of Business and Management, Vol. 7 Issue 1 Jan-Feb, pp. 69-74

Samii, Roxanna (2009) Mobile phones: the silver bullet to bridge the digital divide? Participatory Learning and Action 59. pubs.iied.org/pdfs/G02838.pdf [Accessed 15May, 2015]

Sandberg, Sheryl, (2015) Gender and social networking. http://www.wikigender. org/index.php/Gender_and_Social_Networking [Accessed 10 February, 2015]

Santo, Matikas (2012) More Filipinos now using internet for news, information-study. INQUIRER.net, Tuesday January 31st.

Sarwar, Mohammad and Soomro, Tariq Rahim (2013) Impact of Smartphones's on Society. European Journal of Scientific Research, Vol.98, No.2 March, pp.216-226

Sawyer, Rebecca, (2011) The impact of new social media on intercultural adaptation. Senior Project Honours 242. digitalcommons.uri.edu/cgi/ viewcontent.cgi? article=1230& context.[Accessed 15 April, 2015]

Scarpino, John J and Morris, Robert (2013) The impact of social networks on Saudi residents living in the United States. Issues in Information Systems, Vol. 14, Issues 1, pp.72-81

Schaefer-McDaniel, Nicole J (2004) Conceptualizing social capital among young people: towards a new theory. Children, Youth and Environments, Vol.14, No. 1

Schiazza, Daniela Marie (2013) A case study of a mixed methods study engaged in integrated data analysis. PhD Thesis Submitted to the Faculty of Graduate School, Loyola University, Chicago. USA

Schmidt, Jan, (2006) Social software: facilitating information, identity and relationship management. In Burg< Thomas, N, (ed) Schmidt, Jan (ed) Blog Talks reloaded: Social Software –Research-Cases. Norderstedt: Book on Demand

Science Daily, (2007) Is social networking changing the face of friendship? www.sciencedaily. com/ releases/2007/09/070912161147.htm [Accessed 21 March, 2015]

Scifo, Barbara (Online) The domestication of camera phone and MMS communication: The experience of young Italians. http;//www..socialscience.t. mobile.hu/passenger.eng. scifo.pdf. [Accessed 03 October 2010]

Sciandra, Andrea (2011) Social capital and social network sites: an empirical analysis of European high school students. Italian Journal of Sociology of Education 3

Seller, Ron (1998) Qualitative versu quantitative research – choosing the right approach. The NonProft Times Marc 15

Sgambato, Erika (2011) Facebook usage and social capital among college students. Proceedings of the National Conference on Undergraduate Research (NCUR) March 31-April 2

Shah, Sonali K and Corley, Kevin G (2006) Building better theory by bridging quantitative-qualitative divide. Journal of Management Studies 43:8, December

Shalon, (2013) What is social media and how is it changing our lives? http://www.learning2grow.org/2013/05/12/what-is-social-media-and-how-is-it-is-it-changing-our-lives/ [Accessed 11th September, 2014]

Shambare, Richard, Rugimbana, Robert and Sithole, Nkosinathi (2012) Social networking habits among students. African Journal of Buisness Management Vol.6 (2) January 18, pp. 578-786

Shankar (2011) Social networking sites: a critical analysis of its impact on personal and social life. International Journal of Business and Social Sciences Vol. 2 No. 4

Sharma, Smita (2012) Mobile social networking: opportunities and challenges. www.its2012india.com/topics/ServiceAdoptionSocialNetworking/MobileSocialNetworking OpportunitiesChallenges.pdf. [Accessed 20 November 2012]

Shen, Karly Ning and Khalifa, Mohammed, (2011) Facebook usage among Arabic college students: preliminary findings on gender differences. International Journal of e-Business Management, Vol. 4, No. 1 pp. 53-65

Siisijinen, Martti, (2000) Two concepts of social capital: Bourdieu vs Putnam. Paper presented at ISTR Fourth International Conference "The Third Sector for What and for Whom" Trinity College, Dublin, Ireland Jul 5-8

Silverstone, Roger (1999) What's new about new media? London: Sage Publications

Silverstone, Roger and Haddon, Leslie (1994) "Design and the domestication of information communication technologies: Technical change and Everyday life" in (eds) Mansell, Sooryamoorthy, Radhannny, Miller, Paige B and Shrum, Wesley, (2008) Untangling the technology cluster: mobile telephony, internet use and the location o social ties. New Media and Society, Vol. 10 (5), pp. 729-749

Singh, Supriya, Bartolo, Cassar Kylie and Satchell (2004) Grounded theory and user requirements: a challenge for qualitative research. Proceedings of QualIT 2004: International Conference on Qualitative Research in IT & IT in Qualitative Research, 24 – 26 November, Brisbone, Australia

Small, Mario Luis, (2011) How to conduct a mixed methods study: recent trends in a rapidly growing literature The Annual Review of Sociology, April 15

Smith, Gary, (2013) The reality of mobile usage and social media growth in South Africa. http://imagi-nation.co.za/reality-mobile-usage-social-media-growth-south-africa/ [Accessed 22January, 2015]

Soiferman, Karen L, (April 2010) Compare and contrast Inductive and deductive research approaches; University of Manitoba, USA

Spallazzo, Davide (2012) Sociality and meaning making in cultural heritage field: designing the mobile experience. Ph.D Dissertation Submitted to the Politecnico INDACO, Doctoral Programme in Design

Spence, Ewan, (2014) Mobile Media Is Not Killing The Desktop, But The Older Media Platforms Must Evolve To Stay Relevant http://www. forbes.com/sites/ ewanspence/ 2014/08/22/mobile- media- is-not-killing- the-desktop-but-the-older-media-platforms-must-evolve-to-stay- relevant/#5bab56d2e8ed [Accessed 23 March, 2016]

Spiteri, Christine (2013) Cultural identity construction through smartphone use. Masters Thesis Presented to the Faculty of Arts and Social Sciences, Maastricht University

Sponcil, Megan and Gitimu, Priscilla, (2014) Use of social media by college students: relationships to communication and self-concept. Journal of Technology Research

Srivastava, Mandira, (2012) Smartphones are the future of social networking. http://us.gmocloud.com/blog/2012/09/21/global-smartphone-mania-smartphones-are-the-future-of-social-networking/ [Accessed April, 2015]

Stald, Gitte, (2008) 'Mobile identity: youth, identity, and mobile communication media' in youth, identity and digital media (edited) David Buckingham, The John D and Catherine MacArther Foundation Series on Digital Media in Learning. Cambridge MA: The MITPress

Starkweather, Wendy and Stowers, Eva (2009) Smartphones: a potential discovery tool. Information Technology and Libraries 1 December. napoleon.bc.edu/ojs/ index/php/ital/article/download/3231/2844. [Accessed 16 November, 2013]

Steinfield, Charles, Ellison, Nicole B and Lampe, Cliff (2008) Social capital, self esteem, and use of online social network sites: a longitudinal analysis. Journal of Applied Developmental Psychology 29 pp. 434-445

Steinfield, Charles, DiMicco, Joan M, Ellison, Niccole B and Lampe, Cliff (2009) Bowling online: social networking and social capital within organization. C&T09, June 25 –27, University Park, Pennsylvania, USA

Steinfield, Charles, Ellison, Nicole and colleagues (2013) Online social networks sites and the concept of social capital. http://www.msu.edu/....Steinfield-Internet40.pdf. [Accessed 23 September 2013]

Steve, (2014) Social media statistics: how college students are using social networking. http://studybreakscollegemedia.com/2014/social-media-statistics-how-college-student-are-using-social-networking/ [Assessed 14 April, 2015]

Stollack, Mathew, Vanderberg, Amy, Burklund, Andie and Weiss, Stephanie (2011) Getting social: the impact of social networking usage on grade among college students. Proceedings of ASBBS, Vol. 18 No.1, February)

StudentPoll, (2014) Social networking sites and college –bound students. StudentPoll, Vol. 7 Issue 2

Stutzman, Fred, Vitak, Jessica and colleagues (2012) Privacy in interaction: exploring discourse and social capital in facebook

Sukamolson, Suphat (2013) Fundamentals of quantitative research. www.culi.chula.ac.th\e. journal\bod\suphat%20sukamolson.pdf. [Accessed 26 August, 2013]

Sutter, John O (2012) How smartphones make us superhuman. http://edition.cnn/2012/09/ 10/tech/mobile/our-mobile-society-intro-oms/ [Accessed 12 December, 2013]

Swallow David, Blythe, Mark and Wright, Peter, (2014) Grounding experience: relating theory and method to evaluate the user experience of smartphones. www.users.cs.york.ac.uk/--dswallow/documents/eace05-paper/pdf. [Accessed 12 August, 2014]

Swatman, Paula, (2014) Ethical issues in social networking research. https://www. deakin.edu.au/.../research/research.../Swatman%20Ethics%2 [Accessed 15 November, 2014]

Swigger, Nathaniel (2013) For young, the more involved in social media you are, the privacy matters. LSE American Politics and Policy (USAPP) Blog [24 Sep 2013] Blog Entry

Syed, Firdous S and Nurrllah, Abu Sadat, (2011) Use o mobile phones and the social lives of Urban adolescents: a review of literature. TRIM 7 (1) Jan-June

Symonds, Jenny E and Gorard, Stephen, (2008) The death of mixed methods: research labels and their casualties

The British Educational Research Association, Annual Conference, Harriot Watt University, Edinburgh, September 3-6

Taiwo, Rotimi, (2010) ''The thumb tribe'' creativity and social change through SMS in Nigeria. California Linguistic Notes, Vol. XXXV, No. 1, Winter

Taliaferro, Alisa and Flood, Chena (2014) Building and leveraging a Principal's social capital for students' achievement. International Journal of Academic Research in Business and Social Sciences. Vol. 4, No. 4, March

Tam News, (2011) EDITORIAL: The impact of smartphones on student life. http://the tamnews.org/ 2011/09/ editorial-the-impact-of- smartphones-on-student-life. [Accessed 16 November, 2013]

Tayadyan, Olesja (Undated) Relationship between Use of Social Networking Sites and Social provisions and their influence on Subjective well-being. http://arno.uvt.nl/ show.cgi?fid=122205 [Accessed 12 August, 2014]

Tefferet, Sigal and Vilnai-Yavetz, (2014) Gender differences in facebook self presentation: an international randomised study. Computers in Human Behaviour 35 pp. 388-399.

Tham, Jason (2011) The usage and implications of social networking sites: a survey of college students. Journal of International, Intercultural and Mass Communication, Vol. 2, Issue 1

Thanasegaren, Ganesh (2013) Reliability and validity issues in research. econ.upm.edu.my\ researchbulletin\ artkel\....\35-40%20Ganesh.pdf. [Accessed 32 July 2013]

Thaxton, Cirrelia, (2014) Some educational benefits of smartphones. https://www. linkedin. com/pulse/ 20140624164729-61183726-some- educational- benefits-of-smartphones [Accessed 4 May, 2015]

The rise of social networking. www.itu.int/net/itunews/issues/2010/06/35/aspx [Accessed 12 September, 2014]

Thomas, David, (2006) A general inductive approach for analysing qualitative evaluation dats America Journal of Evaluation, Vol.27, No.2 June, pp. 237-246

Thomas, Joe (2007) Social networking sites' effect on relations among college students. http://voices.yahoo.com/social-networking-sites-effect-relationships.   [Accessed August 19, 2013]

Thompson, Damian, (2012) The new global addiction: smartphones. http://www.telegraph. co.uk/technology/9334058/ The-new-global-addiction- smartphones.html [Accessed 2 May, 2015],

Tode, Chantal, (2013) Women's strong emotional connection to smartphones requires unique. http://www.mobilemarketer.com/cms/news/research/16501.html [Accessed 15 March, 2015]

Tolonen, Tarja (2013) Social and cultural capital meets youth research: a critical approach. Blogs. helsinki.fi/ talone/ Files.2008.04/tolonene.07 Capitalbook.pdf. [Accessed 26 September, 2013]

Tong, Stephenie Tom, Heide, Brandon and colleagues (2008) 'Too much of a good thing' the relationships between number of friends and impressions on facebook. Journal of Computer Mediated Communication, Vol. 13, Issue 3

Thompson, Lee and Cupples, Julie (2008) Seen and not heard? Texting messaging and digital sociality. Social and Cultural Geography, Vol.9, No. 1, February

Tran, Thinh Duc, (2012) The social influence of smartphone usage: a qualitative research on a segment of Copenhagen citizens

Thesis Submitted at IT University of Copenhagen, Digital Design and Communication, December

Trepte, Sabine and Reinecke, Leonard (2012) The reprocical effects of social network site use and the disposition for self-disclosure: a longititudinal study. Computers in Human Behaviour xxx http://dix.doi.org/10.1016/j.chb.2012.10.002 [Accessed August 19, 2013]

Tucker, Tiana, (2011) What influences young adults decision to adopt new technology The Eton Journal of Undergraduate Research in Communication, Vol. 2, No.2, Fall

Tufekci, Zeynep, (2010) Who acquires friends through social media and why? "rich get richer" versus "seek and ye shall find". Proceesdings of the Fourth International AAA1 Conference on Weblogs and Social Media

Tufekci, Zeynep (2012) Cyberasociality and the online sociality divide: third level digital divide?   Technosociology.org/wp-content/uploads/2012/04/CyberSocial.Zeynep-2011.pdf. [Accessed 2 August, 2014]

Tufekci, Zeynep, (2012) Social media's small, positive role in human relationships. http://www.theatlantic.com/technology/archive/2012/04/social-medias-small-positive- role-in-human-relationships/256346 [Accessed 15 Septemmber, 2014]

Tuli, Fekede (2010) The basis of distinction between qualitative and quantitative research in social science: reflection on ontological, epistemological and methodological perspectives. Ethiope. J Educ. & Sc. Vol. 6 No. 1 September

Tunmibi, S, Aregbesola, A and Anni, E (2015) Factors influencing the adoption of smartphones by University students- a cross-border approach. African Journal of Computing & ICT, Vol. 8 No. 1 March

Tyler, Tom R (2002) Is the internet changing social life? It seems the more things change, the more they stay the same. Journal of Social Issues, Vol. No 1, pp. 193-2

Tzanakis, Michael, (2013) Social capital in Bourdieu's, Coleman's and Putnam's theory: empirical evidence and emergent measurement issues. Educate Vo. 13, No. 2, pp. 2-23

Umezuruike, Chiecherem, Oludele, Awodele, Kuyoro, S.O. and Izang, Aaron, (2015) Broadband internet penetration in Nigeria: a review. International Journal of Research Studies in Computer Science and Engineering, Vol 2, Issue January pp.1-7

Uzor, Ben (2012) Etisalat target dominance in Nigerian telecoms market. http://businessday online.com/ NG/index/php/news/76-hot-tpoic/41032- [Accessed 5 October 2013]

Vaidya, Sunil K (2013) 65% mobile users in Oman move to smartphones. http://gulfnews.com/   business/telecoms/65-mobile-users-in-oman-move-to-smartphone2386 [Accessed 12 September, 2014]

Valentine, Scott (2013) Always connected: how smartphones and social keep us engaged. An IDL Research Report, Spnsored by Facebook. www.slideshare.net/..../always-connected-how-smartphones-owners-stay-e..[Accessed 12 January 2014]

Van Deursen Alexander and Van Dijik Jan A.G.M. (April, 2015) New Media and the Digital Divide
International Encyclopedia of the Social & Behavioral Sciences, Edition: 2,
Publisher: Elsevier, Editors: James Wright, pp.787–792

Villines, Zawn, (2012) How social networking changes friendships. http://www.goodtherapy. org/blog/how-social-networking-changes-friendship- 1123127 [Accessed 21 March, 2015]

Viner, Steve, (2014) Social media statistics: how college students are using social networking. http://studybreakscollegemedia.com/2014/social-media-statistics-how-college-student-are-using-social-networking/ [Assessed 14 April, 2015]

Visser, Penny, Kronick, Join and Lavarakas, (2014) Survey research. http://web.stanford.edu/ dept/communication/faculty/krosnick/Survey_Research.pdf Accessed 12 March, 2014]

Vipeesh, P. and Shajan, P.X (2011) The usage of social networking sites among students: a survey in the state of Kerala (India) to measure the influence of social networking sites in present mode of living. Journal of Computer Science and Applications, Vol.3. No. 1, pp. 17-21

Vitak, Jessica, Ellison, Nicole B and Steinfield, Charles (2011) The ties that bind: re-examining the relationship between facebook use and bonding social capital . Proceedings of the 44th Hawaii International Conference on Systems Sciences

Vivian, Nathan and Sudweeks, Fay (2003) Social networks in transnational and virtual communities. Informing Science InSite-"Where Parallels Intersect" June

Volkovich, Yana, Scellato, Salvatore and co-researchers, (2012) The length of bridge ties: structural and Geographic properties of online social interactions. Association for the Advancement of Artificial Intelligence (www.aaai.org)

Volkovich, D and co-researchers, (2014) Gender patterns in a large online social network. http://www.dtic.upf.edu/~akalten/volkovich_etalSocInfo2014.pdf [Accessed 14 June, 2014]

Waddi, Davis, (2014) South Africa, Egypt and Nigeria have fastest smartphones user growth. http://www.channelpostmea.com/2014/12/31/south-africa-egypt-and-nigeria-have-fastest- smartphones-user-growt/ [Accessed 27 June, 2015]

Waern, Yvonne (2001) Ethics in global internet research. www.cddc.vt.ed/aoir/ethics/public/ YWaern- globalirethics. pdf.[Accessed 11 September, 2013]

Walker, J. D and Jorn, Linda (2009) 21st century students: technology survey. University of Minnesota Twin Cities, Office of Information Technology

Walter, UYS. Anddilah, MJA, Jansen, Jeffrey Gary et al, (2012) Smartphones application usage amongst students at a South African University. JJMC International Information Management Corporation (Eds) www.IST-Africa.org/Conference 2011

Walsh, Shari, White, Katherine M and Young, Ross M, (2008) Over-connected: qualitative exploration of the relationships between Autralian youth and the mobile phone. Journal of Adolescence, 31 pp. 77-92

Walther, Joseph (2013) Research ethics in internet-enabled research: human subjects issues and methodological myopia. http://www.nyu.edu/projects/nissenbaum/ethics-wal-full.html. [Accessed 06 September, 2013]

Wang, Qingya, Chen, Wei and Liang, Yu (2011) The effects of social media on college students. http://scholarsarchive.jwu.edu/mba_student/5/ [Accessed 23 September, 2014]

Weber, Mathew (2014) How to use social media on smartphone. http://www. mailinmobile.com/blog/use-social-media-smartphone/ [Accessed 12 September, 2014]

Wee-Kek, Tan and Hock-Hai, Teo (2009) Blogging to express self and social identities, any one? 17th European Conference on Information Systems

Wellman, Berry, (2001) Physical place and cyberspace: the rise of persoanlised networking. International Journal of Urban and Regional Research, Vol. 25 2 June

Wei, Ran (2013) Mobile media: coming of age with a big splash: Broader Issues of Mobile Communication Studies 1 (1) PP.50-56

West, Anne, Lewis, Jane and Currie, Peter, (2009) Students' facebook 'friend': public and private spheres. Journal of Youth Studies Vol. 12, No. 6 December pp. 615-627

Westlund, Oscar, (2008) From mobile phones to mobile device: news consumption on the go. Canadian Journal of Communication, Vol. 33 pp. 443-463

Westlund, Oscar (2009) Perceptions for the mobile device as a news medium from cross-cultural perspective. 'Mobile 2.0: Beyound Voice' Pre-conference Workshop at the International Communication Association (ICA), Chicago, Illinois 20-21, May

Whitbourne, Krauss, Susan (2011) Your smartphone may be making you... not smart. http://www.psychologytoday.com/blog/fulfullment-any-age/201110/your-smartphone-may-be [Accessed 8 August, 2014]

Whiteman, Natasha (2010) Control and contingency: maintaining ethical stances in research. IJIRE: International Journal of Internet Research Ethics, Vol. 3 (12)

Whitting, Anita, (2013) Why people use social media: a uses and gratifications approach. Qualitative Market Research: An International Jouranl, Vol.16. No.6. pp. 382-369

Wiese, M, Pantaziz, G and Samuels, J, (2014) Social networking experiences on facebook: a survey of gender differences amongst students. Acto Commercili, 14 (1)

Wild, Johannes, Cant, Michael and Neil, Corrine (2014) Perceptions and use of social media South African students International Business and Economic Research Journal, July/August, Vol.13, November 4

Williams, Amy, (2014) 8 reasons why I should have a smartphone (the tween perspective). http://www.teensafe.com/blog/smartphones/8-reasons-smartphone-tween-perspective [Accessed 14 June, 2014]

Williams, Dmitri (2006) On and off the net: scales for social capital in an online era. Journal of Computer-Mediated Communication, 11 (2) Article 11. http://jcmc.indiana.edu/vol/11/issue2/ williams.html [Accessed March 4, 2013]

Wimmer, Roger D and Dominick, Joesph R (2000) Mass media research: an introduction (Sixth Edition). London: Wadsworth Publishing Company

Wineman, Lee (2013) What draws us to facebook. American Psychology Association, Vol.44, No.3 March.

Winner, Michelle (2013) Social media, the social mind and social thinking. https://www.socialthinking.com/what-is-social-thinking/michelles-blog/703-social-media-the-social-mind-and-social-thinking [Accessed 7 September, 2014]

Wojtas-Jakubowska, Anita (2014) Generation Y in social media. http://emplo.com/en/blog/generation-y-in-social-media/#.VG8IiGfxo2w [Accessed 15 November, 2014]

Wolff, Brent, Knodell, John and Sittitral, Werasit (2013) Focus groups and surveys as complementary research methods: a case as example. www.personal.psu. edu\faculty \f\k\fkw \rsoc597\Wolff.pdf. [Accessed 27 August 2013

Wong, Winter K.W, (2012) Faces on facebook: a study of self presentation and social support on facebook. Discovey-SS Student E-Journal Vol. 1, pp. 184-21

Woolley, Sarah, (2013) Constantly connected: the impact of social media and the advancement in technology on the study of abroad experience. The Elon Journal of Undergraduate Research in Communications, Vol. 4, No. 2, Fall

Xia, Yan, (2012) Chinese use of mobile texting for social interactions: cultural implications in the use of communication technology International Communication Studies, XXI 2

Xie, Wenjing (2014) Social network site use, mobile personal talk and social capital among teenagers Computers in Human Behaviour 41 (2014) 228–235

Xiung, Chong Jinn, (2013) Smartphones penetration hits 63% in Malaysia. http://www.thestar.com.my/tech/tech-news/2013/09/12/smartphone-and-tablet-penetration-hits-63-percent/ [Accessed 10 September, 2014]

Xu, Qiang, Erman, Jeffrey et al (2011) Identify diverse usage behavior of smartphone apps. IMC 11, November 2---4 Berlin, Germany

Yang, Young, (2011) Your students love social media and so can you. http://www.tolerance.org/magazine/number-39-spring-2011/feature/your-students-love-social-media-and-so-can-you [Accessed 21 September, 2014]

Yartey, Franklin N. A and Ha, Louisa, (2013) Like, share, recommend: smartphones as a self-broadcast and self-promotion medium of college International Journal of Technology and Human Interaction, 9 (40) October-December, pp. 20- 40

Yates, Kirby and Lockley, (2015) Digital media use: differences and inequalities in relation to class and age. https://www.researchgate.net/ publication/ 285384908_Digital _Media_Use_Differences_and_Inequalities_in_Relation_to_Class_and_Age

Yeasmin, Sabina and Rahman, Khan F. (2012) Triangulation research method as the tool of social science research. BUP Journal, Vol. 1, Issue 1, September, pp. 154-163

Yin, Robert K (2009) Case study research, design and methods. Zeitschrift Fur Personalforschung, 26 (1), pp. 93-101. www.hampp.ejournals.de\hampp- vering. services\ get?file=\frei\......\ [Accessed 13 September 2013]

Young, Kirsty, (2011) Social ties, social networks and the facebook experience. International Journal of Emerging Technologies and Society, Vol. 9, No. 1, pp. 20-34

Yu, Jian, Furmaan, Chris et al (3013) New media channels: complements or supplements? evidence from mobile phone usage. www.innvisops.com/papers/cisi2013*submission-3.pdf [Accessed 13 September, 2014]

Yuan, Elaine, (2012) From perpetual contact to contextualized mobility: mobile phones for social relations in Chinese society. www.researchgate.net/...Mobile_ Phone...Society... Mobility_Mobile_Pho. [Accessed *15* March, 2015]

Zayd, (2013) Smartphones and their affects on society. http:/mmcasd.blogspot.com /2013/04/smartphones-and-their-affects-on-society.html. [Accessed 24 April, 2014]

Zhang, Sahun, Anderson, Steven G and Zhan, Min (2014) The differentiated impact of bridging and bonding social capital on economic well-being: an individual level perspective. http://www.wmich.edu/hhs/newletters journals/jssw institutional subscribers/38.1 ZhangPdf. [Accessed 21 September, 2014]

Zhang, Yan and Wildenmuth, Barbara M, (2012) Qualitativ analysis of content https://www. ischool. utexas.edu/~yanz/Content_analysis.pdf [Accessed 12 January, 2016]

Zhao, Shanyang, Grasmuck, Sherri and Martin, Jason (2008) Identity construction on facebook: digital empowerment in anchored relationships. Computers in Human Behaviour 24 pp. 1816-1836

Zhao, Xuan, Salehi, Niloufar et al, (2013) The many faces of facebook: experiencing social media as performance, exhibition, and personal archive CHI 2013: Changing Perspectives, Paris, France

Zohrai, Mohammed (2013) Mixed method research: instruments, validity, reliability and reporting findings. Theory and Practices in Language Studies, Vol. 3, No. 2, pp. 254-262.