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PERCEPTIONS OF SOCIAL MEDIA AS A TOOL FOR RESEARCH:  
A STUDY OF POSTGRADUATE STUDENTS,  
UNIVERSITY OF FORT HARE, ALICE CAMPUS

BY

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## **ABSTRACT**

The study aimed at examining the perceptions of social media as a tool for research among postgraduate students at the University of Fort Hare, Alice campus. Data were collected using a quantitative research approach by administering structured questionnaires to 310 postgraduate students under the cluster sampling across different faculties and departments, and analysed by SPSS Statistical software and Chi-square test. 264 questionnaires were returned for analysis and these respondents maintained that they utilized social media platforms for their academic research. The findings further revealed that social media has to a large extent improved students' research activities as they frequently seek practical knowledge for demonstration and tutorship. Furthermore, the respondents regard social media as a "good" platform for research topics in audio and video formats, scholarly articles, journals and books. This study concluded that since students explore the social media platforms and search engines for various reasons, academic research inclusive, it therefore becomes imperative to create more links within the social media for students to explore books, scholarly journals and articles necessary for research and academic purposes.

**KEY WORDS: SOCIAL MEDIA, PERCEPTION, RESEARCH**

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## **ETHICAL STATEMENT BY RESEARCHER**

I, Ogunnubi Adeyemi Abolanle, hereby acknowledge that this research paper, except otherwise specified in the text, is my own work and has not been submitted at any other University.

.....  
Ogunnubi Adeyemi. A.

.....  
Date

## Table of Contents

ABSTRACT.....	i
ACKNOWLEDGEMENT.....	ii
ETHICAL STATEMENT BY RESEARCHER .....	iii
CHAPTER ONE .....	1
BACKGROUND TO THE STUDY .....	1
1.0 INTRODUCTION.....	1
1.1 STATEMENT OF THE PROBLEM .....	2
1.2 RESEARCH QUESTIONS.....	3
1.3 RESEARCH AIMS AND OBJECTIVES .....	3
1.4 RESEARCH CONTEXT .....	4
1.5 METHODOLOGY .....	4
1.6 ENVISAGED ETHICAL ISSUES .....	5
1.7 SIGNIFICANCE OF THE STUDY .....	5
CHAPTER TWO .....	8
LITERATURE REVIEW .....	8
2.0 INTRODUCTION.....	8
2.1 DEFINING COMMUNICATION AND ITS PROCESS .....	8
2.1.1 Scope of communication .....	9
2.1.2 Nature of communication.....	10
2.1.3 Communication as an art and a science .....	10
2.1.4 Communication as a social science.....	11
2.1.5 Communication as a human process.....	11
2.2 MODELS AND THEORIES IN THE COMMUNICATION PROCESS.....	12
2.3 THE TYPES OF COMMUNICATION .....	14
2.4 DEFINING ELECTRONIC OR COMPUTER MEDIATED COMMUNICATION (CMC).....	16
2.4.1 Connecting social media with electronic or computer mediated communication .....	20
2.4.2 Social media and its impact .....	21
2.5 RECENT TRENDS IN COMMUNICATION TECHNOLOGIES USAGE .....	27
2.5.1 Electronic or Computer mediated Communication in Education.....	28
2.6 WHAT SOCIAL MEDIA IS AND WHAT IT IS NOT .....	30
2.6.1 Relationship between reach and impact of social media .....	34
2.6.2 Different forms of social media and uses .....	35

2.6.3	Popularity of various types of social media in research .....	35
2.6.3.1	Characteristics of traditional and social media.....	36
2.6.3.2	Personal use of social media in higher faculty.....	37
2.6.3.3	The use of social media by faculty class.....	38
2.7	SOUTH AFRICAN SOCIAL MEDIA ADOPTION AND USAGE .....	39
2.7.1	Social media as tools in teaching and learning .....	40
2.7.2	Social media as a tool for research among higher educational institutions.....	41
2.7.3	Benefits of social media as a tool for research and scholarship.....	42
2.8	WHO USES SOCIAL MEDIA IN THEIR RESEARCH .....	43
2.8.1	Social media and the research life cycle .....	44
2.8.2	Perceived benefits and barriers to the use of social media.....	45
2.8.3	Barriers to the use of social media as a research tool .....	47
2.8.4	Drivers of social media usage.....	47
2.9	THEORETICAL FRAMEWORK .....	48
2.9.1	Uses and gratification .....	49
2.9.2	History of uses and gratification theory.....	49
	CHAPTER THREE .....	53
	METHODOLOGY .....	53
3.0	INTRODUCTION.....	53
3.1	METHODOLOGY .....	53
3.1.1	Quantitative research method.....	53
3.1.2	Choice of quantitative research method for my study .....	54
3.2	Research Method.....	55
3.2.2	Purposes of the survey.....	56
3.3	ETHICAL REQUIREMENTS.....	58
3.4	DATA COLLECTION .....	59
3.4.1	Measurement instrument.....	59
3.5	DATA ANALYSIS .....	59
3.5.1	Chi-square test .....	60
3.5.2	Evaluation of data assumptions for chi-square analysis.....	60
3.5.3	Reliability and validity (data quality).....	60
	CHAPTER FOUR .....	63
	RESULTS, DATA INTERPRETATION AND DISCUSSION.....	63

4.0	Introduction .....	63
4.1	Demographics of respondents.....	64
4.1.1	Ages of respondents who took part in the survey.....	65
4.1.2	Gender of respondents .....	66
4.1.3	Level of study of the respondents .....	67
4.2	Evaluation of respondents' age and ICT literacy level before coming to the University of Fort Hare 67	
4.2.1	Evaluation of respondents' ICT literacy by level of study before coming to the University of Fort Hare.....	69
4.2.2	Evaluation of respondents' ICT literacy level by faculty before coming to the University of Fort Hare .....	71
4.3	INFORMATION ON ACCESSIBILITY .....	73
4.3.1	Evaluation of respondents' access to computers, laptops and phones .....	73
4.3.2	Respondents' ratings of access to online materials for research .....	74
4.4	ACCESSING SOCIAL MEDIA AS TOOL FOR RESEARCH .....	75
4.4.1	Respondents' usage of social media as a research tool before coming to the University of Fort Hare. ....	75
4.4.2	Respondents' familiarity with social media .....	77
4.4.3	Respondents' frequent use of social media.....	77
4.4.4	Respondents' views on social media accessibility .....	77
4.4.5	Respondents' views on the mode of accessing the social media .....	78
4.4.6	Respondents' view on usage of Social media as research tool.....	79
4.4.7	Evaluating whether respondents ever thought of Social media as research tool.....	80
4.4.8	Departments' views on whether social media improved their research in any way .....	80
4.4.9	Respondents' views as to whether social media have improved their research in any way 82	
4.4.10	Respondents' usage of social media as a tutor or practical demonstration. ....	83
4.4.11	Respondents' consideration of social media as a platform for research .....	84
	CHAPTER FIVE .....	87
	Conclusion and Recommendations .....	87
5.0	Introduction .....	87
5.1	Postgraduate students' use of social media for research.....	87
5.2	Social media for enhancement of research and innovative skills.....	88
5.4	RECOMMENDATIONS OF THE STUDY .....	91
5.5	LIMITATIONS OF THE STUDY .....	91

REFERENCES.....	93
QUESTIONNAIRE .....	118



## **CHAPTER ONE**

### **BACKGROUND TO THE STUDY**

#### **1.0 INTRODUCTION**

The Mass Media (Print, film, television and radio) had for more than fifty years occupied the attention of its audience, conveying messages which have embedded meanings through a one-way delivery system with little chance for feedback. The audience then were attentive readers; listeners or spectators as the broadcast model of communication, then were from a few-to-many persons, maintaining its control or influence over cultural and subject formation (Silverstone, 1999: 14). Other technology such as transistor radios, cassettes for sound and video recording and playing, cable systems delivery of signals were later introduced.

Another stage, which brought about online forms of media delivery, is known as the Internet (videotext in addition to teletext) while the World Wide Web and other successive applications were introduced in the 1990s. The internet has emerged to circulate the reworked mass object, thereby producing and distributing it cheaply and widely (Silverstone, 1999:15; QuanHaase and Wellman, 2004: 113-125; Guillen and Suarez, 2005). Though social media emerged ten years ago, precisely 2003, and ever since it has been changing new phases with newer packages or branding. The advantage of the internet and social media exceeds the limits of the print and broadcast models, enabling many-to-many communication, simultaneous reception, modifying and re-circulating cultural objects; providing prompt global contact as well as placing the modern/ late modern subject into a networked machine (Silverstone, 1999: 14-15; Fine, 2006:1-3).

Kaplan and Haenlein (2010:60-61) state that the internet emerged as a "Bulletin Board system" in the 1970s for users to transfer, swap or exchange software, data, messages as well as news with one another. Kaplan and Haenlein (2010:60-61) and Fine (2006:1-3) are of the view that "social media is an evolution which dates back to the internet's roots". Kaplan and Haenlein (2010) and other scholars also define social media as a group of internet-based applications that build on ideological and technological foundations of web 2.0 and allowing the creation and user-generated

content (Kaplan and Haenlein, 2010:60-61, Newson, Houghton and Pattern, 2009:49).

In addition, Silverstone (1999:10) had earlier stated that new digital technologies emerged principally as new things to provide new powers so that people can be empowered technologically. Silverstone (1999) says technologies such as social media were generated as new consequences to affect, involve and to bend peoples' minds as political, economic and social human beings. Social media with its ever-increasing and undying popularity became the tool among its users based on its distinct characteristics of new media, namely digital convergence; many-to-many communication; interactivity and globalization amongst others (Silverstone, 1999:11; QuanHaase and Wellman, 2004; Guillen and Suarez, 2005; Fine, 2006:1-3).

Interestingly, social media is now being used for various activities like communication, research, politics, health, business and so on both in private and public sectors. Its use among the youths and especially students is huge. This study therefore becomes crucial because it seeks to evaluate the rising pattern of social media use, which is a form of new media amongst Postgraduate students of the University of Fort Hare as part of efforts to contribute to more knowledge on communication.

## **1.1 STATEMENT OF THE PROBLEM**

Social media have diversified the channels of communication, thereby dividing the audience and transforming it from a mass society into a segmented society (Castells, 1996; QuanHaase and Wellman, 2004; Guillen and Suarez, 2005) and this has now changed the context of communication by bringing convenience and facilitating a globalized reach of the audience (Rice, 1999: 24). The rapid adoption of social media platforms as the Internet and mobile phones have facilitated convergence, making possible multiple ways in which the University community can access the same content on research (Jenkins, 2004). These patterns of media use change significantly with its penetration into the daily lives of consumers, thereby affecting their social relations (Napoli, 2011). Looking at the use of social media for academic and research purposes, it must be noted that members of the University community depended solely on social media, which they accessed through their smart phones

and laptops; which meant that in the absence of social media, the academic progress of the institution was affected or disturbed. An example was an incident that occurred between August 23rd and August 28th 2013 at the University of Fort Hare, Alice Campus when there was no internet connection. This immediately resulted in a total disconnection amongst students, who were not able to successfully get their assignments and research work done while others were able to get their work done with the aid of their smartphones. The disruption that took place and the expression of the University community, especially students, confirmed the huge importance of social media. In line with the above-stated problems, the research, which focused on Postgraduate students of the University of Fort Hare, what forms of social media they used and its contribution to their daily academic lives, was conducted to ascertain the importance and value of using the social media within the academic environment.

## **1.2 RESEARCH QUESTIONS**

The research questions that will guide this study are:

1. What are the forms of social media used by Postgraduate students?
2. How available and accessible are the social media?
3. What are Postgraduate students' perceptions of the impact of the social media on their academic research?
4. To what extent has social media enhanced the performance of postgraduate students' research activities?

## **1.3 RESEARCH AIMS AND OBJECTIVES**

The specific objectives of the study are as follows:

1. To identify the specific forms of social media that Postgraduate students use in UFH.
2. To determine the accessibility of social media.
3. To examine the perception of Postgraduate students on the impact of social media on their academic research.
4. To determine the extent to which social media contribute to Postgraduate students' research performance?

## **1.4 RESEARCH CONTEXT**

Social media is a network explained as a social structure with all individuals with whom one shares a social association. There is a social tie which one has or share with these various persons (Golder *et al.*, 2007). The information in an article by Golder *et al.* showed that social media such as Facebook, is described as a social networking website, which gives freedom to users to make public profiles and enable communication between individuals on that website. Social media is a form of media, which users or persons share and interact on the electronic-web-based content, accessible and relatively cheap media giving everyone the chance to circulate and access knowledge, information and opinion (Fine, 2006:1-3; Sasfko and Brake, 2009: 4-6, Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012). In order to conduct the research on social media, it was important to note that the researcher was aware that many individuals spend many hours a day on one or many social media platforms. Facebook among others is fulfilling a function of face to face communication. Moreover, many persons have become obsessed with updating their profile regularly and uploading photographs in their profiles thereby spending so much time on social media (Aydin, 2012). The researcher would also point out that individuals put up a type of addiction in terms of social media usage particular Facebook and YouTube. The above explanation helps to base the theoretical point of departure on one of the media theories namely the uses and Gratification Theory.

## **1.5 METHODOLOGY**

Methodology is just about processing of bits of absolute truth and researcher's inquiring, which formed the collected data (Leedy and Omrod, 2010: 93-94). There are two research methodologies namely quantitative and qualitative (Clayton: 2010: 95 and Blaxter *et al.*, 2006:59). Quantitative research deals with numerical, amounts and quantities of one or more variable of interests through the use of designed measures such as thermometers, rulers or and rating scales, questionnaires and tests for psychological characteristics or behaviour among human beings (Leedy and Omrod, 2010: 94; Blaxter *et al.*, 2006: 58; Denzin and Lincoln, 2000: 804; Phophalia, 2010: 19; Clayton, 2010: 95-96). Cluster sampling under probability sampling was

used to arrive at picking 310 students as the sample size. According to a writer, the accuracy of sample meant that the estimates of population parameters might be manipulated by sampling error because a sample was taken from the population (Sedgwick, 2012:1-2). The confidence level for the population of the sample of 310 Postgraduate students was set at 0.05 or 95 per cent. A Cross-Sectional approach was used for the research to allow people from different age groups to be sampled and compared (Leedy and Omrod, 2010:186). Participants were told that the objective of the research sought to gather information about students' use of social media socially or for academic purposes, with reference to the academic environment, who they are (demographics) and what they considered social media to be a research tool. Rating scale otherwise called Likert scale (Leedy and Ormrod, 2010: 189) was used and data was analyzed quantitatively to simplify and quantify participants' attitude or behaviour (Leedy and Ormrod, 2010:190). SPSS statistical Program Software was used to present results in tabular and graphical outputs. The researcher conducted a pilot study using a small group of people to assess their understanding of the questions. The full details are in chapter 3.

## **1.6 ENVISAGED ETHICAL ISSUES**

This was an objective study, which aimed at the information to be found by the researcher. All participants were represented objectively and all information were reported as such. The researcher abided by the ethical issues and regulations governing the conduct of research in the University. The researcher sought the consent of the participants by clearly explaining the purpose of the study and assured them of information confidentiality. A copy of the Ethical Clearance approved for this study is attached as Appendix 1.

## **1.7 SIGNIFICANCE OF THE STUDY**

This study was significant as it aimed to ascertain the impact of social media on academic research among UFH students. The social media is a global phenomenon and no research is done on the evolving use for academic research, which is the focus of my study. Students make use various social media such as Facebook, YouTube, Twitter, Blogs, BBM, Whatsap, research gate, academia.com for different

purposes. As individuals they tailor their usage to fit their specific needs each day. Some social media platforms are basically for communication rather than research. This study needs to ascertain whether social media have impact on research by identifying which of the social media platforms are utilized by students, to gratify their social integrative needs (uses and gratification theory) thereby combining learning, education and research as the fundamental elements. The study will go a long to either support the argument for or against other researchers, who alleged that youths especially students are addicted users of social media platforms and search engines either to gather research topics or purely for entertainment or communication (Mohammed, 2008; Davis , 2010; Andrews, 2012; Aydin, 2012; Reddy, 2013; Konijn *et al.*, 2013). Without any doubt, one can say users see social media as platform to access electronic-web-based knowledge, information and opinion to improve their research as supported by many scholars and writers (Mohamed,2008; Rhoades *et al.*, 2008; Sasfko and Brake, 2009: 4-6; Yu Lin and Peng Lu, 2011; Schneiderman *et al.*, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Reddy, 2013, Narayan, 2013).

The aim of the study is to evaluate, explore and assess the extent of social media usage among Postgraduate students of the University of Fort Hare, Alice campus, who engage in different interactive activities since social media has become a very prominent technology in the world over the past few years. Moreover, based on the fact that additional newer packages or platforms also enhanced communication, business, interactions, information and academic research thereby offering users the option of active participation, social media is a phenomenon of great importance but also as a factor of transformation of the public sphere today. The social media has taken the role or mission of mainstream media, with help from the audience through production of journalistic material themselves (Domingo *et al.*, 2008). One would watch with keen interest how students and lecturers make use of social media every day on their smart-phones, laptops or computers, which have become their radio and television to scout for research, information and even connect with friends and families on blogs and other Internet forums. What do students really make use of, for what and how? The study on the social media is undertaken to re-examine or re-

evaluate whether the social media has changed the general media landscape among students and lecturers (academic community) for discussions.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

The Chapter reviews related literature on social media and its impact on today's society and most importantly on research. The Chapter also looked at the concept of Communication and how it has evolved with the internet, the models and theories in the Communication process as developed by different scholars and the impact of Electronic or Computer mediated communication in education. Others discussed in this Chapter include what social media is and what it is not, different forms of social media and uses; South African's social media adoption and usage; popularity of various types of social media in research; who uses social media in their research; social media as a tool for research among higher educational institutions and the theoretical framework.

#### **2.1 DEFINING COMMUNICATION AND ITS PROCESS**

The concept of "Communication" is universal and is as old as man. To communicate with people is an irresistible urge of human beings as communication is seen as life itself. Man is described as a communication animal because he alone possesses the power to express in words through his five senses of sight, touch, sound, taste and smell which served as modes of transmission of messages (Rayudu, 2010:4). The term "Communication" which means common is derived from the word "*Communist*". Its application also means a common ground of understanding (Rayudu, 2010). "Communication" has many definitions. "Communication" is considered an interdisciplinary concept which extends to various disciplines which include accounting, mathematics, system analysis, auditing, ecology, psychology, linguistics, etymology and cybernetics (Dance, 1970: 201-204, Rayudu, 2010:2).

The term "Communication" is defined as a process of exchanging ideas, facts, opinions and the means by which groups of individuals or organizations contribute to meanings and understanding with one another (Anderson, 1959, Hoben, 1954:77, Mead, 1963:107, Berelson and Steiner, 1964:254, Newcomb, 1966:66, Dance, 1970:204-208, John and Finnegan, 2002; Rayudu, 2010: 2). Communication could



also be defined as the process of transmitting and interacting of ideas, opinions, facts, attitudes or feelings (Dance, 1970:204-208). The term "Communication" means how messages are managed with the purpose of creating meanings (Griffin, 2005). The term "Communication" is also defined as a process of picking, sorting and sending of symbols in a way to assist the listener to perceive and recreate the meaning in the listener, a transfer of information and thousands of potential stimuli (Newcomb, 1966:66; Dance, 1970:204-208; John and Finnegan, 2002). The term "Communication" allows people to perform important tasks in order to develop and discover ourselves so as to regulate the environment (Rayudu, 2010:2).

The process of communication can be analysed in different ways through the communication model known as 'trptych of communication' (Mersham and Skinner, 1999:7; John and Finnegan, 2002). Within this communication model, the communicator, a medium through which the message is sent, and a recipient, are elements without which communication process is a failure. People will not be able to swap or transfer meanings, feelings or thoughts into messages. Messages are first turned into symbols and signs through a physical form known as the medium. The messages are then in form of images, speech, sound or writings to be understood by the receiver or recipient after which the receiver or recipient gives his response or feedback through the same ever-ending process. This two-way communication process shows the role of the sender and the receiver or recipient of the message.

### **2.1.1 Scope of communication**

The Scope of Communication is very extensive and comprehensive as Communication entails the transmission and reception of information. Communication is a continuous process of swapping of ideas, facts, attitudes, feelings, opinions and figures thereby interacting with other people. Within this Communication process, symbols such as actions, words, figures or pictures are used (Mead, 1963:107, Berelson and Steiner, 1964: 254; John and Finnegan, 2002). Communication is in different directions either horizontally, vertically, diagonal or across organizational structure. Communication is interpersonal process when two or more people are involved (Rayudu, 2010:7). Communication could be internal or

external and it may also be formal or informal, written or oral. External Communication is transferring messages outside an organization between governments of other countries, its own departments, inter-corporate bodies, customers and the general public. Internal Communication is used to perform managerial functions such as planning, direction, coordination and motivation (Rayudu, 2010: 3-4).

### **2.1.2 Nature of communication**

Communication is an essential tool and aspect of management process through which superior-subordinate (two parties) relationship exists on a platform of meaningful communication or interaction (Anderson, 1959; Mead, 1963:107; Berelson and Steiner, 1964:254; Dance, 1970:204-208). Managing the Information system is effectively done through communication which consist gathering of past or present information, processing of and storing of such information (Rayudu, 2010:4). According to many writers, within the communication processes, there are two parties (the sender or transmitter of the message as well as the receiver/reader/listener/recipient at the other end). Communication is the transmission or exchange of messages as well as the interaction (Miller, 1966:92; Dance, 1970). The idea behind communication is to allow other people to realize and act upon the same in the same expected manner. Communication becomes valuable when messages are disseminated and understood among people. There is no effective or successful communication if information or messages, sent by the sender or communicator is not understood by the receiver of the message in the same sense it was intended to be (John and Finnegan, 2002; Rayudu, 2010:4).

### **2.1.3 Communication as an art and a science**

Communication is both art and science as it contains both the elements of science and art. Communication as science of Communication uses principles to direct managers to seek solutions to problems through an objective evaluation of results. Communication as a field is fast growing as science with the emergence of sophisticated Communication technologies. Communication as a subject has its own

body of knowledge, theories, principles as well as concepts. Communication as science has its approach and dynamics in different work situations (Rayudu, 2010:6).

#### **2.1.4 Communication as a social science**

According to John and Finnegan (2002), within the communication process, there is the sender of the message and the receiver of the message, encoding and decoding of messages (symbols) and reception (listening and knowledge). Communication as a social process affects the entire society. Communication is a tool that enables everyone in the society to satisfy their basic needs and desires as well as making contacts with other people (Dance, 1970:204-208; Rayudu, 2010:7). As a social process, Communication is a means of recording and preserving knowledge by way of writing, symbols or by some other devices to pass on to the next generation. Communication is not only a means of individual and groups' progress or social advancement, but society as a whole interact in the process to be influenced (Frings, 1967:297; and Rayudu, 2010:8).

#### **2.1.5 Communication as a human process**

Communication is a human process which involves an art of transmitting information (Newcomb, 1966:66; Rayudu, 2010:7-8). Communication is a necessity for informing, directing, coordinating and unifying the efforts of managerial people towards a common goal. Without a proper communication network, the art of getting things done through and with the people in a formally organized manner cannot be achieved. Communication is a human process through the involvement of two or more people (Dance, 1970:204-208). Communication, as a process affects all and enables people to satisfy their basic needs or desires as well as getting along with other people. This human process also means the recording of knowledge and passing it to the succeeding generations (Rayudu, 2010:8). The transmitter uses a set of media oral, written, visual or audio-visual to convey facts, ideas, opinions, or feelings to another. Visual or Communication, media carry neon-boardings, slides and posters. Television and films are audio-visual communication media. Communication is a process that uses a set of media to transmit ideas, facts and feelings from one person to another (2010:10-11). The transmitter selects when and

what to communicate and determines the medium for transmission. The receiver or recipient takes the messages, interprets, perceives and responds to it. As a process, it is a routine, continuous and never an ending process cycle.

According to Ruyudu (2010:10-13), David Berlo listed six steps or elements in the whole sequence of Communication. They are message, sender, encoding, channel, receiver and decoding.

## **2.2 MODELS AND THEORIES IN THE COMMUNICATION PROCESS**

Models and theories in the Communication process are developed by different scholars to help understand the process involved in Communication (2010: 11).

### **(I) LINEAR MODEL:**

Aristotle's Model is about the first step towards development of an elementary model of the Communication process. According to Aristotle, in any Communication event, three elements such as the speaker, the speech and the audience are present. Afterwards, a number of experts also developed modern models of Communication which are complex and dynamic (Rayudu, 2010:11).

#### **(a) Mathematical Theory:**

Two scholars, Claude E. Shannon and Warren Weaver developed the Mathematical theory of Communication popularly called Shannon-Weaver Model in 1949 as a model in electronic Communication (Verdu and McLaughlin, 2000; Rayudu, 2010:12). These two scholars regarded this theory as strictly mathematical and have been identified with technology and technical aspects of Communication. The Mathematical theory created an impact on the concept of measuring the unit of the information transmitted over technical channel (2010:12).

**(b) Information Theory:** In 1950 the Information theory developed separately from the Communication theory. Computer Science, data processing, cybernetics and so on are the segments of the Information theory (Rayudu, 2010:12). The behaviour scientists adopted the Mathematical theory to make clear the human Communication. Shannon's focus, being an engineer, was on technical problems of transmitting signals from one point to another. Shannon regarded Communication as

a mechanical system consisting of the following five basic elements (Verdu and McLaughlin, 2000; and Rayudu, 2010:12). They are: (i) Information- Source, (ii) Transmitter- to convert messages into transmittable sign (iii) A channel (iv) A receiver- who reconstructs the message from the sign (v) Destination: the person, whom the message is intended. The other four components Shannon introduced in the system are: the message, transmitted signals, received signals and noise source

(c) **David K. Berlo's Model:** This process theory is one of the basic theories for all Communication theorists. Berlo's model is of basic importance in developing other communication models and for identifying elements of Communication (Rayudu, 2010:13). Berlo's process theory has given a great deal to the subject of Communication (2010:13). In this model, Berlo mentioned the nine essential elements and other factors affecting them: a source, an encoder, message, channel, receiver, decoder, meaning, feedback and noise.

(d) **Harold D. Lasswell Model:** The Communication process of Lasswell indicates the major elements in the process by posing some basic questions dealing with the act of communication (Rayudu, 2010:14). They are who? what? Whom? Which? In this model, Lasswell established the behavioural aspects of the sender in the Communication process by dealing with the five elements in the process with the above questions. The model emphasizes on the effect of Communication and the response of the receivers (2010:14). The behavioural aspect of the sender is the important element in the process: who says what? in what channel? to whom? with what effect?

(e) **Wilbur L. Schramm's Model on Mass Communication:** The model focuses on signal from the two sides of the source and receiver. The encoder, which is the source, has to encode and the same is to be decoded towards the destination (Rayudu, 2010).

(II) **Interpersonal OR Interactional Model:** This interpersonal or interactional model of Communication is also called "circular" or "cyclical" model. The previous models discussed above are linear models, which do not regard the response or reply from the receiver of the message. But an effective Communication is cyclical or circular in nature. In circular system of Communication process, the element of

feedback is introduced (Rayudu, 2010: 15-16). A response or feedback is the last and most important component of the Communication process which translates an interaction with another person, who is the receiver of the message. The presence of response or feedback makes the Communication process circular or cyclical. The receiver's response, reaction or behaviour to the message is called the Feedback. Feedback is the last and most important element of Communication process. Its presence makes the communication process an interpersonal or interactional model of Communication. Interaction facilitates the return information called "feedback"; effected by signs, words and behaviour change. This cycle or circular flow completes the Communication process. An interpersonal or interactional model makes Communication a two-way process while the linear model is known as one- way Communication without feedback or interaction.

The Interpersonal model of Communication requires the presence of the following elements in the Communication process: (i) Message or idea or stimulus (ii) Sender or transmitter or Communicator (iii) Encoding (iv) Channel (v) Medium (vi) Receiver (vii) Decoding (viii) Action or behavioural change (ix) Feedback.

## **2.3 THE TYPES OF COMMUNICATION**

From the above-stated, we can simply conclude that there are three types or forms of Communication namely:

- (1) Intrapersonal Communication- Linear model-one way
- (2) Interpersonal Communication-Interactional or Cyclical-two way
- (3) Computer /internet mediated communication- interactional -many to many

As part of Communication, the mass media (Print, film, television and radio) occupied the attention of its audience, conveying of messages which have embedded meanings through a one-way delivery system with little chance for feedback. The audience then were attentive listeners/spectators as the broadcast model of communication, then was from few-to-many persons, maintaining its control or influence over cultural and subject formation (Silverstone, 1999: 14) after which transistor radios, cassettes for sound and video recording and playing, cable

systems delivery of signals were later introduced. Another stage was online forms of media delivery known as the internet, the World Wide Web alongside other successive applications introduced in the 1990s to circulate the reworked mass objects cheaply and widely (Silverstone, 1999:15).

The advantage of the internet and social media exceeds the limits of the print and broadcast models, enabling many-to-many communication, simultaneous reception, modifying and re-circulating cultural objects; providing prompt global contact as well as placing the modern/ late modern subject into a networked machine (Silverstone, 1999: 14-15; Fine, 2006:1-3). Kaplan and Haenlein (2010:60-61) state that the internet emerged as a "Bulletin Board system" of the 1970s for users to transfer, swap or exchange software, data, messages as well as news with one another. These writers and Fine (2006) are of the view that "social media is an evolution which dates back to the internet's roots". The writers defined social media as a group of internet-based applications that build on ideological and technological foundations of web 2.0 and allowing the creation and user-generated content (Newson, Houghton; and Pattern, 2009:49; Kaplan and Haenlein, 2010:60-61).

Silverstone (1999:10) states that new digital technologies emerged principally as new things to provide new powers so that people can be technologically empowered. These technologies were generated as new consequences to affect, involve and to bend our minds as political, economic and social human beings. Social media with its ever-increasing and undying popularity became the tool among its users based on its distinct characteristics of social media, namely digital convergence; many-to-many communication; interactivity and globalization among other (Silverstone, 1999: 11; Fine, 2006; Mohamed, 2008; Schneiderman *et al.*, 2011; Andrews, 2012; Aydin, 2012, Moreno *et al.*, 2013, Narayan, 2013; Reddy, 2013). Social media is now being used for various activities like communication, research, politics, business and so on, both in private and public sectors. Its use among the youths and especially students is huge (Mohammed, 2008; Andrews, 2012; Aydin, 2012; Konijn *et al.*, 2013; Reddy, 2013).

Results from previous research revealed that users of social media platforms and search engines are majorly students (Rhoades *et al.*, 2008; Aydin, 2012). Majority of students in public universities, own and operate accounts on social media with over 100 million active users of online knowledge-sharing network, which promotes interpersonal interactions and communication (Mohamed, 2008; Andrews, 2012; Aydin, 2012; Konijn *et al.*, 2013; Reddy, 2013). According to Aydin (2012) college students spend chunk of their personal time communicating either talking face to face, texting, conversing on the phone, or using social networking sites. This study, therefore, becomes crucial because it seeks to evaluate the rising patterns of social media use amongst Postgraduate students of the University of Fort Hare as part of efforts to contribute to more knowledge on communication.

## **2.4 DEFINING ELECTRONIC OR COMPUTER MEDIATED COMMUNICATION (CMC)**

Computer Mediated Communication can be defined as a Communication using the internet via social networking site such as Facebook and other social media platforms. Communication through the use of internet on a computer entails the transfer or exchange of video, audio, video, or text (Herring, 2002, 2004; Zazcek and Bonn, 2006; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 5; Konijn *et al.*, 2013). The internet, being portrayed as the great social phenomenon of human history, centres on the essence of human society, which is Communication between people (Bargh and McKenna, 2004; Plant, 2004; Andrews, 2012; Konijn *et al.*, 2013).

Though the use of Internet or Computer Mediated Communication is not assumed as the replacement of old technology, but it presents additional choices to the people or consumers (Livingstone, 2004; Lo and Lie, 2008; Burgess and Green, 2013: 5). Many researchers have expressed their opinion that real life Communication is totally different from Communication through the internet known as Computer mediated Communication, CMC (Crolley and Matlby, 2008; Zazcek and Bonn, 2008). The end goal of inter-personal social Communication has not changed (Anderson and Tracy, 2001; Lin *et al.*, 2007). Communication scholars and social psychologists



have been studying the effects of CMC and the formation and maintenance of social relationships for decades (Di Gennaro and Dutton, 2007). Predictions have it that the internet will ultimately transform every aspect of human lives privately, publicly, socially, politically, educationally, economically and culturally (Bargh and McKenna, 2004).

Many researchers are drawn to Interpersonal Communication through the web (Hampton and Wellman, 1999, 2003; Zazcek and Bonn, 2006; Crolley and Maltby, 2008) and Computer Mediated Communication technologies have also contributed to the shaping of communication and social relationships resulting to shaping social behaviour (Herring, 2002; 2004; Plant 2004; Houston and Sichler, 2007; Di Gennaro and Dutton, 2007; Mohamed, 2008; Raacke and Bond-Raacke, 2008; Andrews, 2012; Aydin, 2012; Konijn *et al.*, 2013; Reddy, 2013). The internet is a Communication medium which has challenged the traditional distinctions between media production and media consumption (Zeitlyn, Bex; and David, 1998; Fine, 2006:1-3; Burgess and Green, 2013:4; 5; 9-10; 15-17).

According to Jo and Kim (2003), the interactive nature of the internet distinguishes it when compared to traditional media like television and radio. Interactivity is its critical component of Computer mediated Communication, (CMC). According to history, youths, mainly maintain contacts through face to face interaction or telephone but in the 21st century, youths now communicate using the internet, Computer mediated Communication or social networks (Merkle and Richardson, 2000; Fine, 2006; Hinduja and Patchin, 2008; Mohamed, 2008; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013). It must be noted that face to face interaction is combined or complemented with computer mediated technology, even though Computer mediated Communication is more advanced, suitable, purposeful, interactive and conducive than the traditional means of maintaining or sustaining contacts (Lenhart, Raini, and Lewis, 2001; Herring, 2004; Fine, 2006; Lenhart, Madden; and Hitlin, 2007; Hinduja and Patchin, 2008; Dabbagh and Kitsantas, 2012). Some scholars have also noted that the electronic media have created a new environment for interpersonal relationships (Merkle and Richardson, 2000; Wellman *et al.*, 2001, Fine, 2006; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013:8-9).

As new technologies evolve, their uses and effects adjust (Lo and Lie, 2008; Stern, 2008, Dabbagh and Kitsantas, 2012). Nyland (2007) states that social networking is one of the newest forms of Computer mediated Communication and that some forms of media perform as a substitute to enhance social relationship or communication between two individuals. Scholars share the opinion that the internet is changing the society, but disagreed on what these changes are (Di Maggio *et al.*, 2001). The internet, which is also computer-mediated communication, is offering a new public domain for communication with people being removed from public life (Fisher and Wright, 2001). However, this supports the views of Communication theorists, including William Schutz, who have noted that people communicate to gratify their own needs or wants.

Computer Mediated Communication, CMC is also a popular means of communication because of its capabilities to perform better functions than the traditional forms of interaction such as face to face interaction (Ramirez and Wang, 2008, Dabbagh and Kitsantas, 2012; Rutledge, 2013). Before this period, researchers had concentrated on how the internet, Computer Mediated Communication modified the message exchange process, but now modern researchers are more concerned with how internet or CMC and face to face are complementing each other for effective communication (Ramirez and Zhang, 2007; Dabbagh and Kitsantas, 2012; Rutledge, 2013). Even though face to face interaction and the use of telephone continues, the internet still links up geographically dispersed people and organizations, who shared common interest (QuanHasse and Wellman, 2004; Yu Lin and Peng Lu, 2011; Andrews, 2012; Moreno *et al.*, 2013; Rutledge, 2013). The Internet or Computer Mediated Communication is part of an overall communication system through which people communicate.

According to recent studies, public schools in South Africa in the past usually make use of conventional methods of teaching, which include discussion worksheets, stories, posters, written notes as well as chalk boards to promote learning. But today, students have available rich information due to the internet and social media, the Computer Mediated Communication transforms peoples' application of technology in education (Fine, 2006; Devries, 2007; Mohamed, 2008; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013). Globalization101 (2012) states

that since the introduction of the internet, Computer Mediated Communication and the World Wide Web, electronic communication has evolved to rapidly serve as ideal platform for virtual classrooms and e-learning. New technology has also brought about innovative ways to reach a large number of students any place and anytime (Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Narayan, 2013; Reddy, 2013; Mendel, 2014). Kimmel (2005:34) is of the opinion that technological innovations have played a major role in transforming mass communication. According to Kozma (2010:01) and Reddy (2013) the society expects a lot from its educational system as schools are expected to train the future leaders. The interaction with internet affords persons large content of knowledge to compliment teaching application as educational models must keep abreast with innovative developments and exploit all available resources to equip students rather than through conventional methodologies (Mohamed, 2008).

It is therefore important to note that the use of technology allows learners to constructively obtain knowledge from various sources (Mohamed, 2008; Reuben, 2008; Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Reddy, 2013). Reuben (2008) also expresses that social media consists of networking and socializing online through words, videos and pictures. Many types of new technology have the capability to help learners with various academic problems faced by students (Eberhardt, 2007; Mohamed, 2008; Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Reddy, 2013). Stempel and Stellar (2009) as quoted by Reddy (2013) admit that technology linked to social media expands communication to a larger sample of participants, giving such people the option to voice their opinions and thoughts.

#### **2.4.1 Connecting social media with electronic or computer mediated communication**

Electronic or Computer mediated communication has given new dimensions to the process of interpersonal and mass communication. Electronic or Computer mediated communication has changed the manner of interaction between people (Knowledge Way, 2011; Globalization 101, 2012). Radical technological changes have taken place in the past few years with social media being the latest technology being used around the world and everyone is using such technology be it to conduct research or for pleasure (Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Lenhart, 2012; Moreno *et al.*, 2013; Narayan, 2013). Interestingly, younger generation of people or savvy children find it easy to incorporate new technology within their daily lifestyle (Green and Hannon, 2007).

Electronic or Computer mediated communication can be defined as websites, software applications and e-mail through which people access or gather information (Mohamed, 2008; Sasfko and Brake, 2009: 4-6; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013). However, internet as an essential communication tool is radically modifying the production and consumption of information. Some obvious and emerging media usage patterns particularly with the social media platforms such as YouTube, Twitter, MySpace, Facebook and Wikipedia have made the internet one of the primary mediums by which many people interact, swap, transfer or exchange information and maintain or sustain contacts with families, friends and associations (Fine, 2006; Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013; Rutledge, 2013; Mendel, 2014).

Journals and articles assert that social media is increasing in popularity and usage (Mohammed, 2008; Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Andrew, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Reddy, 2013; Rutledge, 2013). The world of communication is now occupied by numerous media, which have impacted our lives. Technology has altered modes of life, social

institutions, families, religions, morality, marriage (Mohammed, 2008; Yu Lin and Peng Lu, 2011; Sociology guide, 2011; Open Culture, 2012; Andrew, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Narayan, 2013; Reddy, 2013). Societies are influenced in many ways with mothers performing multi-task on laptops while cooking, others watching sports and younger people busy chatting with their friends on social media while on their smart mobile phones (Andrew, 2012; Dlamini, 2012; Lenhart, 2012; Narayan, 2013; Reddy, 2013;). Social media is a vital medium for human communication (Scott, 2011; Narayan, 2013; Konijn *et al.*, 2013; Rutledge, 2013).

## **2.4.2 Social media and its impact**

Social media have encroached on peoples' daily lives thus becoming an important social platform for computer-mediated communication (Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 8-9; Konijn *et al.*, 2013; Narayan, 2013; Reddy, 2013; Mendel, 2014). Facebook, MySpace and Friendster are successful examples. The internet and social media is very much relevant for the 21st century as it serves a platform for public debate, forum and opinion gathering. Some of the importance of social media platforms is discussed below:

### **(I) Social media use for political engagement**

A lot has been said about the impact of the internet on political activity with technology developing and transforming peoples' lives. Government and political parties as well as politicians have used the social media platforms to reach their constituents in order to be involved in the political process and policies (Rommele, 2003; Rutledge, 2013). The social media therefore helps to present candidates of political party during electoral campaigns (Rutledge, 2013). An example was when the American President, Barack Obama campaigned for re-election and how he used social media effectively to reach out to his supporters. Just like late American president, John F. Kennedy was the first president to show the power of television, in the same light; Barack Obama remains the first social media president. The first African American to be elected president, Obama emerged the first presidential candidate in 2008 to use social media as a major campaign strategy (Rutledge,

2013). His 2008 presidential campaign made history when Obama reminded the American electorates through Twitter and Facebook to go out and vote, unlike his political rival, McCain (Rutledge, 2013).

The media landscape, in the run-up to the 2012 presidential election, also took another dimension with the introduction of countless social media tools. Apart from President Obama's political team, who used the social media machine-relationship; his political rival, Romney also employed the use of social media to politically reach out to his supporters unlike McCain in 2008 (Rutledge, 2013). President Obama dominated the social media space because his political team understood how the social networks worked. President Obama's election campaign in the 2012 scaled through with the strategic use of the social media while Romney's campaign did not succeed with the social media phenomenon and the fluidity of the internet media channels (Rutledge, 2013). Indonesian President-elect Joko Widodo ran much of his election campaign through Facebook and the internet. He recently launched a hallmark of his style e-Blusukan in order to connect online with 250 million Indonesians in a similar way across archipelago. Apart from other African leaders, Rwandan Prime Minister, Pierre Damien Habumuremyi also tweeted to give answers to people's questions via social media in order to engage young people in societal policies.

Against this background, one cannot ignore the importance and benefits of political use of social media to engage the society. Social media is participatory in nature, it facilitates civic engagement and information sharing as well as acting as additional channels for political engagement for political parties and their constituents (Polat, 2005:441, Ghanavizi, 2011; Ghannam, 2011; Rutledge, 2013). The tool which provides the platform from many-to-many information sharing, views, communication, is called the participatory media. According to some studies, social media provides extensive participation in public representation and engagement (Johnson and Kaye, 2003:12; Ghanavizi, 2011; Ghannam, 2011; Santiago, 2013). Social media enables the growth of democracy and political participation through ICTs and other forms of digitized technology. Writers and researchers have also said that political participation as a result of the influence of the internet had led to a participating society (Burgess and Green, 2013: 8-10; 15-17; Rutledge, 2013).

Writers raised questions about whether social media activity can be used to assess offline political behaviour for political analysis (Digrazia *et al.*, 2013). However, some researchers have questioned the validity of such data, saying that social media content is largely focused on entertainment and emotional expression, potentially rendering it a poor measure of the behaviour and outcomes typically of interest to social scientists (Digrazia *et al.*, 2013).

## **(II) Social media as a tool for political participation**

Yu (2006:313) cites social media as platforms being used by ordinary people and journalist in China to carry out their citizenship roles based on two cases of victims, Sun Zhigang and Li Siyi, who were unjustly killed. The social media allowed the ordinary people to exercise their rights to know and say their opinions as citizens of the nation with the virtual space of the net serving as a public forum setting mainstream media agenda and decision-making for the Chinese government. Yu (2006:313) describes the impact of social media and communication technologies on the socio-political cultures of China, reaching the public sphere, empowering the people and expanding the space of sociality through daily use of Short Message service due to its efficiency in the Chinese urban. Social media technologies are powerful tools for participatory democracy; promoting parallel level to level communication between the citizens and vertical communication with their government (Ghanavizi, 2011; Ghannam, 2011; Rutledge, 2013).

The protests by youths and opposition in Myanmar (2006), Moldova (2008), Iran (2009), North Africa (2011) Tunisia, Egypt, Libya and the Middle East (2011) were possible through interactive web or online social media and mobile technologies (Pillay, van Niekerk and Maharaj, 2010; Shneiderman *et al.*, 2011; Santiago, 2013). Santiago (2013) attributes the uprising as a trigger event which pushed the citizens to the streets against restriction of basic civil rights among others. The writer also pointed out the incredible rate of advancement of the Internet and social networks in enhancing information transfer with the world at large (Fine, 2006: 31-32; Santiago, 2013). The Internet and social networks proved their usefulness during the uprisings by making it possible for the outside world to close monitor the unfolding events in the Philippines, Bahrain and the rest of the Arab world (Santiago, 2013). According

to Dainotti *et al.* (2011); Rutledge (2013) and Pew internet research showed that users on social media actively engage in political activism online. This was also the case in Egypt and Libya in 2011 where social media sites were crucial to cyber-activism in the face of mass censorship by authorities (Dainotti *et al.*, 2011).

### **(III) Social media use in economy**

Inspired by Pierre Bourdieu's class theory and other related theoretical resources, Baohua (2011) conceptualizes social media as a form of capital and resource utilized to perceive reality while exploring the relations between social media use and subjective social status. His data analysis from the Shanghai Survey revealed that adoption of social media and the pattern of use; each has an independent influence on individuals' sense of their social positions in a stratified society, particularly its cultural dimension. Based on Baohua's (2011) findings the expansion of social media resources has the tendency to re-create and perpetuate the systemic logic of social stratification. Lister *et al.* (2003) puts 'social media' as technologies in cultural, textual, conventional in media production and distribution.

### **(IV) Social media as a tool for medical research**

According to Allen, Stanton, Di Pietro and Moseley (2013), social media such as Facebook, blogs and Twitter 'push' relevant knowledge straight to the end-users. These writers believe social media is effective at improving information dissemination, but stated there is no evidence to support such claim (Allen *et al.*, 2013). Conventional methods of research dissemination involved journal publications, conference presentations and textbooks (Allen *et al.*, 2013). With regard to health and medical research, the clinicians are the end-users, some of who do not subscribe to journals or attend conferences (Allen *et al.*, 2013). The rapid rise in popularity of web blogs and social media sites such as Facebook and Twitter, on health and medical research have positioned high profile journals for subscription since credible, timely and accessible information is critical to improving public health either taking actions to prevent illness or outbreak of deaths (George, 2011, Allen *et al.*, 2013; Thackeray *et al.*, 2012., Kung and Oh, 2014). Social media are critical tools with which to aid dissemination (Allen *et al.*, 2013). Researchers concluded that



the release of an article in the clinical pain sciences on social media increases the number of people who view or download such articles (Allen *et al.*, 2013).

Since there is a lack of reported data on social media adoption within public health settings, the majority of the state public departments used Twitter, Facebook and YouTube channel to distribute information on prevention of diseases and staying healthy with little room for interaction with the audience (Thackeray *et al.*, 2012; Kass-Hout and Alhinnawi, 2013., Kung and Oh, 2014). On health challenges and confidentiality concerns, though social media platforms offer opportunities to sponsors recruiting volunteers for a clinical trial, adverts on social media platforms allow the potential subject to give enough information for screening purposes (Andrews, 2012). Twitter and other social media tools may not bring health to all but can help to bring accurate health information to many more people than ever before (McNab, 2009). According to George (2011: 215,217, 218) the proliferation of social media has elevated all professions including healthcare, thereby linking humanity with real time sharing of information. Health professionals also expressed the barrier to using social media platforms on the grounds that using networking tools can invite violations of patient privacy laws or lapses in confidentiality and time-drain (George, 2011: 216-218). Some health professionals identified Twitter as the least useful and worthwhile for younger professionals on smartphones. Other professionals expressed concern over privacy issues and professionalism on such platforms. Majority of participants felt LinkedIn was a tool that could provide adequate professional networking with colleagues in the health profession (George, 2011:218-219).

#### **(V) Social media use in communication**

Globalization in the late period of the 20th century led to the emergence of what is known as social media technologies influencing all forms of communication (Borges, 2003:36; Flew, 2005:3; Fine: 2006; Yu Lin and Peng Lu, 2011, Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 8-9). New relationships were formed between the users and consumers and the social media technologies led to the changes in the pattern of use every day. The integration of these social media technologies also led to a shift in personal and social time, place and space which caused an influence or impact on how persons experience or see the world around

them (Flew, 2005:13; Van Dijk, 2006:8, Mohamed, 2008; Andrews, 2012; Aydin, 2012; Burgess and Green, 2013: 15-17; Konijn *et al.*, 2013; Moreno *et al.*, 2013; Narayan, 2013, Reddy, 2013; Mendel, 2014). These persons can choose what and when to watch or listen to, participate in, modify or alter content.

The development of social media and relationship of society has been broad socially, economically, culturally and politically through networks (Flew, 2005: 16; Van Dijk, 2006: 7; Mohamed, 2008; Andrews, 2012; Aydin, 2012; Narayan, 2013; Reddy, 2013). The importance of social media cannot be ruled out as it brought about a two-way form of interaction between persons, thereby allowing their involvement in the production of text (Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012). The social impact of the social media includes its influence on civic engagement and increasing political participation of citizens (Xenos and Moy, 2007:706; Ghanavizi, 2011; Ghannam, 2011) with more political information available and having access to such information. Social media creates parallel level to level peer to peer communication by providing a universal platform for discussion as well as an opportunity to form virtual communities not bound by time, the economy or geographical location (Yu Lin and Peng Lu, 2011; Andrews, 2012; Dabbagh and Kitsantas, 2012; Moreno *et al.*, 2013; Narayan, 2013). Another thing to note is that social media helps to reduce obstacle to access for voices of local minority to global communication (DiMaggio *et al.*, 2001: 322; Burgess and Green, 2013: 9, 10, 15-17; Moreno *et al.*, 2013; Narayan, 2013).

Information and communication technology, (ICT) and social media, with reference to less costly mobile smart phones provides new competition and chances/opportunities for mainstream media. Some recent studies' estimates got from International Telecommunication Union, ITU, showed that Africa has the world's fastest growth rate of use of mobile phones in 2006 and 2007 and that the continent in 2009, enjoyed mobile penetration put at 28 per cent. Mobile smart phones as communication tools therefore afford the media a new audience.

Warshauer (2003) states that various scholars have examined the structural inequality of internet penetration within the notion of digital divide portraying the expansion of social media, including the Internet and mobile phones, which is embedded with the social stratification, economic opportunities and technological proficiency. As a global form of medium, social media provided its users the opportunity to obtain, share and prove the truthfulness of such information from wide global sources (Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 5; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013; Mendel, 2014). I can therefore conclude in this section that in line with the views of some scholars that the online tools which make communication and information accessible, thereby creating participation through some internet applications of web 2.0 and the social media (Hetcher, 2007: 863; Kaplan and Heinlein, 2010:61, Yu Lin and Peng Lu, 2011, Dabbagh and Kitsantas, 2012). This also means that social media is a form of media which users or persons share and interact on electronic-web-based content, accessible and relatively cheap media giving everyone the chance to circulate and access knowledge, information and opinion (Mohamed, 2008; Sasfko and Brake, 2009: 4-6; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 4; Reddy, 2013; Mendel, 2014).

## **2.5 RECENT TRENDS IN COMMUNICATION TECHNOLOGIES USAGE**

In this age of Communication, information is considered as wealth and one of the keys to such a source lies in the application of information retrieval techniques which have also enhanced the emergence of social media, which is also the new communication technology (Silverstone, 1999; Green and Hannon, 2007; Yu Lin and Peng Lu, 2011, Dabbagh and Kitsantas, 2012). Several scholars and authors have argued for and against that technologies are not just new or but that remarkable transformation have taken over with Communication now available for mass consumption through new technologies (Silverstone, 1999; Fine, 2006; Green and Hannon, 2007; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 5; Moreno *et al.*, 2013; Anderson *et al.*, 2012; Narayan, 2013). With the availability of those Communication technologies, some basic problems,

namely speed, cost, accuracy, quantity and quality corporate business operations are tackled or overcome.

Also, there has been a rapid development with the use of new technologies for experimentation in classrooms (Rhoades *et al.*, 2008; Mohamed, 2008; Rollag and Billsberry, 2010:186; Yu Lin and Peng Lu, 2011; Andrews, 2012; Dabbagh and Kitsantas, 2012; Reddy, 2013). People can transfer and receive large quantity of information faster and easier to and from other individuals and workgroups from far regions. In addition, web-conferencing applications, social networking sites such as Facebook and Twitter, Instagram, Tumblr, Pinterest, Wiki, blog and LinkedIn can be used to promote study (Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Open Culture, 2012; Duggan and Brenner, 2013; Konijn *et al.*, 2013; Reddy, 2013; Salomon, 2013).

I also want to add that the use of technologies today in particular, the social media platforms through computers in schools and personal smart phones provide students with access to in-depth knowledge of research topics from some research papers in online libraries, on the internet, interviews, books, magazines and newspapers published online for research purposes. Effective electronic or Computer mediated communication is communication on different social media websites through the use of audio, video, text or animated multimedia. ICT provides full access to experts in remote places, enables learning environment and increase the efficiency of the education system (Mohamed, 2008; Rhoades *et al.*, 2008; Andrews, 2012; Aydin, 2012; Kozma, 2010:01; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Duggan and Brenner, 2013; Konijn *et al.*, 2013; Moreno *et al.*, 2013; Reddy, 2013; Salomon, 2013).

### **2.5.1 Electronic or Computer mediated Communication in Education**

It is also important to discuss the impact of Electronic or Computer mediated communication which has given students or learners access to resources related to assignments or studies. Electronic or Computer mediated communication paves way for interaction among audiences in a two-way communication. Two-way communication within the electronic or Computer mediated communication is a form of many-to-many communication which affords groups of people in different

geographical location to communicate interactively and simultaneously (Cole and Crawford, 2007; Patricios, 2009:22). Electronic or Computer mediated communication such as the Internet and social networking sites can be used as instructional tools and for professional development (Eberhardt, 2007; Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Reddy, 2013). This therefore means that the use of technology provides a different approach to teaching and learning not covered by traditional textbook-based methods. Students can therefore make use of computers as tutors to make progress in their academics (Bennet, 1999:74; Eberhardt, 2007; Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Duggan and Brenner, 2013; Salomon, 2013) as some teachers may have no time to repeat lessons. Eberhardt (2007) and Levine (2008) believe educators must use technology to their advantage to facilitate learning. Traditionally, people used the internet in many ways: watching, reading as well as purchasing products or services within the content.

There are countless diverse social media sites for different people such as Facebook, Friendster, Whatsap, Instagram, Tumblr, Pinterest, Hi5, LinkedIn for professional networks, MySpace, YouTube, Flickr, concentrate on shared videos and photos (Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Champion, 2012; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013:4; Duggan and Brenner, 2013; Konijn *et al.*, 2013; Reddy, 2013; Salomon, 2013; Thornton, 2014). The authors of these media sharing sites range from everyday people to professional writers and celebrities. Scholars revealed that social media is very powerful with functional blocks namely identity, conversations, sharing, presence, relationships, reputation, and groups. Each building block is neither mutually exclusive, nor do they all have to be present in a social media activity (Kietzmann *et al.*, 2011). They allow us to make sense of how different social media functionality is configured.

## 2.6 WHAT SOCIAL MEDIA IS AND WHAT IT IS NOT

Social media is a user-created, user-controlled, flexible and democratic medium. Social media is also by non-centralized in both form and content (Moran, Seaman; and Tinti-Kane, 2011). The most distinctive aspect of social media is its content, which afterwards becomes conversation, a way of exchanging information, and of invoking unparalleled individual, industry, societal, and global change (Fine, 2006:1-3; Moran, Seaman; and Tinti-Kane, 2011; Burgess and Green, 2013: 9, 10;15-17; Konijn *et al.*, 2013). Social media makes use of the mobile and web-based technologies to allow interactive platforms through which persons and communities develop, distribute, share, discuss as well as alter user-generated content providing or serving as a new communication landscape even for Churches (Kietzmann *et al.*, 2011:241-242, Yu Lin and Peng Lu, 2011; Aydin, 2012; Dabbagh and Kitsantas, 2012).

Kietzmann *et al.* (2011: 244) define social media using identity, conversations, sharing, presence, relationships, reputation and groups. Kaplan and Haenlein (2010) define "Social Media as a revolutionary new trend which should be of interest to business executives, decision maker or consultants of companies operating in online or any space (2010:60). These writers gave an insight to the origin of the internet and social media. Both scholars also posit that the growing availability of high speed and internet access further enhanced the popularity of the concept leading to the development of social networking sites. This in turn led to the formation of the term "social media" and promoted its prominence (Kaplan and Haenlein, 2010; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012).

Reilly (2013), on his part, sees social media as the future of communication, with a countless array of internet based tools and platforms that increase and enhance the sharing of information (Reilly, 2013). This new form of media makes the transfer of text, photos, audio, video, and information in general increasingly fluid among internet users. Social Media also has relevance not only for regular internet users, but business as well (Reilly, 2013).

Platforms like Twitter, Facebook, and LinkedIn have created online communities where people can share as much or as little personal information as they desire with

other members (Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas 2012). The result is an enormous amount of information on common topics that can be easily shared, searched, promoted, disputed, and created (Reilly, 2013; Konijn *et al.*, 2013). Topics, both general and specific, now have living homes on the internet; and anything from colon to security and compliance do have active social media communities (Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Konijn *et al.*, 2013; Reddy, 2013; Reilly, 2013).

The term “social media”, which achieved broad popularity between 2003 and 2006, is usually applied to describe the forms of media content that are publicly available and created by end users (Kaplan and Haenlein, 2010:61-62; Kietzmann *et al.*, 2011: 244; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013: 4, 5,8-9). In the opinion of Kaplan and Haenlein (2010:61-62), social media is a group of internet based applications that builds on ideological and technological foundations of web 2.0 and that allow the creation and exchange of user- generated content (Yu Lin and Peng Lu,2011; Berthon *et al.*, 2012; Dabbagh and Kitsantas, 2012). The writers further said that there are various types of social media although most people would probably agree that Internet started out as a giant Bulletin Board System (BBS) of the late 1970s which gave liberty to users to exchange software, data, messages and news with each other.

The term "social media" may be used in place of web 2.0 interchangeably without any much difference. Social networking is another form of Social media that makes multiple individuals who have similar interests or beliefs to link up and share information and thoughts (Eberhardt, 2007; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012). Some scholars see social networking, social media and web 2.0 as basically diverse ways of describing the same phenomenon. They see the web as more than just distribution of information, as a collaboration as well as interactive environment which broaden relationship with other people wherever they are (Cinman, 2008:49; Stokes, 2009:250; 350).

Apart from diverse definitions of social media from other scholars, Kaplan and Haenlein (2010:60-61) give a formal definition of the term by first drawing a line between these two related concepts “web 2.0 and user-generated content”.

According to these writers, web 2.0 is a term that was first used in 2004 to describe a new way in which software developers and end users started to make use of the World Wide Web. Kaplan and Haenlein (2010:61) consider web 2.0 as the platform for the evolution of social media. Both writers say web 2.0 represented the ideological and technological foundation while user-generated content is seen as the total of all the ways or manner in which people make use of social media.

Social media use as a Communication strategy has gained overwhelming support fuelled by its increasing importance of social marketing which results in an effective marketing and advertising campaigns (Daniasa *et al.*, 2010; Konijn *et al.*, 2013; Mendel, 2014). Social media instead 'pushes' relevant knowledge straight to the end-user, via blogs and sites such as Facebook and Twitter and that social media is very effective at improving information dissemination (Mohamed, 2008; Schneiderman *et al.*, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Allen *et al.*, 2013; Konijn *et al.*, 2013; Moreno *et al.*, 2013; Reddy, 2013; Mendel, 2014). Other authors such as Agarwal *et al.*, (2011:697) describe social media as an influential political tool, creating an understanding of peoples' opinion, elevating brands, films and music albums and disseminating news quicker. Social media have demonstrated its worth as an effective tool to maintain and sustain contact with people through its reach, speed as well as the direct communication (Burgess and Green, 2013: 4-5; Mendel, 2014). The advanced growth of social media and the development of web 2.0 tool also contributed to the complexity of the Communications environment.

From recent studies and literature review, it is obvious that the growth and popularity of online social networks have created a new world of collaboration and communication between people to create, collaborate and contribute their knowledge (Fine, 2006; Eberhardt, 2007; Boyd and Ellison, 2008; Mohammed, 2008; Shneiderman *et al.*, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Duggan and Brenner, 2013; Konijn *et al.*, 2013; Narayan, 2013; Reddy, 2013). This is because social networking websites are virtual communities which allow people to connect and interact with each other on a particular subject or to just "hang out" together online (Murray and Waller, 2007; Cheung *et al.*, 2011; Konijn *et al.*, 2013).



Membership online social networks have recently exploded at an exponential rate which is also measured by the amount of interactions per user taking place since social interactions and connection is the objective of such online social networks. According to a study by Andrews (2012) Facebook has a membership of over 400 million users as of March 2010 while YouTube is said to have over 10 million users monthly, who are not up to 18 years of age (Cheung and Lee, 2010; Cheung *et al.*, 2011; Schneiderman *et al.*, 2011; Konijn *et al.*, 2013). It is also important to note that social media is also rapidly changing or transforming the Communication sector being a game changer by speeding up Communication as part of the converging digital work of information, social connectivity, entertainment and advertising (Mohamed, 2008; Mulhern, 2009; Ang, 2011; Kirtis and Karachan, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Champion, 2012; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013; Duggan and Brenner, 2013; Narayan, 2013; Salomon, 2013; Reddy, 2013; Mendel, 2014; Thornton, 2014). Marketers and advertisers cannot also deny the flourishing of social media day by day (Ewing, 2009; O'Brien, 2011; Andrews, 2012; Konijn *et al.*, 2013). Mangold and Faulds (2009) aligned with the idea that people, the audience or consumers are depending on digital information and social media before considering decisions to buy products and services, thereby shifting away from traditional forms of media (Kirtis and Karachan, 2011).

Hearn, Foth and Gray (2009:5) see the Social media Communication evolution motivated by some technological developments. Social media are helping to fulfil the demand for cheap, instant communication between researchers fuelled by the growth of collaborative and interdisciplinary research (Nicholas and Rowland, 2011; Andrews, 2012; Aydin, 2012; Reddy, 2013). Cinman (2008:49) says social media, social networking and Web 2.0 are terms which all mean an interactive environment while Elphick (2008:40) believes that the interactive environment in the end extends to benefit business. Social media platforms such as Facebook, Twitter, Myspace, Flickr, LinkedIn and YouTube all emerged between 2003 and years later (Cinman, 2007:49; Kaplan and Haenlein, 2010:61-62; Kietzmann *et al.*, 2011: 244; Shneiderman *et al.*, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Dabbagh and Kitsantas, 2012 ; Burgess and Green, 2013). And these social media are basically

users-generated content accessed through online networks or mobile smartphones, enabling participation, shared culture and bond (Patricios, 2009:22). Newmarch (2009:6) and Patricios (2009:22) agreed that social media is both irresistible and compulsive.

Facebook is the most popular online social networking site among people, particularly University students (Boyd and Ellison, 2008; Mohamed, 2008; Rhoades *et al.*, 2008; Cheung *et al.*, 2011; Shneiderman *et al.*, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Duggan and Brenner, 2013; Narayan, 2013; Reddy, 2013). It is therefore important to note that understanding why students use online social networking sites is crucial for the academic community, as this new communication platform exhibits important impact on student motivation to learn, affective learning, and classroom climate (Mazer, Murphy and Simonds, 2007; Boyd and Ellison, 2008; Mohammed, 2008; Rhoades *et al.*, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Moreno *et al.*, 2013; Narayan, 2013).

### **2.6.1 Relationship between reach and impact of social media**

The reach of social media is straightforward based on the number of people in a network who make a comment on a post (Allen *et al.*, 2013; Konijn *et al.*, 2013; Mendel, 2014). Impact is less straightforward and one may propose that impact should reflect some sense of engagement with the material, for example the number of people within a network (Allen *et al.*, 2013). Allen *et al.* further noted part of the reasons why researchers use the social media as a measure of its impact or reach. Researchers have quite a few social media options to integrate their research on open, non-subscription sites such as Mendeley, and joining discussions about research on social media sites such as Twitter and on blogs (Mohamed, 2008; Andrews, 2012; Aydin, 2012; Allen *et al.*, 2013; Moreno *et al.*, 2013). Social media dissemination in the clinical sciences relies on clinicians having access to, and using social media. It will have no effect for those who do not use the web and who rely on more traditional means of dissemination that is extracting evidence. Different social media platforms are used to disseminate to a wide audience as possible without any knowledge of who they are (Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas,

2012; Allen *et al.*, 2013). Gathering statistics for the use of each article on Facebook and Twitter is sometimes difficult and not always accurate (Allen *et al.*, 2013). The risk in using search engines to gather data is that there is no way of knowing whether all the data have been identified. For Twitter, there is no way to retrospectively calculate the number of re-tweets accurately over a longer period retrospectively for each post (Allen *et al.*, 2013).

### **2.6.2 Different forms of social media and uses**

Social media in the 21st century promote the networked tools or technologies which portray the social aspect of the internet, either as a communication channel, creative expression and collaboration (Fine, 2006; Eberhardt, 2007; Boyd and Ellison, 2008; Mohammed, 2008; Ekine, 2010:24; Shneiderman *et al.*, 2011; Andrews, 2012; Aydin, 2012; Champion, 2012; Dabbagh and Kitsantas, 2012; Burgess and Green, 2013; Duggan and Brenner, 2013; Narayan, 2013; Reddy, 2013; Salomon, 2013; Thornton, 2014; Hu *et al.*, 2014). Many of the popular social media platforms are Facebook (for social utility), Whatsap (social utility), Instagram (social utility), Tumblr, Pinterest, YouTube, MySpace (for social utility), LinkedIn, (for professional social utility), Micro-blogging such as Twitter (for social utility), YouTube (for social utility), Zoopy, MXit (for mobile social utility), Flickr (for photo sharing), Blogs, wikis and Google Apps.

### **2.6.3 Popularity of various types of social media in research**

Majority of the literature showed social media platforms have the following characteristics social networking, blogging, micro-blogging, collaborative authoring, Social tagging and bookmarking, scheduling and meeting tools (Conferencing) as well as image or video sharing. Collaborative authoring is by some distance the most popular tool, while social tagging and micro-blogging is the least popular. Many researchers make use of social media tools in only one or two categories (Nicholas and Rowland, 2011; Shneiderman *et al.*, 2011; Dabbagh and Kitsantas, 2012).

### 2.6.3.1 Characteristics of traditional and social media

Traditional media	Social media
Fixed and unchangeable	Immediacy and instantly updateable
Limited Commentary and not in real time	Unlimited and real time commentary
Limited and time delayed bestseller lists	Instant popularity gauge
Poorly accessible archives	Accessible archives
Limited Media mix	All media can be mixed
Committee publishers	Individual publishers
Finite	Infinite
Encourages and allows sharing and participation	Not encouraging sharing
Control	Freedom

Table 1: Differences between traditional and social media

Scholars such as Burghin and Manyika (2007:12) say executives, who participated in a survey listed using different forms of social media such as wikis to encourage business cooperation and communication with companies and their customers. Some companies obtained business value using social media platforms as part of broadening their business (Burghin *et al.*, 2008:39; Andrews, 2012). Adding to increase in sales, social media can save costs in the context of customer support (Gelles, 2009:7) and also as an effective customer relation management tool (Gunning, 2009:1).

Apart from the use of social media being widely used for business purposes, social media is also popular among higher education schools in the USA, just like many parts of the world like South Africa. A 2010 ESCAR study (EDUCAUSE Centre for Applied Research) of undergraduates and information technology revealed that students use of social media has steadily increased from 2007 to 2010 (Dabbagh and Kitsantas, 2012). The study also showed the noticeable use of social media in students' academic coursework and experience both formally and informally as well as the diminishing percentages of users of social media between older and younger students (Mohamed, 2008; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Duggan and Brenner, 2013; Narayan, 2013; Reddy, 2013; Salomon, 2013).

According to a study by Barnes and Mattson (2009:2), colleges and universities used social media for research. Another survey also indicates that admission officers also use social networking sites and search engines to conduct investigation on prospective students who seek admission (O' Shaughnessy, 2009; Barnes and Mattson, 2009:4; 6). Integrating the social media networks as tools will make students successful in achieving their learning goals (Boyd and Ellison, 2008; Mohamed, 2008; Rhoades *et al.*, 2008; Dawley, 2009:109,112; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Narayan, 2013). Barnes and Mattson (2009:7) also express their opinion that schools which do not embrace the use of social media can be overtaken by their competitors (Barnes and Mattson, 2009:9).

### **2.6.3.2 Personal use of social media in higher faculty**

There has been explosive growth in the number and the impact of these social media sites for personal, professional, as well as instructional use by higher education faculty members globally even in the United States of America (Hardré and Cox, 2009; Moran, Seaman; and Tinti-Kane, 2011; Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012). Most higher education teaching faculties are big users of social media sites either for their personal use; professional or career lives with more than 90 percent using social media in their courses (Moran, Seaman; and Tinti-Kane, 2011). There are huge differences in the patterns of social media usage from one social media site to another. YouTube and Facebook are also the most frequently cited in a faculty report on uses of social media in support of professional careers (Moran, Seaman; and Tinti-Kane, 2011). A company, Pearson, had for several years conducted research on faculty use of social media. In Pearson's opinion, higher education's ability to take advantage of social media for promoting professional development, broadening institutional reach, and increasing student success is nothing short of revolutionary (Moran, Seaman; and Tinti-Kane, 2011).

About 1,920 out of 3,431 teaching faculty members from all disciplines in the U.S. expressed their belief that social media offer value in teaching career (Moran, Seaman; and Tinti-Kane, 2011). Facebook is the highest visited site for personal use, while YouTube ranked second most visited, with low posting rates. Almost two-

thirds of all faculties make use of social media during a class session, with 30 per cent posting content for students to read after class lecture. More than forty per cent faculty require students to read social media as part of a course assignment while 20 per cent assign students to make comment on social media sites (Moran, Seaman; and Tinti-Kane, 2011). Other social media sites such as LinkedIn, blogs, Flickr, Slide Share, and MySpace are much lower (Moran, Seaman; and Tinti-Kane, 2011).

These Faculty members are aware of the social media such as MySpace, Facebook, Twitter, YouTube and blogs as some members who teach online would have greater exposure to the technology and the online sites (Moran, Seaman; and Tinti-Kane, 2011). The greatest number of faculty use YouTube for professional (non-teaching) use than any other social media site. Facebook is used less frequently than YouTube. More than one-quarter of faculty report using blogs, LinkedIn, and wikis, Twitter or Flickr. Professional use of Slide Share and MySpace is under 10 per cent (Moran, Seaman; and Tinti-Kane, 2011). Facebook is used by a smaller fraction of faculty than YouTube, but the frequency of use is far higher. Daily use of Facebook, at 11 per cent exceeds that of other social media sites, followed by 5 per cent daily use of blogs, 4 per cent of YouTube, and wikis just 3 per cent (Moran, Seaman; and Tinti-Kane, 2011). Faculty with online teaching experience were more likely to access and post to social media sites for personal use while Faculty who teach online are also more likely to use social media sites for professional use, with both higher rates of use (Moran, Seaman; and Tinti-Kane, 2011).

### **2.6.3.3 The use of social media by faculty class**

A further look at Pearson's survey earlier on discussed, shows that most faculties are well aware of social media platforms for both personal and professional reasons, and these Faculties use social media postings as part of student assignments in class or outside class (Moran, Seaman; and Tinti-Kane, 2011). For instance, almost two-thirds of all teaching faculty confirmed the use of social media within their teaching sessions with 30 per cent posting content for students to view outside class (Moran, Seaman; and Tinti-Kane, 2011). Over 40 per cent of faculty assigned students to read or view social media as part of course assignments while 20 per cent assigned students to comment on or post to social media sites. In total, 80 per

cent of faculty report using social media for some aspect of a course they are teaching (Moran, Seaman; and Tinti-Kane, 2011). Online video tops the list and is by far the most common type of social media used in class and posted outside class for students use. Podcasts, blogs and wikis are next in popularity while other sites rarely used for personal purposes within a course include Facebook and Twitter (Moran, Seaman; and Tinti-Kane, 2011).

## **2.7 SOUTH AFRICAN SOCIAL MEDIA ADOPTION AND USAGE**

Social media is as well-liked and trendy in South Africa as throughout the rest of the world (Mohamed, 2008; Andrews, 2012; Aydin, 2012; Erasmus, 2012; Narayan, 2013; Reddy, 2013). Stokes (2009:2) admitted that the use of the internet in South Africa and internationally has not led to any decrease in the use of traditional media and that the difference in the features of traditional and social media have only paved new channels for advertisers or marketers to get to their audience through marketing campaigns. Social media can promote traditional media campaigns since it forms an integral part of online marketing campaigns (Stokes, 2009:126; Konijn *et al.*, 2013; Moreno *et al.*, 2013). According to some studies, higher education institutions and businesses in South Africa are making use of Social media with few research studies and surveys being undertaken. South Africans are the sixth largest group of Facebook members (Corrigal, 2007; Erasmus, 2012). South African political parties, the Congress of the People (COPE) as well as Standard Bank are users of social media to promote themselves (Stopforth, 2009:41). It was earlier predicted that fast expansion is expected by 2013 as approximately four million people in South Africa would have access on their mobile phones (Dingle, 2009:14). The use of the Internet in South Africa is rising after a number of years passing the five million counts of personal computers in 2006, according to a study by World Wide Worx (2010) which attributed improvements in education levels and computer literacy as some of the driving factors for the change (Erasmus, 2012). Compared to smartphone penetration and of 20 per cent globally, South Africa has 15 per cent of smart phone penetration and smart phones are mostly used by students and young working people (Newmarch, 2009:6). Weldon's research indicates that smartphones

in South Africa are of necessity to young people as nearly 90 per cent of them between the ages 16 to 24 own a Smartphone (Lamprecht, 2009:7).

In a 2007 survey conducted by Burghin and Manyika (2007:7), respondents across the entire globe revealed increased use of social media platforms, with 29 per cent of those respondents from developing countries. Apart from the social media platforms known globally, Cinman (2008:49) says South Africa also has its own start-up social media, including Amatomu (blog search engine), Zoopy (multimedia sharing) and Blueworld (an extensive social network). In another survey in 2009, South Africans are making use of multiple social media platforms, including MySpace, Facebook, Zoopy, Twitter and Mxit (Atmosphere, 2010 ; Goldstuck, 2010; Erasmus, 2012:78-79)). This survey found that 74 per cent of South Africans specifically access social media networking platforms by linking up their various social media accounts so that their social media profiles can be seen by visitors. According to Cinman (2008:49); Burghin and Manyika (2007:13) the popularity of social media is based on the fact that it is easy to use and understand by an average person.

### **2.7.1 Social media as tools in teaching and learning**

According to a report by the Kellogg Commission (1999), students' experience must be enriched with research as part of schools' curriculum, thereby paving way for practical opportunities to enable such students prepare for the task ahead of time (Eberhardt, 2007; Mohamed, 2008; Rhoades *et al.*, 2008; Andrews, 2012; Aydin, 2012; Powell *et al.*, 2012; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013). Social media such as blogs can be used as teaching tools to complement other techniques in order to encourage student participation, communication and critical thinking (Ebernett, 2007; Boyd and Ellison, 2008; Mohamed, 2008; Davis, 2010; Kaplan and Haenlein, 2010:63; Quan-Haase and Young, 2010; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; and Powell *et al.*, 2012). Powell *et al.* (2012) also noted that integrating social media tools such as twitter (Micro-blogging) and blogging into class activities also promote real time dialogue and student involvement in the learning process than classes where social media tools were not used thereby making assignments a dynamic experience (Powell *et al.*, 2012).



Higher education institutions can make the most of social media as new communication channels to expand their reach to new audiences such as consumers and other stakeholders, who may not have been reached through the traditional channels to exchange ideas on evidence-based risk information (Mohamed, 2008; Hardré and Cox, 2009; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Powell *et al.*, 2012:276; Moreno *et al.*, 2013; Reddy, 2013 Salomon, 2013). Social media platforms are well suited for use in scholarly activities (Glassick *et al.*, 1997; Wise *et al.*, 2002; Mohamed, 2008; Schneiderman *et al.*, 2011; Andrews, 2012; Aydin, 2012; Powel *et al.*, 2012; Reddy, 2013). Scholarly communication is changing and the traditional peer-reviewed journal article is one method of contributing to the body of knowledge on any topic of interest (Phillips, 2010). Like others, it is interesting to note that social media such as blogging provide new channels for conducting and disseminating scholarly work (Mohamed, 2008; Hardré and Cox, 2009; Kaplan and Haenlein, 2010:63; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Moreno *et al.*, 2013; Narayan, 2013). Scholars, researchers and students, therefore no longer need to struggle with access to these journals as they are readily available online.

### **2.7.2 Social media as a tool for research among higher educational institutions**

The impact of research is fundamentally dependent on how well it is disseminated to the end-user. Conventional routes of information dissemination used to involve textbooks, conference presentations and journal publications (Yu Lin and Peng Lu, 2011; Dabbagh and Kitsantas, 2012; Allen *et al.*, 2013). Moreno *et al.*, (2013) and Nicholas and Rowland (2011) say that social media may not yet have fully invaded the research space, but there are indicators that social media is likely to make a very significant impact among most age groups over the next few years.

As at now, social media platforms such as Facebook and blogs place academic research in the public sphere for rapid sharing of research methods, results, and conclusions with appropriate references (Skipper, 2006; McGuire, 2008; Mohamed, 2008; Kaplan and Haenlein, 2010:63; Yu Lin and Peng Lu, 2011; Andrews, 2012;

Aydin, 2012; Dabbagh and Kitsantas, 2012; Powell *et al.*, 2012; Konijn *et al.*, 2013; Reddy, 2013). This in turn allows rapid dissemination of unfiltered but reliable information as well as promote knowledge sharing, idea generation which in turn complements other traditional goals of higher education institutions as tools for learning and teaching (Eberhardt, 2007; Mohamed, 2008; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Powell *et al.*, 2012; Reddy, 2013). Blogs, formerly known as weblogs are used as internet spaces for authors to give personal commentary on issues, new ideas and events for interaction (Perlmutter, 2008; Kaplan and Haenlein, 2010:63). Blogs are typically dated entries in form of images, text and links to web pages or other blogs (Kaplan and Haenlein, 2010:63; Bukvova, 2011). Technorati, a blog community and analysis site, in 2010 noted in its blogosphere that people have an extensive engagement with various social media tools such as blogs, Twitter and social networks (Kaplan and Haenlein, 2010:63; Sobel, 2010).

It is also important to note that within the context of higher education institutions, social media presents opportunity for academic scholarship and outreach for readers to have evidence-based information (Lindgren, 2006; Mohamed, 2008; Kirkup, 2010; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Powell *et al.*, 2012; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013). Blogs can also be used as tools to facilitate research, collaboration, and the sharing of knowledge (Park *et al.*, 2011; Powell *et al.*, 2012). Blogging is being used by scholars, researchers, educators, and extension personnel to voice ideas online in a less formal setting in real time than traditional publication channels to their peers (Kaplan and Haenlein, 2010:63; and Powell *et al.*, 2012:271).

### **2.7.3 Benefits of social media as a tool for research and scholarship**

It is important to note that I highlighted the benefits of social media as a tool for research and scholarship and that social media are helping to fulfil the demand for cheap, instant communication between researchers fuelled by the growth of collaborative and interdisciplinary research as noted by some scholars too (Mohamed, 2008; Hardré and Cox, 2009; Nicholas and Rowland, 2011; Andrews, 2012; Aydin, 2012; Konijn *et al.*, 2013; Reddy, 2013). Social media, including blogs, YouTube videos, Facebook, and Twitter provide a venue for scholarly discussion,

thereby making popular the research (Mohamed, 2008; Kaplan and Haenlein, 2010:63; Bukvova, 2011; and Putnam, 2011; Andrews, 2012; Aydin, 2012; Powell *et al.*, 2012:272; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013). Social media serves as an additional platform for academic researchers to make research processes more available to the public before and after publication in traditional journals (Efimova, 2009; Maguth *et al.*, 2010; Powell *et al.*, 2012:272; Moreno *et al.*, 2013). Powell *et al.* cited a 2010 survey in which over two thousand researchers were examined over the use of social media as tools to support their research activities by communicating effectively with diverse audiences in remote distances and across disciplinary divides (Powell *et al.*, 2012; Moreno *et al.*, 2013). Powell *et al.* further noted that social media or blogs can only complement traditional publication avenues for scholarly work such as conference proceedings, books or journals rather than replacing it.

In addition, journals, conference proceedings and books remain the core traditional means of disseminating research as social media have also become an important complementary channel for disseminating and discovering research (Nicholas and Rowland, 2011). However, there is only a sketchy understanding of how researchers use social media such as Twitter and Facebook, which have made an enormous impact on people's personal lives and for what purposes and how it fits into research life cycle (Nicholas and Rowland, 2011).

A 2010 study was carried out to investigate the impact of social media tools on research work flow using more than 2000 researchers and the study revealed the impact of social media from various points of the research life cycle, to research opportunities as well as disseminating the findings (Nicholas and Rowland, 2011). The study found out three most popular social media tools in a research setting include collaborative authoring, conferencing and scheduling meetings (Nicholas and Rowland, 2011).

## **2.8 WHO USES SOCIAL MEDIA IN THEIR RESEARCH**

Awareness of social media among members of the research community is high, but there is a large gap between awareness and actual use for the majority of tools (Nicholas and Rowland, 2011; Andrews, 2012; Aydin, 2012; Konijn *et al.*, 2013;

Reddy, 2013). There are two groups of researchers, those who use the social media and others who do not use social media. There is a reason to compare and contrast the differences between those disciplines which employ social media in their research. Researchers in the academics, business, health, the biosciences and the arts and humanities are less likely to use social media professionally and for research purposes than their peers (Nicholas and Rowland, 2011). Age is a demographic factor when considering the use of social media in research. Researchers under 35 are generally more likely to use at least one social media application (Nicholas and Rowland, 2011). In terms of new technology, young people are more familiar and comfortable with technologies and social media are by no means a digital native phenomenon (Mohamed, 2008; Nicholas and Rowland, 2011:69, 70-71; Reddy, 2013). Therefore, young researchers younger than 35 years are more likely to use social media professionally than the older group (Nicholas and Rowland, 2011).

In addition, studies have shown that professional users of social media are more likely to use a smartphone, an iPad or other mobile device than non-users (Nicholas and Rowland, 2011). What is different, though, is that active social media users are far likely to use the internet more as a complementary activity, disseminating their findings through email lists and web groups, personal web pages, wikis, blogs, social networks and Twitter, Google Docs (Kaplan and Haenlein, 2010:63; and Nicholas and Rowland, 2011:73).

### **2.8.1 Social media and the research life cycle**

Biosciences and health are the largest users of social media in research workflow than the other disciplines which include business and management (Nicholas and Rowland, 2011). The natural sciences are the big users of collaborative authoring, which has an important role in reviewing the literature. Social media are found useful in different phases of the research lifecycle either for dissemination of research findings at the end, research collaboration and identifying research opportunities. The same social media tools may not be used by the same researchers, but social media is making an impact on scholarly research workflow (Mohamed, 2008;

Nicholas and Rowland, 2011; Andrews, 2012; Aydin, 2012; Moreno *et al.*, 2013; Reddy, 2013). Three most popular social media tools in a research setting are those for collaborative authoring, conferencing, and scheduling meetings (Nicholas and Rowland, 2011). One of the least popular social media tools is social tagging, which is not used for reviewing the literature while scheduling tools are used for managing the research process and collaboration (Nicholas and Rowland, 2011). Conferencing tools are used to enable research collaboration, by all subject groups. Image and video sharing tools assist in disseminating research findings, especially in the natural sciences.

## **2.8.2 Perceived benefits and barriers to the use of social media**

### **Opinions and barriers in the use of social media**

There are mixed opinions, whether an educator or students should use social media sites (Mohamed, 2008; Moran, Seaman; and Tinti-Kane, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Reddy, 2013). Not all social media sites are seen as being valuable tools for teaching. Facebook and Twitter are not seen as having any value for class use (Moran, Seaman; and Tinti-Kane, 2011). The faculty members mentioned video, podcasts, blogs, and wikis as valuable social media tools for teaching and collaborative learning (Kaplan and Haenlein, 2010:63; Moran, Seaman; and Tinti-Kane, 2011). I however want to point out that many factors why researchers are cited as barriers to the use of social media (Nicholas and Rowland, 2011). Factors like lack of time and training as well as lack of institutional support are cited as barriers to the use of social media (Moran, Seaman; and Tinti-Kane, 2011). Majority of faculty members state that social media networks take more time than they are worth (Moran, Seaman; and Tinti-Kane, 2011). Faculty members also responded that online videos from either YouTube or other online video sites are valuable for use in classes (Moran, Seaman; and Tinti-Kane, 2011).

### **Personal initiative in connection with the use of social media**

The most important of all is personal initiative. The reason is that of technological advancement in terms of availability of tools which are easy to use and its perceived contribution to faster and more efficient research (Nicholas and Rowland, 2011).

### **Perceived benefits as it pertains to the use of social media**

A number of perceived benefits (usefulness and enjoyment) are associated with the use of social media by researchers to communicate effectively with diverse audiences in remote distances (Nicholas and Rowland, 2011; Yu Lin and Peng Lu, 2011; Andrews, 2012; Aydin, 2012; Moreno *et al.*, 2013; Narayan, 2013; Reddy, 2013). According to Yu Lin and Peng Lu (2011) people now maintain their networks through the fast developing social media sites. Users of social media spread perceived the economic benefits to relatives and friends thereby increasing network members. Previous researches have pointed out individuals' behaviour of using information technology as a result of gaining value and pleasure (enjoyment). Yu Lin and Peng Lu (2011) revealed that "motivation theory" is used to explain individuals' acceptance and use of information technology in earlier studies. The motivations underlying individuals' behaviour are divided into extrinsic and intrinsic motivation, explaining the cognitive and affective benefits of social media.

### **Extrinsic motivation**

Extrinsic motivation (usefulness) is about an action done because of its perceived usefulness to achieve an improvement on the job or task (Yu Lin and Peng Lu, 2011). Usefulness is a level by which individuals conceive a belief that using a product or service will elevate one's class work or job performance. So researchers discovered that users' perceived usefulness in social media affects the positive intention to use.

### **Intrinsic motivation**

Intrinsic motivation (pleasure/enjoyment) is the opposite of extrinsic. Intrinsic motivation is performing a task due to the interest in the action itself rather than external reinforcement (Yu Lin and Peng Lu, 2011). Pleasure/enjoyment is the mood which an individual undergoes when carrying out a particular task. According to Yu Lin and Peng Lu (2011) scholars include intrinsic motivation in technology Acceptance Models (TAM). It is believed that intrinsic pleasure (enjoyment) that a

user gets from using computer technology to undertake in a work related behaviour enhances behaviour intention.

### **2.8.3 Barriers to the use of social media as a research tool**

According to a study, one of the major factors, which hinder researchers from using social media in their research, is lack of time (Nicholas and Rowland, 2011). Researchers are still unclear about the benefits of using social media to occupy their time. They also have serious concerns about the authenticity of crowd-sourced information (Nicholas and Rowland, 2011). The social media active researcher is much more likely to put out a general call for information (Nicholas and Rowland, 2011). Such researcher may isolate instead of looking out for an expert within his or her institution.

Users and non-users of social media express almost identical preferences when they look for scholarly information. The traditional channels, especially journals, conference proceedings and edited books are liked greatly by social media users and non-users over informal channels such as blogs. Researchers continue to back dissemination routes that they know and trust (Nicholas and Rowland, 2011). It is clear that social media users see informal tools as a complement to the existing system of scholarly publishing, not as a replacement.

### **2.8.4 Drivers of social media usage**

With millions of people using one or more of the different forms of social media, a study by Correa, Hinsley and DeZuniga (2010:247) found that extraversion and sincerity to experiences positively connected to individuals' social media uses. Linking personality traits to the use of social media, Massi (2010) as cited in Lazier (2010) says the underlying need for using the social media can be linked to motivational drivers which include Altruism (assisting others in making the right decision); social (need for a sense of belonging, or to connect with like-minded individuals); Discovery (learning from others, or self-development); Escapism (escape from daily routine); Expression (imagination outlet or expression of personal identity) and fame (challenging one's abilities against that of others).

Massi (2010) as cited by Lazier (2010) also places these motivational drivers of using social media on different levels thereby comparing them to the five stages model of Maslow's hierarchy of needs. Twitter, according to Stopforth (2009:41), is one of the forms of social media as marginally informative and entertaining, which is equivalent to the motivational drivers, Discovery, Escapism and Expression (Massi, 2010). While Pike (2009:28) describes the popularity of twitter as largely a source of information to people. Pike's account (2009:28) is equivalent to the motivational driver, discovery (Lazier, 2010; Massi, 2010). Be it personality traits or motivational drivers, they are all essential for businesses and institutions of higher education to comprehend the justification behind the use of social media. Pinpointing the drivers and concentrating on them help to boost relationships and communication between the relevant parties. There is also the need to focus on the essence of social media (Stopforth, 2009:37) as the use of social media does not translate to the total neglect of traditional media (Jackson, 2010:57). Both can be used (Hearn *et al.*, 2009:56).

The rising popularity of social media around the globe is therefore undeniable. Even though there are challenges in understanding the benefits of social media and ameliorating its dangers, some researchers use social media to improve or speed up their research (Mohamed, 2008; Rhoades *et al.*, 2008; Schneiderman *et al.*, 2011; Andrews, 2012; Aydin, 2012; Reddy, 2013; Mendel, 2014). I want to point out that important difference in these patterns emerged when examining the various types of social media platforms, their popularity across geographic regions, differences amongst demographic groups and differences in their use by individuals in personal and business settings (Hardré and Cox, 2009; Yu Lin and Peng Lu, 2011, Dabbagh and Kitsantas, 2012). Many countries including South Africans are making use of diverse social media platforms they accessed while working on personal computers or through mobile phones while in some remote areas (Ekine, 2010 19-21).

## **2.9 THEORETICAL FRAMEWORK**

Theories of Communication actually began in the 1950s. The theories of Communication are used to further give ideas to what is actually going on pertaining to a study. The theoretical framework for this study will be built on the influential “uses and gratification theory” and it is further discussed below. Social media



platforms are part of the media even though it is social. According to Gentile and Walsh (2002) and Ferguson *et al.* (2007) the uses and gratification theory was seen as an appropriate theoretical foundation for examining the social media platforms since this approach had been previously used to understand the audiences' use of other media (Nyland, 2007; Raacke and Bonds-Raacke, 2008).

### **2.9.1 Uses and gratification**

The 1970s introduced the rediscovery and an elaborate point of what people do with the media, the reason and for what exactly the audience use the media for. The Uses and Gratification theory supports the connection between the users' need or motivation as well as the real use of technology (Bryant and Heath, 2000). Rubin and Perse (1987:59) points out ritualistic and instrumental use as types of motivation for use of technology. Instrumental use of technology refers to the intentional aim of using technology to gratify a need while ritualistic use means the habitual use of technology so as to benefit from the company of other people or to while away time. The Uses and Gratification theory focuses on individual needs and gratification assuming that media consumption is not the same for everyone. This premise of this theory is on more knowledge about audiences and the importance of individual differences in the audience experience. The beginning of the 21st century also contributed to the reawakening of the uses and gratification theory and research in that the technological revolution prompted that as indicated by Johnson and Kay (2002:54; Luo, 2002:4; Stafford, 2004:3) highlighting its importance in interactive technology research.

### **2.9.2 History of uses and gratification theory**

The uses and gratification approach developed from the work of Katz, Blummer and Gurevitch (1974), who criticized previous mass communication studies and approaches for being behaviourist and effect- driven. Prior to the development of uses and gratification theory, the major concern of research was only observable behaviour and the effects of mass communication. Katz *et al.*, (1974) summarized the uses and gratification of mass communication to include the social and psychological origins of, the needs which generate, expectations of the mass media

or other sources, which lead to different patterns of media exposure (or engagement in other activities) resulting in the need gratification and other consequences (Katz *et al.*, 1974:510).

It must however be noted that few past studies showed that within the uses and gratification theory some factors affect or influence consumer's selection of a particular communication technology (Lo and Lie, 2008). So it is the aim of the current study, to determine the use and gratification that people actually experience with the media. Those studies alongside Lo and Lie (2008) find the factors to include perceived ease of use, the usefulness of Communication technology, the ability to facilitate friendship development, the personalization of Communication and a sense of direct connection to one's community influencing the usage of communication technology. Di Gennaro and Dutton (2007) as well as Raacke and Bonds-Raacke (2008) say that the popularity of social media sites, of which Facebook, YouTube and Twitter belong to, serve as meeting points for users' personal and social needs.

Bargh and McKenna (2004) agree that people or users are not passively affected by the technology (internet). But those users mainly and actively shape technology use and influence into a powerful tool for generating social relationships (Di Gennaro and Dutton, 2007). This current study therefore applied the uses and gratification theory since it was a vital way to explore the needs in relation to these social media sites (Raacke and Bonds-Raacke, 2008). Previous research done on social media, particularly Facebook by writers including Raacke and Bonds-Raacke (2008) showed the following uses and gratification that users need to keep in touch with old, and new friend, they make new friends and look at and post pictures. Users also learn about events as well as to post social events. They feel connected and share information about oneself. In addition, users use for academic purposes; and dating purposes.

Govani and Pashley (2005) classify the motivations for social media, especially Facebook, into two groups. The first group deals with reasons in relation to peer pressure and friends' recommendation while the second group is on the usefulness (benefit) of social media for meeting new people, getting help on academic courses, keeping in touch with friends, finding old friends. Majorly, students' reasons for

joining and using the social media fall into both categories. Nyland (2007) reveals that social utility, entertainment and gratification opportunities are three vital factors to understand general areas of motivation for the use of Computer-mediated Communication, CMC. These three factors are present in social networking, e-mail and face-to face communication. Dainton and Zelley (2005) mention that all mass media fulfil four common needs in humans which are information, personal identity and personal relationships or social interaction and entertainment.

This current study therefore examined the uses and gratification of social media among Postgraduate students of the University of Fort Hare, Alice. The study attempted to provide answers to what forms of social media used by Postgraduate students and how available and accessible were the social media platforms to the students.

Uses and Gratification also helped to know Postgraduate students' perceptions of the impact of the social media on their academic research and the extent that social media enhanced the performance of postgraduate students' research activities. The literature reviewed suggested that a variety of social media were used by users in all spheres of life, but the focus of the research was on students' use of social media as a tool for research.

### **Critique of uses and gratification theory**

Ruggiero (2000) criticizes the uses and gratification theory based on whether it is a non-theoretical theory and that it is not a rigorous scientific theory, which relied on mostly self-reports, which were simplistic to determine motives. Ruggiero believed that the uses and gratification theory, is vague in defining some key concepts and just a data collection strategy. He was of the opinion that the uses and gratification theory had done very little to explore the antecedents of gratification sought as well as the social origin of the needs which audience brought to the media; the needs which people seek to fulfil through the media use are inferred from questions about why they use the media, sending across suspicion whether the need was created by the media or just a rationalization of the media use. Ruggiero's other criticism pointed out that the exposure to mass communication, which were likely not always deliberate or purposeful as the information presented showed that much media use is habitual or ritualistic. In this regard, uniform effects were not predicted by uses and

gratifications approach; the focus of theory was basically on an individual and it also relied on some psychological concepts such as needs and neglected the social structure as well as the place of the media. Ruggiero believed that the uses and gratification theory by some studies produced separate typologies of motives and research findings which were not synthesized to produce a comprehensive theory.

Although the above-stated criticisms were important to the uses and gratification approach of the social media for its users, Ruggiero (2000) asserts that the emergence of Computer-mediated Communication, CMC revived the importance of the uses and gratification theory due to the fact it assisted the understanding of new mass communication media especially in the initial stages of the communication medium.

### **Chapter Summary**

This chapter reviewed related literature with regards to the impact of social media, tracing it from the concept of communication and how it has evolved with the internet, the models and theories in the communication process as developed by different scholars and the impact of electronic or computer mediated communication in education. The chapter also discussed what social media is and what it is not as perceived by different scholars, the South African's social media adoption and usage; the popularity of various types of social media in research; the perceived benefits of social media as a tool for research among higher educational institutions as well as the theoretical framework backing up the study.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter discusses the research methodology or design implemented for the study. Research Methodology is the manner in which the research is carried out. The methodology chapter therefore contains the description of the research, the methods used, the research design, the population that was studied and the research instruments (Trochim, 2006). Attention is also given to the participants, the research context, data collection, data analysis and ethics. Issues relating to reliability and validity also discussed.

#### **3.1 METHODOLOGY**

This study makes use of quantitative research. Methodology is the processing of bits of absolute truth by the researcher which formed collected data (Leedy and Omrod, 2010:93-94). According to many researchers, there are two research methods, namely quantitative and qualitative (Clayton: 2010: 95; Blaxter *et al*; 2006:59). They both use a related line of action (procedures) such as formulation or developing of hypotheses, literature review, collection and analysis of data.

##### **3.1.1 Quantitative research method**

A quantitative methodology framework was seen as suitable for this study. Questionnaires were therefore used as a survey research tool to gather data from the Postgraduate students on what their choice was of the Social Media: social Networking Sites such as Facebook, YouTube, Flickr, What's Up, Twitter and Google which they either use for academic purposes or social interaction. According to Ferber *et al.*, (1980), a survey is a method of collecting information from a number of individuals (known as sample) in order to learn or investigate about something about the larger population from which the sample is taken. The current study fell under

quantitative research design. The data gathered and generated contained numerical information and the survey method was used to generate data (Babbie, 2005; Breakwell and Rose, 2006). Data usually implied a search for objective truth, precise measurement and close analysis of target concepts. The researcher was seen as separate from the subject matter, detached and impartial (Babbie, 2005; Davis and Bremner, 2006; Trochim, 2006).

Press (2006:94; 97-98) cites use of quantitative survey methodologies to study culture and its audience. So for the purpose of this research, quantitative research methodology was used. This type of research comprised of either showing the characteristics of an observed phenomenon or tried to explore possible correlations between two or more phenomena. Descriptive research studied a situation as it was rather than modifying the situation under investigation.

### **3.1.2 Choice of quantitative research method for my study**

This study fell under descriptive quantitative research which involved either identifying the characteristics of an observed phenomenon or exploring possible correlations among two or more phenomena. Descriptive research examined a situation as it was. It did not involve changing or modifying the situation under investigation, nor was it intended to determine cause and effects relationship. This study made use of the quantitative method as it was deemed fit for collecting data as timely as possible, within few months. Quantitative research dealt with numerical, amounts and quantities of one or more variable of interests. Questionnaires were therefore used as a survey to gather data from the Postgraduate students on what their choice was of the social media: social Networking Sites such as Facebook, YouTube, Flickr, What's Up, Twitter and Google. Ferber *et al.*, (1980), describes a survey as a method of collecting information from a sample in order to investigate something about the larger population from which the sample is taken. The study evaluated variables through the use of questionnaires to test for psychological characteristics or behaviour among human beings (Leedy and Omrod, 2010: 94; Blaxter *et al.*, 2006: 58; Denzin and Lincoln, 2000: 804; Phophalia, 2010: 19; Clayton, 2010: 95-96). Data were gathered from a population of a large sample which stood for that population in form of figures. Quantitative research relied more

on deductive reasoning (Blaxter *et al.*, 2006). The disadvantages of qualitative research however included collection of data which stretched over months as it was complex and time engaging. A qualitative research method would seek to study complexities of a specific phenomenon (Blaxter *et al.*, 2006: 65). Complex human situations which included the behaviour and values of a cultural group and creation of works of art such as television adverts and works of art would have an in-depth angle (Blaxter *et al.*, 2006: 63-64; Leedy and Omrod, 2010:94; Clayton, 2010:20). Qualitative research method would begin with general research questions instead of specific hypotheses, then collection of an extensive account of words of mouth (verbal e.g. interview feedback, document, field notes or non-verbal data e.g. videotapes, drawings, photographs) and artefacts from small group of people, arranged those data in logical form for verbal or written description of the circumstances studied (Berg, 2004:200-202,205-206; Kothari, 2004; Blaxter *et al.*, 2006: 65-74; Clayton, 2010:95-97,100; Leedy and Omrod, 2010:95; Phophalia, 2010:18). Qualitative research method is a "holistic and emergent" with exact focus, design, measurement tools such as case-study, observation, interviews and interpretations (Kothari, 2004:5). Qualitative research method would make use of few participants to throw more light on a phenomenon with the purpose of generalizing the study (Clayton, 2010:95). Qualitative research method would make use of inductive reasoning.

### **3.2 Research Method**

Since the study dealt with examining what kind of social media tools were being used by students and how such had enhanced students' research activities, a quantitative methodology framework was seen as suitable for the study. Questionnaires were therefore used as a survey to gather data from the Postgraduate students on social media: social Networking Sites such as Facebook, YouTube, Flickr, What's Up, Twitter and Google for academic purposes or social interaction. According to Ferber *et al.*, (1980), a survey is a method of collecting information from a number of individuals (known as sample) in order to learn or investigate about something about the larger population from which the sample is taken. Also Babbie (2005) explains a survey as a frequently used mode of

observation in the Social Sciences whereby a researcher selects a sample of respondents and administers a questionnaire to each person in the sample.

Questionnaire was an instrument designed to gather information from respondents. Whitley (2002) and Trochim (2006) gave similar definitions of survey as a process of collecting data by asking questions and recording peoples' answers in form of numbers. In accordance with these definitions, questions about social media were structured in questionnaire format and answered by the respondents. However, respondents may over-claim or mis-report information (Ellison *et al.*, 2007).

### **3.2.2 Purposes of the survey**

#### **Questionnaire**

The survey method has many benefits and for the purpose of this study on the perception of social media as a research tool among postgraduate students, surveys were important in a complex society such as the one we presently live in. The Survey was seen as a speedy and economical process to determine facts on some topics on peoples' knowledge, expectations, attitudes, beliefs or behaviour (Babbie, 2005). Information was collected through standard questions such that every participant surveyed, responded exactly to the same questions. Furthermore, surveys helped to get a statistical profile of the population with the results given in form of summaries with statistical tables and charts. The survey allowed quick information from the sample of that large population due to students' ability to respond on time as they were faced with so many academic works, reading and other engagements (Whitley, 2002; Babbie, 2005). As many questions as possible were asked on the perception of social media as a research tool among postgraduate students. The survey was also relevant to the study since the researcher was able to elicit information about the uses and gratification of social media, their use of social media within their academic as well as whether they use or regard social media as a tool for research. Participants gave fruitful feedback to questions with assurance that their feedback would be anonymous. There were however some challenges when administering questionnaires such as situations where most students who received questionnaires did not return them and that translated to a decrease in number of questionnaires while those who returned questionnaires may not serve as true representatives. The last reason was due to



misinterpretation of some questions by willing participants (Leedy and Omrod, 2010:189).

## **SAMPLE**

The population for the study were the would-be units for analysis. The populations were categorized into sub-units and a representative member of a population was picked or selected as units of analysis. The total number of Postgraduates in University of Fort Hare was 2,632, out of which 879 were students in East London campus, 226 was the population of Postgraduate students in Bhisho campus while the population of Postgraduate students in Alice campus was 1,527. Out of this number, only ten percent, which was 307 Postgraduate students of the University of Fort Hare across all fields and levels, Faculties and departments (Honours, Masters and PhDs) were participants. Sekaran and Bougie (2010; 296) expressed that any sample size that was larger than 30 and less than 5000 were approximate in meeting the objectives of the study on the perception of social media as a research tool among postgraduate students.

## **CLUSTER SAMPLING**

Cluster sampling under probability sampling was used for 307 Postgraduate students of the University of Fort Hare across all fields and levels, Faculties and departments (Honours, Masters and PhDs). The nearest figure for the sample size was 310 in order to have 5 percent sample error. According to writers, the accuracy of Sample means as estimates of a population parameter could be manipulated by sampling error which occurred because a sample was taken from the population (Sedgwick, 2012:1-2). Sampling error is the difference in size between the sample estimate and the population parameter. Any inaccuracy in the sample estimate comes from it based on a sample of individuals from that population. It was worthy to note that sampling error got smaller as the sample size increased because the more the sample size was, the more it accurately represented the population (Sedgwick, 2012:1-2). The confidence level of the population of the sample of 307 Postgraduate students was set at 0.05 or 95 percent.

## **Time dimension**

A Cross-Sectional approach was used for the research as it allowed people from different age groups to be sampled and compared. Moreover, the researcher was able to collect all of the needed data at a shortest and single time. The disadvantage of cross sectional design was that different age groups sample might have been raised under different environmental conditions and lastly correlations between different age levels could not be computed (Leedy and Omrod, 2010:186).

### **3.3 ETHICAL REQUIREMENTS**

The research was conducted in a manner so as to achieve credibility. A letter of consent was sent from the researcher to prospective respondents explaining the motive of the research. The letter alongside a statement was signed by each participant indicated they understood the objective of the research. Respondents were informed that participation was voluntary and they could withdraw anytime. Participants were not discriminated against and all relevant parties were given an opportunity to participate in the research. Anonymity and privacy were observed.

#### **Administering the questionnaire**

The researcher earlier pre-tested the questionnaire on 30 respondents out of which 25 answered all questions, giving their own interpretation. The goal of the pre-test study was to ensure that the questions were understood by the respondents and to elicit feedback or responses from social media users with the possible addition of uses and gratification. The pre-test study revealed the time it took a respondent to complete a questionnaire. Changes were made to the pre-test study questionnaire after a particular Faculty had too many representatives than the rest of other Faculty. According to Welman *et al.* (2005; 148), pre-test study questionnaire allows the researcher to identify unclear formulated idea or flaws in the measurement procedure. After the amendment, the final questionnaire was restructured and participants were told the objective of the research, which sought to gather information about students' use of social media socially or for academic purposes. With reference to the academic environment, who they were (demographics) and what they considered social media to be whether as forms of Communication. There were no requests for names and student identification numbers in any part of data collection so as to protect their identity. Only the participants had the opportunity of

seeing their surveys and no one else after filling and completing the questionnaires. Participants were asked to hand over the questionnaires. Collection of questionnaires was done a minimum of one week and a maximum of two weeks. At least, sixty to one hundred questionnaires were daily distributed within a week. Two weeks after, the data were collected and recorded as received in preparation for data analysis and interpretation.

### **3.4 DATA COLLECTION**

The process of data collection and the measurement instruments were planned ahead of data analysis techniques and were applied in order to generate an accurate data which could be accurately interpreted.

#### **Data collection procedure**

Questionnaires were administered by hand to respondents in Postgraduates' offices, classes as well as residences.

#### **3.4.1 Measurement instrument**

The researcher developed the questionnaire based on a comprehensive literature review on modes of social media under Computer-mediated Communication. The questionnaire investigated the social media usage, as a research tool, the uses and gratification of social media in form of substitution of face to face interaction. People globally used the social media, e.g. Facebook, Twitter, YouTube as universal communication media for similar reasons. The questions used in the questionnaires were developed by the researcher in relation to the literature reviewed. The researcher scrutinized various sources relating to literature's specific findings on how users made use of social media. A copy of the questionnaire for this study is attached as Appendix 2.

### **3.5 DATA ANALYSIS**

Data were analysed using the SPSS Statistical software program. Statistical Analysis and Reporting System and SPSS are comprehensive, interactive, general purpose packages to generate decision-making information statistics. Where necessary in cases where numbers or frequencies were involved, the results were presented with

high quality tabular and graphical outputs. The analysis provided meaningful results and conclusions through the use of appropriate statistical tests. Descriptive statistics such as frequencies and means were also calculated to form all overall summaries of the data. Rating scale otherwise called Likert scale (Leedy and Ormrod, 2010: 189) was used and data were analyzed quantitatively. The researcher used the rating scale to simplify and quantify participants' attitude or behaviour (Leedy and Ormrod, 2010:190).

### **3.5.1 Chi-square test**

A Chi-square test was used to measure the data. The Chi-square test can be explained as a significant test that relied on counts rather than scores (Lachenicht, 2007). The results were evaluated by reference to the Chi-Square distribution. Hence, a hypothesis was tested stating that the frequency distribution of certain results observed in a sample, was consistent with a particular theoretical distribution (Lachenicht, 2007). The Chi-square test was used to analyze whether gender and respondents' information literate interact or whether respondents' to social media use and gender interact.

### **3.5.2 Evaluation of data assumptions for chi-square analysis**

The present study fulfilled the assumptions for Chi-square test analysis (Lachenicht, 2007). The number of subjects expected in each cells must reach a certain minimum. The expected frequency was not less than five in at least 80% of the cells. However, in an example, the expected frequency is less than five and subsequently the finding was interpreted with caution. Another assumption was that items and people were independent of each other. The foregoing was ascertained due to the fact that all subjects were included in the table. Furthermore, each observation came from a different subject.

### **3.5.3 Reliability and validity (data quality)**

This section discussed the two ways by which a researcher could measure the quality of data instruments and the quality of data. The application of these approaches ensured that the results generated for a particular study, were true.

## **Reliability analysis**

The researcher conducted a pre-testing of the questionnaire in a pilot study using a small group of people to assess their understanding of the questions, to detect possible errors for amendment. The researcher also used Cronbach' alpha, the most widely objective measure of reliability (Tavakol and Dennick, 2011).

Reliability is the ability of a measure to yield the same results during repeated trials (Babbie, 2005; Trochim, 2006). Surveys likely had greater reliability than validity. This was as a result of all respondents having the same standardized reaction or feedback. And this might mean that the researcher's observation was reliable (Babbie, 2005). Even though the respondents might receive the questionnaire, it might not mean that the questionnaire was reliable. And so, for the researcher to show that a measure was reliable, independent observers and research tools, procedures and statistics, which yielded consistent measurements were needed (Babbie, 2005, Trochim, 2006). Reliability analysis was conducted to determine whether the questionnaires could measure consistently. It was very vital to ensure that the questionnaire gave a consistent score across respondents. This could be achieved by determining the Cronbach alpha, which was the estimate of consistency of responses to the different scale of items in the survey (Finchilescu, 2007). A high Cronbach alpha suggested that a survey has strong test-retest reliability. It might give the same result every time it is applied to the same individual.

## **Validity**

Validity is the degree by which a study can accurately measure and reflect the information the research is trying to measure (Babbie, 2005; Trochim, 2006). Validity can also refer to whether the researcher measured what she or he was supposed or expected to measure. In the context of this research, internal validity meant whether the researcher accurately measured the uses and gratification of the social media e.g. Facebook, Twitter, YouTube, blogs or others. Though artificial nature of the survey was that it might negatively impact on the overall validity while trying to gauge respondents' actual feelings.

## **Chapter Summary**

This chapter discussed how the study made use of quantitative research design under the research methodology. The chapter also looked at the methods used, the population that was studied and the use of questionnaires to collect data with particular attention given to the participants with regards to ethical consideration. How data were collated and coded for easy analysis as well as issues relating to reliability and validity were also discussed.

## **CHAPTER FOUR**

### **RESULTS, DATA INTERPRETATION AND DISCUSSION**

#### **4.0 Introduction**

This section discussed the results of the findings based on the analysis of the completed questionnaires with use of tables and graphs. Out of three hundred and ten, only two hundred and sixty-four completed questionnaires were received. Data were analysed using the Statistical software program, SPSS, which is a comprehensive, an interactive as well as general purpose package used for statistical analysis of data concerning the respondents' information. The analysis of such data was used to create tables alongside the graphs. An elaborate explanation was presented for each of the tables and its corresponding graphs followed by discussion as well as interpretation of results. Descriptive statistics such as frequencies and mean were calculated to form an overall summary of the data.

The first part of the chapter focused on the reliability of the questionnaire. It included a broad outline of the findings in terms of the basic demographics of the sample and descriptive statistics were supplied for each question. The second part of the chapter used statistical analyses and test to further interrogate the findings and to look for statistical significance.

The questionnaire investigated the social media platforms as a research tool, the uses and gratification of social media in the form of substitution of face to face interaction. People globally used the social media, e.g. Facebook, Twitter, YouTube as universal communication media for similar reasons. 264 respondents were from the following five faculties and departments: Management and Commerce, Science and Agriculture, Social Sciences and Humanities, and Education. The departments include the following: Agricultural Economics, Agricultural Extension, Agronomy, Animal Science, Economics, Botany, Business Management and Commerce, Microbiology, Chemistry, Communication, Computer Science, Geology, Geography, Economics, Environmental and Biological Sciences, English, Law, Library Science, Livestock and Pasture Science, Physics, Political Science, Psychology, Public Administration, Soil Science, Social Work, Sociology and Zoology.

## Section A

### 4.1 Demographics of respondents

The study focused on 264 Postgraduate students and the use of social media as a research tool. Information about the respondents such as age, gender, race, nationality, country of origin, level of study and year, Faculty, departments, residence and ICT literate were captured in tables and graphs.

Figure 1a: below shows the composition of the respondents' race.

Out of the 264 questionnaires that were returned, 258 respondents (representing 97.7%) were black, 3 respondents (representing 1.1%) were Chinese, 2 respondents (representing 0.8%) were coloured and 1 respondent (representing 0.4%) was white.

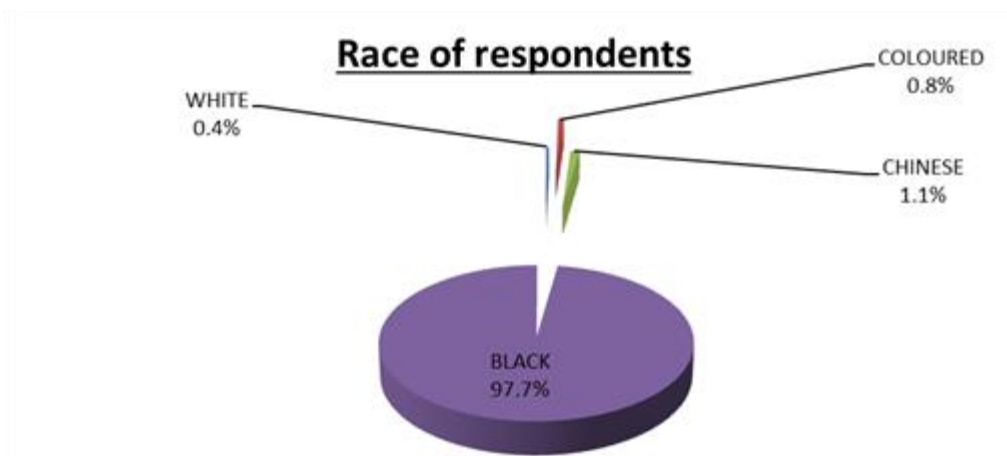


Figure 1a: shows the race of respondents

Figure 1b below indicates that out of the 264 respondents from different countries, who took part in the survey, 113 respondents (representing 42.8%) were South Africans, 57 respondents (representing 21.6%) were Nigerians, 77 respondents (representing 29.2%) were Zimbabweans, 6 respondents (representing 2.3%) were Cameroonians, 4 respondents (representing 1.5%) were Kenyans, 2 respondents (representing .8%) were from Lesotho, 1 respondent (representing .4%) was a Malawian and 1 respondent (representing 4%) was from Swaziland. Below is the graph.



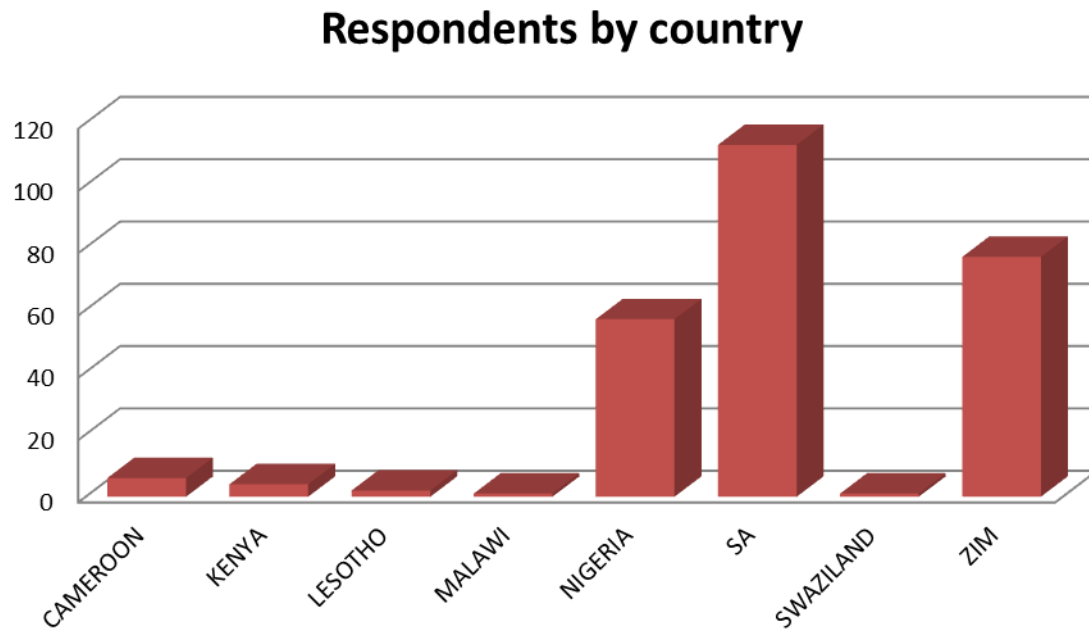


Figure 1b: respondents from different countries

#### 4.1.1 Ages of respondents who took part in the survey.

Out of the 264 respondents (across gender, nationality, all levels of study, departments and Faculty), 105 of the respondents (representing 40.1%) are between the ages of 20 to 25 years followed by 98 of the respondents (representing 37.4%) are 25 to 30 years. 32 of the respondents (representing 12.2% ) are 35 to 40 years old. 10 of the respondents (representing 3.8%) fall between 30 to 35 years. 11 of the respondents (representing 4.2%) are aged 45 to 50 years old. 4 of the respondents (representing 1.5%) are 40 to 45 years. The researcher created the age range based on what the research considered to be distinctive stages of life. Figure 2 below indicates the graph for the percentages and ages of the 264 respondents.

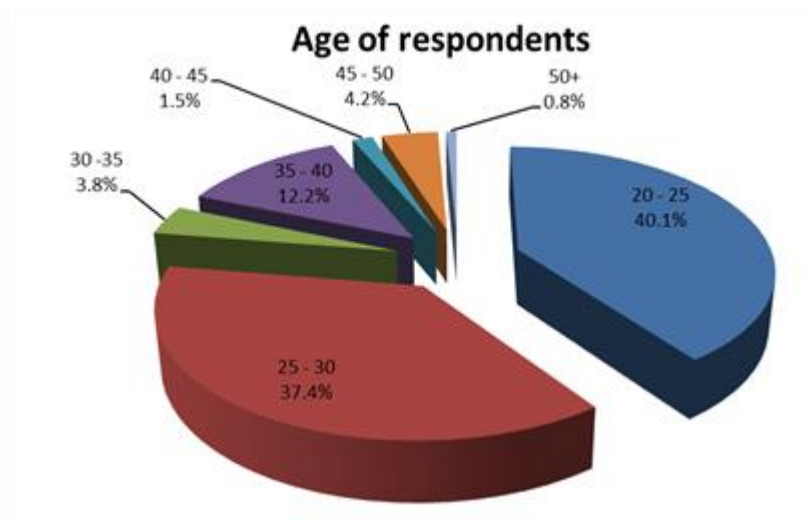


Figure 2: Age and percentages of the respondents

#### 4.1.2 Gender of respondents

Figure 3 below indicates the graph for the gender of the 264 respondents across nationality, levels of study, departments and Faculty, of which, 128 respondents (representing 48.5%) are females while 136 respondents (representing 51.5%) are male. See figure 3 below

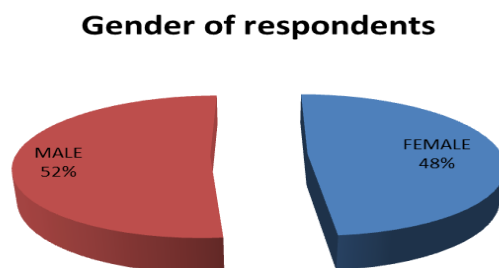


Figure 3: illustrates that the sample consisted of more males than females. There is a clear difference in the use of social media use between the gender.

### 4.1.3 Level of study of the respondents

The survey revealed that the Masters and Honours students are of the majority, due to the time and use of social media at their disposal unlike the PhDs and post-docs who have bulk task before them. Out of the 264 respondents across departments and Faculty, 117 of the respondents (representing 44.3%) are Masters followed by 75 of the respondents (representing 28.4%) who are Honours. 55 respondents (representing 20.8%) are PhDs while 13 of the respondents (representing 4.9%) are postdocs. There is however missing value for 4 respondents (representing 1.5%). Figure 4 below indicates the graph level of study for the respondents.

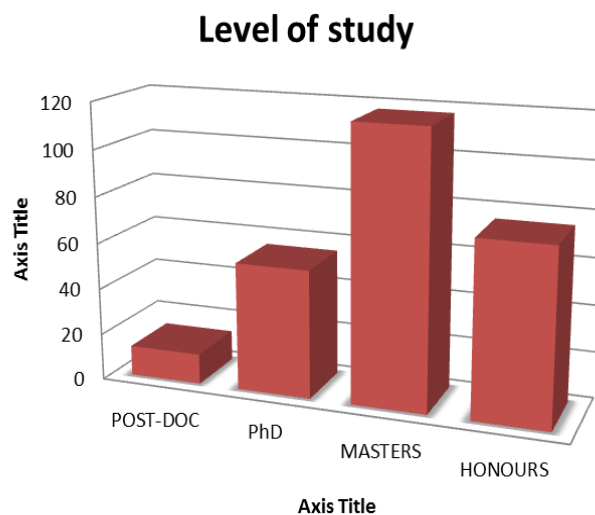


Figure 4: Level of study of the respondents

### 4.2 Evaluation of respondents' age and ICT literacy level before coming to the University of Fort Hare.

It was important to note know if the 264 respondents were Information, communication and Technology (ICT) literate before coming to the University of Fort Hare. And when asked this question, this is the row percentage (that is out of the 105 of age range of 20 to 25, 12 respondents are “not at all”, 52 respondents ticked

“partially” while 41 ticked “yes” which gives a percentage of 42.9%, 52.5% and 29.9% respectively. See Table 2 below.

			INFORMATION LITERATE			Total
			NOT AT ALL	PARTIALLY	YES	
AGE	20 - 25	Count	12	52	41	105
		% within INFORMATION LITERATE	42.9%	52.5%	29.9%	39.8%
	25 - 30	Count	9	36	53	98
		% within INFORMATION LITERATE	32.1%	36.4%	38.7%	37.1%
	30 -35	Count	2	2	8	12
		% within INFORMATION LITERATE	7.1%	2.0%	5.8%	4.5%
	35 - 40	Count	4	5	23	32
		% within INFORMATION LITERATE	14.3%	5.1%	16.8%	12.1%
	40 - 45	Count	1	0	3	4
		% within INFORMATION LITERATE	3.6%	0.0%	2.2%	1.5%
	45 - 50	Count	0	3	8	11
		% within INFORMATION LITERATE	0.0%	3.0%	5.8%	4.2%
	50+	Count	0	1	1	2
		% within INFORMATION LITERATE	0.0%	1.0%	0.7%	0.8%
Total	Count	28	99	137	264	
	% within INFORMATION LITERATE	100.0%	100.0%	100.0%	100.0%	

### **.Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.093 <sup>a</sup>	12	.036
Likelihood Ratio	25.725	12	.012
N of Valid Cases	264		

a. 11 cells (52.4%) have expected count less than 5. The minimum expected count is .21.

Table 2: indicates ICT literate before coming to University of Fort Hare.

The Chi-Square test carried out on the data was significant at the 0.036 level ( $p < 0.05$ ) of significance. ( $\chi^2 = 22.093$ ,  $df = 12$ ) so i conclude that there is a significant difference in the ages of the respondents and their information literate, that is it is unlikely that the variables are independent.

#### **4.2.1 Evaluation of respondents' ICT literacy by level of study before coming to the University of Fort Hare.**

Out of the 264 respondents per level of study, 12 respondents (representing 8.8% postdocs) ticked "yes", 35 respondents (representing 25.5% PhDs) ticked "yes", and 60 respondents (representing 43.8% Masters) ticked "yes" while 30 respondents (representing 21.9% Honours) ticked "yes" respectively. See Table 3 below.

### LEVEL OF STUDY \* INFORMATION LITERATE

			INFORMATION LITERATE			Total
			NOT AT ALL	PARTIALLY	YES	
LEVEL OF STUDY	POST- DOC	Count	1	1	12	14
		% within INFORMATION LITERATE	3.6%	1.0%	8.8%	5.3%
	PhD	Count	7	14	35	56
		% within INFORMATION LITERATE	25.0%	14.1%	25.5%	21.2%
	MASTERS	Count	10	48	60	118
		% within INFORMATION LITERATE	35.7%	48.5%	43.8%	44.7%
	HONOURS	Count	10	36	30	76
		% within INFORMATION LITERATE	35.7%	36.4%	21.9%	28.8%
	Total	Count	28	99	137	264
		% within INFORMATION LITERATE	100.0%	100.0%	100.0%	100.0%

Table 3: ICT and level of study

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.969 <sup>a</sup>	6	.014
Likelihood Ratio	17.497	6	.008
N of Valid Cases	264		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.48.

As shown in Table 3, the Chi-Square test was significant at the 0.014 level ( $p$ -value < 0.05) of significance. ( $\chi^2 = 15.969$ ,  $df = 6$ ) so we conclude that there is a significant difference in the representation of the students' level of study and information literate.

#### 4.2.2 Evaluation of respondents' ICT literacy level by faculty before coming to the University of Fort Hare

Table 4 below shows that in Social Sciences and Humanities, 23 respondents (representing 16.8%) ticked "yes"; against 13 respondents (representing 13.1%) who ticked "partially" and 5 respondents (representing 17.9%) are "not at all". For the Faculty of Education, 2 respondents (representing 7.1%) are "not at all"; another 2 respondents (representing 2.0%) ticked "partially" while 8 (respondents representing 5.8%) ticked "yes". 23 respondents (representing 16.8%) in the Faculty of Management and Commerce ticked "yes"; 28 respondents (representing 28.3%) ticked "partially" while 7 respondents (representing 25.0%) are "not at all". In the Faculty of Law, 1 respondent (representing 0.7%) ticked "yes"; another 1 respondent (representing 1.0%) ticked "partially" and 0.0% is "not at all". Lastly, Science and Agriculture, 82 respondents (representing 59.9%) ticked "yes"; 55 respondents

(representing 55.6%) ticked “partially” and 14 respondents (representing 50.0%) are “not at all”. See Table 5 below:

#### ICT LITERATE VERSUS FACULTY

			INFORMATION LITERATE			Total
			NOT AT ALL	PARTIALLY	YES	
FACULTY	SOCIAL SCIENCES AND HUMANITIES	Count	5	13	23	41
		% within INFORMATION LITERATE	17.9%	13.1%	16.8%	15.5%
	EDUCATION	Count	2	2	8	12
		% within INFORMATION LITERATE	7.1%	2.0%	5.8%	4.5%
	MANAGEMENT AND COMMERCE	Count	7	28	23	58
		% within INFORMATION LITERATE	25.0%	28.3%	16.8%	22.0%
	LAW	Count	0	1	1	2
		% within INFORMATION LITERATE	0.0%	1.0%	0.7%	0.8%
	SCIENCE AND AGRICULTURE	Count	14	55	82	151
		% within INFORMATION LITERATE	50.0%	55.6%	59.9%	57.2%
Total		Count	28	99	137	264
		% within INFORMATION LITERATE	100.0%	100.0%	100.0%	100.0%

Table 4: Respondents’ ICT literacy level by faculty before coming to the University of Fort Hare



### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.266 <sup>a</sup>	8	.508
Likelihood Ratio	7.749	8	.458
N of Valid Cases	264		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .21.

The Chi-Square test was insignificant at the 0.508 level (p-value > 0.05) of significance. ( $\chi^2 = 7.266$ , df = 8) so we conclude that there is no significant difference in the representation of the students' faculty and information literate.

## Section B

### 4.3 INFORMATION ON ACCESSIBILITY

#### 4.3.1 Evaluation of respondents' access to computers, laptops and phones

It was important to know that concerning access to computers, laptops and phones and out of 264 respondents only 260 respondents (representing 98.5%) said "Yes" while 4 respondents (representing 1.5%) said "No". Therefore almost all students have access to computers from schools or from home, through cell phones and personal workstations. See table 6 below.

#### COMPUTER ACCESS

	Frequency	Percent	Valid Percent	Cumulative Percent
YES	260	98.5	98.5	98.5
Valid NO	4	1.5	1.5	100.0
Total	264	100.0	100.0	

Table 5: Evaluation of respondents' access to computers, laptops and phones

Cross-tabulation shows that out of the 98.5% respondents' computer access by age, 90% of respondents are aged 30 to 35 and 97.1% of 20 to 25 years ticked "Yes". Almost (100%) respondents between 25 to 30 years and 35 to 40 and above have access. This means almost every respondent owns a personal laptop or there are computers in the school's laboratory and library to facilitate students' learning as well as communication.

#### 4.3.2 Respondents' ratings of access to online materials for research

From the table 7 below, 52 respondents (representing 19.7%) say access to online materials is "poor", 155 respondents (representing 59.7%) are of the opinion that it is "good" while 56 respondents (representing 21.2%) ticked "excellent". There is 1 non-responsive answer (missing value representing .4%). See table 7 below. **Cross tabulation** on access to online materials based on level of study shows that 38% post docs ticked "excellent" against 36% Honours and 34.2% Masters and other 30.8% postdocs and 31.5% PhDs, who ticked Good. 39.5% of second-year respondents, 32.4% of first year respondents and 26.7% third year respondents ticked online materials as "good" against 1.2% first year respondents, 1.3% second year respondents and 0.0% third year respondents, who ticked "poor". See Figure

**Access to online materials**

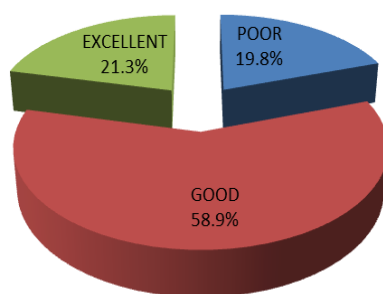


Figure 5: Respondents' access to online materials

### 4.3.3 Respondents' ratings on whether online materials are sufficient for research

Similarly, respondents opinion about whether online material is sufficient, out of the 264 returned questionnaires, 46 respondents (representing 17.5%) ticked "poor"; 170 (representing 64.4%) say "good" while 43 respondents (representing 16.3%) ticked "excellent". There are however 5 unresponsive answers (missing value representing 1.9%). See graph in figure 6 below

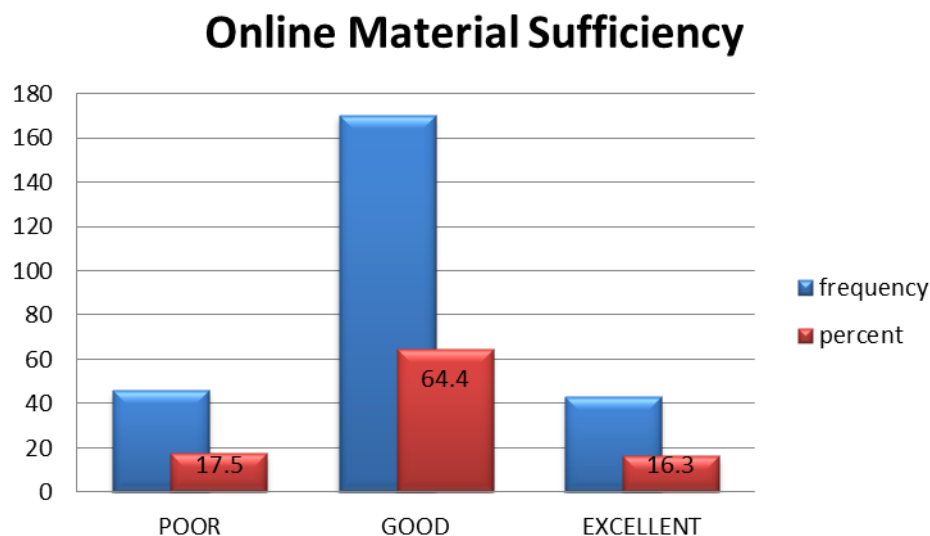


Figure 6: Respondents' view whether online materials are sufficient

## SECTION C

### 4.4 ACCESSING SOCIAL MEDIA AS TOOL FOR RESEARCH

#### 4.4.1 Respondents' usage of social media as a research tool before coming to the University of Fort Hare.

Out of the 264 respondents per level of study, the graph in table 8 and Figure 7 below illustrate that one hundred and 40 respondents (representing 54.0%) say "Yes", while 119 respondents (representing 46.0%) ticked "No". **Cross tabulation** based on gender showed that 59.4% male ticked "Yes" than 48.4% female. 51.6% of the female ticked "No" for not using social media than 40.6% male. **Cross**

**tabulation** based on age showed that in the category for “Yes”, 75% of respondents aged 40 to 50 have used social media before against 48.5% of respondents aged 20 to 25 and 55.7% of the respondents aged 25 to 35years. By level of study in the “Yes” category, 70.4% of respondents (PhDs), 50% of respondents (post docs) as well as respondents (Honours) have used social media than 49.1% Masters. See Figure 8 below.

#### USED SOCIAL MEDIA BEFORE COMING TO UFH

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	140	53.0	54.1	54.1
Valid NO	119	45.1	45.9	100.0
Total	259	98.1	100.0	
Missing .	5	1.9		
Total	264	100.0		

Table 6: Respondents’ usage of social media as a research tool before coming to the University of Fort Hare. This is shown in the graph in figure 7 below

#### USED SOCIAL MEDIA

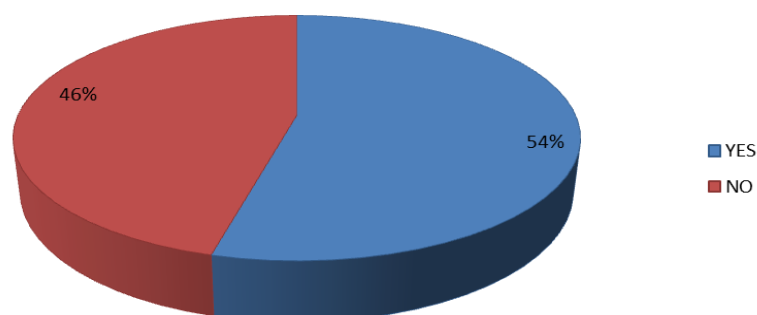


Figure 7: Indicates respondents’ usage of social media as a research tool before coming to the University of Fort Hare

#### **4.4.2 Respondents' familiarity with social media**

All (100%) of the 264 respondents are familiar with Facebook, Twitter and blogs. All the (100%) respondents between the ages of 20 to 30 are more familiar with YouTube. People in that age range are always very adventurous and exploring. It seems that the male category likely tend to use the social media more than the female. The male usually downloads videos of scientific discoveries, movies, music and other areas for self-development, education, entertainment or research.

#### **4.4.3 Respondents' frequent use of social media**

All the 264 respondents (100%) say they have access to mobile smart phones. All the respondents (100%) indicated that they have access to laptops. It means almost everyone has access to a personal laptop at the residence, the departments or school library or laboratory. All (100%) of respondents across departments have access to the laboratory either owned by the school. The males are likely to have more access to phones than the females.

#### **4.4.4 Respondents' views on social media accessibility**

Out of the 264 respondents, 102 respondents (representing 38.6%) say social media is "strongly accessible"; 77 of the respondents (representing 29.2%) ticked "neutrally accessible"; while 78 of the respondents (representing 29.5%) say "not strongly accessible". There are 7 unresponsive answers (missing value representing 2.7%). **Cross tabulation** on social media accessibility versus level of study, shows that 63.6% post docs, 34.0% PhDs, 43% Masters and 36% Honours ticked "strongly accessible". See Figure 8 below

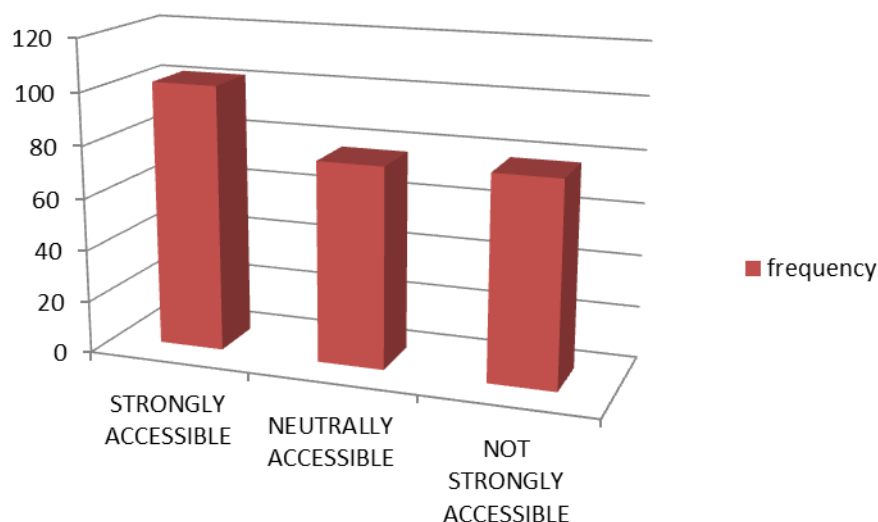


Figure 8: Respondents' on social media accessibility

#### 4.4.5 Respondents' views on the mode of accessing the social media

Out of the 264 respondents, 154 respondents (representing 58.3%) say they “frequently” access the social media; 95 respondents (representing 36.0% ) ticked “sometimes”. 3 respondents (representing 1.1%) say they hardly make use of the social media by choosing “rarely” while 1 respondent (representing 0.4%) ticked “never” as seen in Table 7 below. **Cross tabulation** shows that all the (100%) respondents across all levels of study are familiar with Facebook and Twitter even if they do not access it for academics or research. Respondents of all age ranges are familiar with blogs and frequently use blogs. This means almost everyone uses blogs either to gather research topics or purely for communication. It can be argued that blogs seem to be more used by respondents, especially from ages between 20 to 30 and 35 to 40. Without any doubt, one can say the respondents see social media as platform to access electronic-web-based knowledge, information and opinion to improve their research as supported by scholars and writers (Mohamed, 2008; Sasfko and Brake, 2009: 4-6; Yu Lin and Peng Lu, 2011, Schneiderman *et al.*, 2011 Andrews, 2012; Aydin, 2012; Dabbagh and Kitsantas, 2012; Reddy, 2013).

#### HOW ACCESSIBLE ARE THE SOCIAL MEDIA

		Frequency	Percent	Valid Percent	Cumulative Percent
	FREQUENTLY	154	58.3	60.9	60.9
	SOMETIMES	95	36.0	37.5	98.4
Valid	RARELY	3	1.1	1.2	99.6
	NEVER	1	.4	.4	100.0
	Total	253	95.8	100.0	
Missing	.	11	4.2		
Total		264	100.0		

Table 7: Respondents' views on mode of accessing the social media

#### 4.4.6 Respondents' view on usage of Social media as research tool

Out of the 264 respondents, 171 respondents (representing 64.8%) "frequently" use social media, 81 respondents (representing 30.7%) choose "sometimes"; 6 respondents (representing 2.3%) say "rarely" while 1 respondent (representing .4%) choose "never". However there are 5 unresponsive answers (missing value which represents 1.9%). The respondents, who ticked "frequently", are a typical social media user.

#### HOW OFTEN DO RESPONDENTS MAKE USE OF THE SOCIAL MEDIA

		Frequency	Percent	Valid Percent	Cumulative Percent
	FREQUENTLY	171	64.8	66.0	66.0
	SOMETIMES	81	30.7	31.3	97.3
Valid	RARELY	6	2.3	2.3	99.6
	NEVER	1	.4	.4	100.0
	Total	259	98.1	100.0	
Missing	.	5	1.9		
Total		264	100.0		

Table 8: How respondents use social media

#### 4.4.7 Evaluating whether respondents ever thought of Social media as research tool.

Out of the 264 respondents, 141 respondents (representing 53.4%) say they “frequently” feel like using social media as a research tool, 70 respondents (representing 26.5%) choose “sometimes”; 20 respondents (representing 7.6%) say “rarely” while 17 respondents (representing 6.4%) ticked they “never” thought of using social media as a research tool. However, there are 16 unresponsive answers (missing value which represents 6.1%) as seen in table 9 below. The respondents, who ticked “frequently” are typical social media users. They gratify their needs with technology such social media either to seek for more knowledge, information while getting entertained.

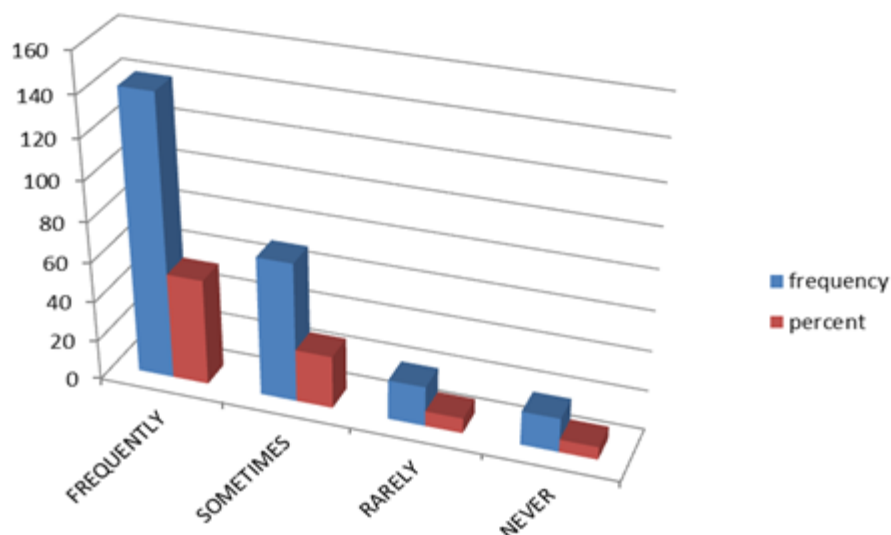


Figure 9: indicates if respondents thought of using social media ever as research tool

#### 4.4.8 Departments' views on whether social media improved their research in any way

This is the breakdown of the 264 respondents from different departments who said the use of social media has improved their research. 28 respondents in Chemistry (representing 10.6%) said “Yes” social media has improved their research activities; followed by 25 respondents (representing 9.5%) in Biochemistry and Microbiology; 20 respondents (representing 7.6%) in Economics. 18 respondents (representing



6.8%) in Livestock and Pasture Science said “Yes” social media has improved their research; 14 respondents (representing 5.3%) in Physics; 13 respondents (representing 4.9%) in Communication; 13 respondents (representing 4.9%) in Computer Science; 13 respondents (representing 4.9%) in Business Management. 10 respondents (representing 3.8%) in Agric Economics; 10 respondents (representing 3.8%) in Education; 10 respondents (representing 3.8%) in Social Work. 9 respondents (representing 3.4%) in Botany said “Yes” social media has improved their research; 9 respondents (representing 3.4%) in Industrial Psychology. 8 respondents (representing 3.0%) in Agronomy and 8 respondents (representing 3.0%) in Geology ticked “Yes” social media has improved their research. 7 respondents (representing 2.7%) in Microbiology and 7 respondents (representing 2.7%) in Public Administration. 4 respondents (representing 1.5%) in Development Studies; 4 respondents (representing 1.5%) in Management and 4 respondents (representing 1.5%) in Commerce and Sociology. 3 respondents (representing 1.1%) in English, 3 respondents (representing 1.1%) in Geography and 3 respondents (representing 1.1%) in Zoology said “Yes” social media has improved their research. This section attests to the points made by researchers such as Nicholas and Rowland (2011), who had earlier pointed out that people in the Academics, business, health, the biosciences and the arts and humanities are less more likely to use social media professionally and for research purposes than their peers. See Table 11 and figure 10 the graph below.

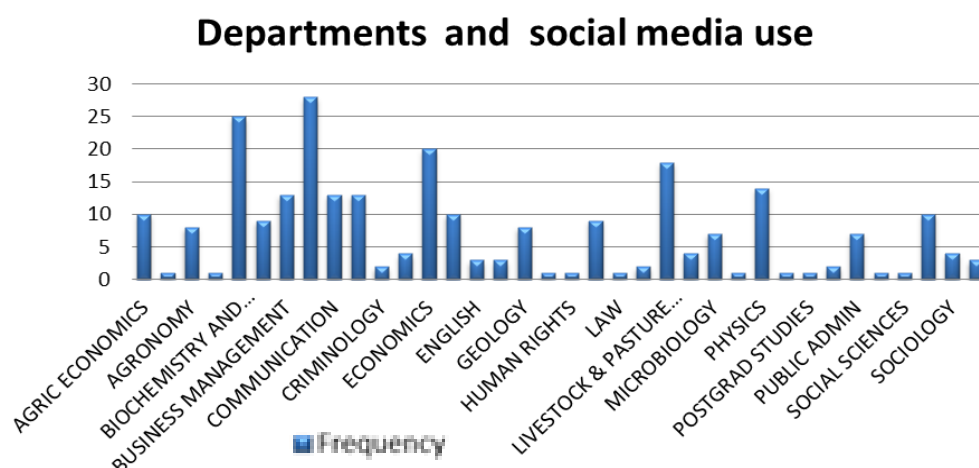


Figure 10: shows a breakdown of departments saying “yes” social media has improved their research.

#### **4.4.9 Respondents' views as to whether social media have improved their research in any way**

The graph in figure 11 reveals that out of the 264 respondents, 119 respondents (representing 45.1%) said “yes” and they are of the opinion that social media have improved their research. 78 respondents (representing 29.5%) ticked “partially”; 57 respondents (representing 21.6%) ticked “No”. There are 10 unanswered respondents (representing 3.8%) as missing value. In conclusion, all the respondents for “Yes” are more than “partially” and “No” as seen in See figure 11. Social media has helped to improve respondents' research. **Crosstabulation by age**, all (100.0%) of the respondents above 50 years ticked “yes” and they are of the opinion that social media have improved their research; followed by 58.1% of the respondents aged 35 to 40. 50.5% of the respondents between 25 to 30 ticked “Yes”. 50.0% of the respondents aged 40 to 45 years as well as 45 to 50 also ticked “Yes”. This supports the views of scholars like Nicholas and Rowland (2011) who assert that age is a demographic factor when considering the use of social media in research. Nicholas and Rowland (2011) believed that researchers under 35 are generally more likely to use at least one social media application than the over 35years old. Other writers had also said that in terms of new technology, young people are more familiar and comfortable with technologies and social media, which are by no means a digital native phenomenon (Mohamed, 2008; Nicholas and Rowland, 2011:69, 70-71; Reddy, 2013). **Crosstabulation by Faculty**, For the “Yes” category, 66.7% respondents in the Faculty of Education and 53.8% respondents of Social Sciences and Humanities ticked “yes” and they are of the opinion that social media have improved their research. Others are 50.0% of respondents in Law; 46.2% in Science and Agriculture and 40.7% in Management and Commerce. 50.0% respondents in Law; 34.5% in Science and Agriculture; 25.9% in Management and Commerce; 25.0% in Education and 23.1% in Social Sciences and Humanities ticked “Partially”.

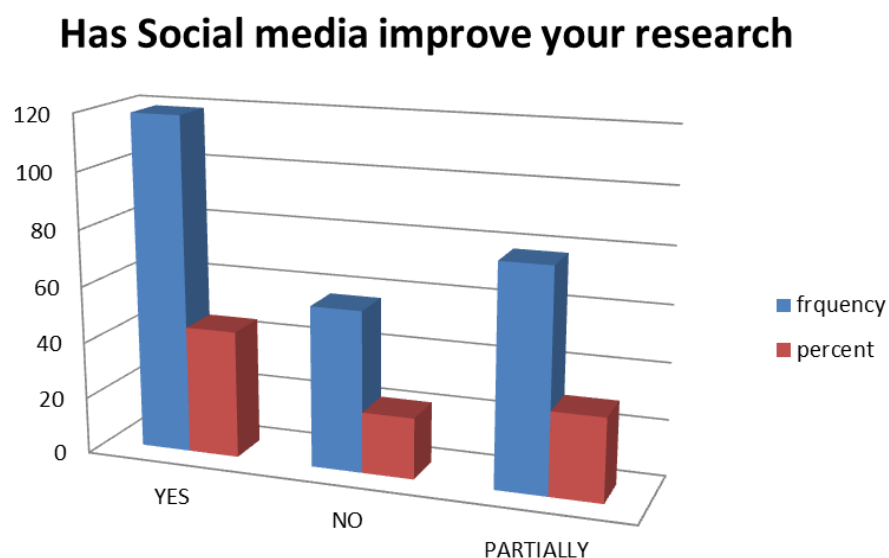


Figure 11: Respondents' views as to whether social media has improved their research.

#### 4.4.10 Respondents' usage of social media as a tutor or practical demonstration.

The graph in figure 12 below reveals that out of the 264 respondents, 114 respondents (representing 43.2%) say they “frequently” use social media for practical knowledge for demonstration as a senior student or tutor. 70 respondents (representing 26.5%) ticked that they “sometimes” use social media for practical knowledge for demonstration as a senior student or tutor; 24 respondents (representing 9.1%) “rarely” use of social media for practical knowledge or demonstration as a senior student or tutor. 45 respondents (representing 17.0%) ticked that they “never” use social media for practical knowledge or demonstration as a senior student or tutor. 11 unanswered respondents (representing 4.2%) are missing value”. See graph in Figure 12

### Social media knowledge as a tutor for practical demonstration

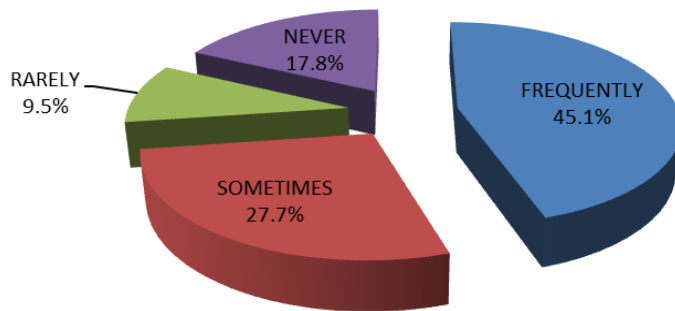


Figure 12: Usage of social media either as a tutor or practical demonstration

#### 4.4.11 Respondents' consideration of social media as a platform for research

The graph as shown in figure 13 below on whether social media should be considered a good, poor or excellent platform for research indicates that out of 264 respondents, 131 of the respondents (representing 49.6%) regard social media as a “good” platform for research, 21 respondents (representing 8.0%) ticked that social media is “excellent” platform for research while 105 of the respondents (representing 39.7%) say it is “poor”. There are 7 unresponsive answers (missing value representing 2.7%) . Respondents' regard for social media as a “good” platform for research is supported by Govani and Pashley (2005) and Yu Lin and Peng Lu (2011). These writers had pointed out that individuals' behaviour of using information technology is as a result of gaining value and pleasure or enjoyment within the uses and gratification theory. These writers used the "motivation theory" to explain individuals' acceptance and use of information technology based on conceived beliefs that using a product or service elevates one's class work or job performance or that a user gets pleasure from using computer technology to undertake in a work related behaviour which also enhances behaviour intention. See figure 13 below

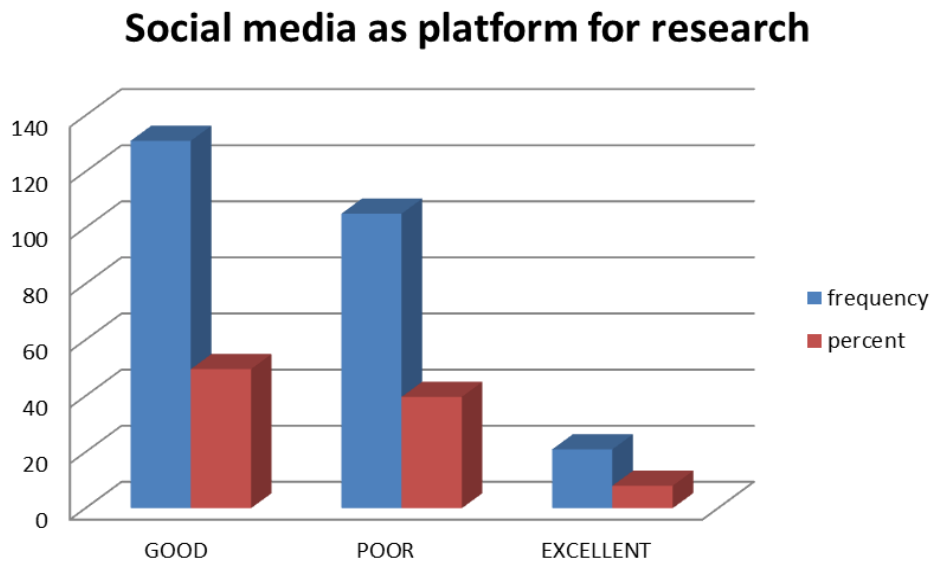


Figure 13: Respondents' view on social media as a platform for research

Major factors, which hinder researchers from using social media in their research is lack of time and the fact there were still unclear about the benefits of social media. They also have serious concerns about the authenticity of crowd-sourced information as supported by (Nicholas and Rowland, 2011).

## Chapter Summary

This Chapter discussed the results of the findings based on 264 completed questionnaires returned out of three hundred and ten that were administered. The 264 respondents were from the following five faculties and departments: Management and Commerce, Science and Agriculture, Social Sciences and Humanities, and Education. The departments include the following: Agricultural Economics, Agricultural Extension, Agronomy, Animal Science, Economics, Botany, Business Management and Commerce, Microbiology, Chemistry, Communication, Computer Science, Geology, Geography, Economics, Environmental and Biological

Sciences, English, Law, Library Science, Livestock and Pasture Science, Physics, Political Science, Psychology, Public Administration, Soil Science, Social Work,

Sociology and Zoology. Data were analysed using the Statistical software program, SPSS. The analyses of the data were used to create tables alongside the graphs. An elaborate explanation was given for each of the tables with corresponding graphs followed by discussion as well as interpretation of results. Descriptive statistics such as frequencies and mean were calculated to form an overall summary of the data. The chapter also discussed the reliability of the questionnaire using statistical analyses to test the results for statistical significance. Next chapter is the conclusion and recommendations drawn up from the findings.

## **CHAPTER FIVE**

### **Conclusion and Recommendations**

#### **5.0 Introduction**

This chapter therefore provides the conclusion and recommendations from the findings of the study as well as the limitations of the study. The chapter also looked at postgraduate students' use of social media for research, enhancement of research and innovative skills. Most importantly, social impact on research and the challenging factors to note when using social media for research.

The major aim of this study has been to assess the relevant literatures and analyses of data on previous chapter, which highlighted the views of respondents' findings. The study has therefore confirmed that social media has to a large extent improved postgraduate students' research activities and that students frequently seek practical knowledge using social media for demonstration and tutorship.

### **SUMMARY OF KEY FINDINGS**

#### **5.1 Postgraduate students' use of social media for research**

The core findings from the analyses of data in the study showed that most of the respondents, who were matured access online materials and use all forms of social media to search for related research topics in audio and video format, scholarly articles, books and journals. Majority of the postgraduate students have access to computers at home, in the school library, on personal laptops, smart phones and computer laboratories even though the University of Fort Hare is equipped with the basic technological devices, which such students are able to efficiently use. This study has to a large extent proved that social media have an impact on research based on the views of the respondents, who acknowledged that the use of social media has helped to enhance their education as well as research activities. The study identified the various forms of social media platforms utilized by students to gratify their social integrative needs each day thereby combining learning, education and research as the fundamental elements. Respondents used social media for

different purposes as individuals tailor their usage to fit their specific needs each day. It is also important to note that respondents' access the social media for different reasons best known to them as social media provides respondents with many uses and gratification, mostly revolving around its convenient nature. Individuals have therefore in one way or the other differently incorporated social media into their lives. Respondents' engagement with social media is evident in their growing interest in exploring how social media sites were useful in different situations including research. This suggests that matured postgraduates already considered circumstances where technology could improve their lives as they become more familiar with social media technology.

## **5.2 Social media for enhancement of research and innovative skills**

Social media has become a new form of communication with huge numbers of users on popular sites expanding at exponential rates, with millions using these tools as part of their everyday life, both for work and play. Many participants make use of YouTube and blogs to obtain, learn or communicate their research via the social media websites. The study sees researchgate.net and academia.com as different in this regard, because people in such networks are mostly in the field of research with experiences of people using social media as tools for communication. There is also a belief that through social media, research results can be disseminated to a larger audience rather than mere scientific community and more effectively than traditional communication channels. Some groups of people consider YouTube, Blogs and LinkedIn as an effective way to communicate research results to people of like minds in the research area in general. Social media can be an educational tool for updated information or the latest version of lesson materials especially on YouTube; Research-gate, academia.com and etc. Students will therefore always have an added advantage of limitless access to information. Mohammed (2008) had earlier pointed out that there was lack of research on social media particularly, Facebook's use as an educational resource. Ryan et al., (2011) and Aydin (2012) also revealed that social media platforms could be more utilized as an educational environment regardless of the fact there were unanswered questions as to how efficiently social media could be. This study agrees to debates by researchers like Burgess and



Green (2009) and Anna Scott (2013), an expert on social communication who posited social media as a shift in power from the traditional top-down media to individuals with access to technology and literacy. Individuals' voices are powerfully heard anywhere in the world and younger adults are mostly users of social media, with the number of adult users of social network expanded from 60% in 2005 to 70% in 2013 according to Pew Research Center (<http://pewinternet.or/reports/2013/social-networking-sites.aspx>).

## **CONCLUSION OF THE STUDY**

This study has to a large extent proved that social media has an impact on research based on the views of the respondents. This study has revealed that respondents used social media Facebook, YouTube, Twitter, Blogs, BBM, Whatsap, Research gate and Academia.com for or as a tool for research. Respondents say that the use of social media uplifts their education, learning as well as research activities. As such, social media platforms are utilized by students to gratify their social integrative needs thereby combining education and research as stated by Moreno *et al.* (2013). Though, the argument here is that the use of social media for research among the youths and students is very high particularly for knowledge on variety of research topics, updates on research discoveries and target cultures, follow-up on how to do things better in order to succeed generally.

This study has come to the conclusion that most postgraduate students use the social media sites to collect and share research ideas and topics, from online articles either for further research or debates while some are of the view that people on social media sites look for fun. The study also found that social media sites like Facebook site is seen not purely for research purposes but regarded as a tool for science communication allowing easy access to experts' blogs, new findings as well as research updates or methods. The social networking sites allowed free flow of research findings to increase people's knowledge thereby creating an impact on research. Arguments are presented for and against that the social media platforms such as YouTube, Facebook, Research Gate, and LinkedIn, which are majorly explored for science communication in that they promote effective and quick

interaction for exchange of thoughts, idea as well as concepts. The study see LinkedIn just for scientific debates since science and communication is part and parcel of each other and then communication is a social interaction and social networks are devoted to create virtual social interactions. Social networks are very powerful tools for scientists. The fast innovations in technology such as social media can further be linked to what positive impact research could have on education, communication and governance. There is a need to build a corporate strategy for social media because social media allows so much connection directly with stakeholders and beneficiaries across the digital divide: the borders, geographical distances and time differences. Evidently, social media plays the role of the instigator by serving as a new way of carrying out one's work in a more efficient, learning and sharing in a meaningful manner as supported by Maguth *et al.* (2010).

Having reviewed relevant literatures and analysed data collected, these are the conclusions: It has been noted that researchers derive many benefits from engaging with social media as they use, distribute and find information via the social media. Considering the fact that social media is classified as a communication tool. This study also notes that most postgraduates also use social media to conduct their academic research and communicate. Evidently, social media is classified as a communication tool allowing users to feel that they have different options to meet their needs depending on mood and accessibility. Social media can therefore modify the manner in which people carry out their research with its reach keeps expanding every day through mobile social media. In research, students who used technology to analyse information and learning achieved success in their presentation. Social media has so far served as an effective tool in social learning, e-learning, environmental learning, business, art and chemistry education. Therefore, I conclude from this study that social media platforms are valuable research tools for researchers to reach out and conduct studies within the populations which are not likely to be reachable in traditional research.

## **5.4 RECOMMENDATIONS OF THE STUDY**

This study has been quite enlightening and has provided positive feedback regarding the perceptions of social media as a tool for research among postgraduate students, University of Fort Hare, Alice campus. It has also assisted to indicate that people, particularly postgraduate students are always exploring the social media or perhaps any new technology. Social media had created an environment even for education, information; communication, entertainment (edutainment meaning a combination of education and entertainment) as well as learning. The recommendations are as follows:

- This study concluded that since students are seen to spend chunk of their time on social media platforms and search engines for various reasons, academic research inclusive, it therefore becomes imperative to create more links for students to explore books, scholarly journals and articles necessary for research and academic purposes within the social media
- I conclude that subsequent future research should be undertaken so as to be able to prove that social media is a valid tool for research. This can help to boost better academic and research results. Technology is rapidly developing and transforming the world, people as well as students need to try and align themselves with the technology advancements especially in education.

## **5.5 LIMITATIONS OF THE STUDY**

There are many problems or limitations faced by the study. One of the problems is that although the study revealed that postgraduate students are users of social media for multi-purpose in addition to being a communication tool. Another problem is that majority of the respondents were predominantly black Africans since the University of Fort Hare is a Black school located in the rural Nkonkonbe province. The third problem is that females were the dominant respondents because the female population are more than the male in the school. The fourth problem is that since the study sample was predominantly black the statistical analysis eliminated

race for some reasons best known to the researcher. This is because many individuals from different race and countries also use social media. Though the study has proved that social media as a useful research tool, has been able to enhance performance of research activities by postgraduate students. There is no physical access to academic records. Subsequent future research should be able to prove this point with access to academic records and results. The questionnaires consisted self-reported measures which might lead respondents to over-claim or mis-report information. Another critical fact is that the study tries to focus on only social media users, which formed part of the sample, implying that the results cannot be generalized considering the non-users even among the students. Some postgraduates in the Psychology department say that the social media is not a valid tool for research hence it is not reliable research tool..

## **Chapter Summary**

This chapter discussed Postgraduate students' use of social media for research, enhancement of research and innovative skills, most importantly, social media impact on research as well as the challenging factors to note when using social media for research. The chapter also looked at the conclusions and recommendations as well as the limitations of the study. Social media has an impact on research by students, as students gratify their social integrative needs which include education and research. It is recommended that more links within the social media platforms be created for students and researchers to access scholarly articles for academic and research purposes.

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# QUESTIONNAIRE



University of Fort Hare  
*Together in Excellence*

## Introduction

Social media platforms including Facebook, YouTube, Twitter and blogs place academic research in the public sphere for rapid information sharing, which in turn complement other traditional goals of higher educational institutions as tools for communication, learning and teaching diverse audiences at remote distances and across disciplinary divides (Glassick *et al*; 1997; Wise *et al*; 2002, Yu Lin and Peng Lu, 2011; Powel *et al*; 2012, Dabbagh and Kitsantas, 2012).

As a Master's communication student, this questionnaire will help to identify the types of social media which postgraduate students make use of within their academics as a research tool. This questionnaire is designed to know how accessible or available these social media are.

Analysis of the questionnaire will enable me to know how students use the social media in and within (the institution). Information provided by students will be analysed and data would be used to prepare action plans.

All information received within the study will be treated **strictly confidential**.

Please complete the questions honestly and openly based on your own personal experience at UFH.

## SECTION A Biographical data

Please complete the following:

1. What is your age range?

20- 25 ☐ 25-30 ☐ 30-35 ☐ 35 -40 ☐ 40-45 ☐ 45-50 ☐ 50+ ☐

2. What is your gender?

Female ☐ Male ☐

3. What is your race?

White ☐ Coloured ☐ Chinese ☐ Black ☐ Indian ☐

4a. What is your nationality?

SA citizens ☐ Nationals of other countries ☐

4b. If answer to number 4a is Nationals of other countries. Please specify

5. Are you a part time or full time Postgraduate student?

Full time ☐ Part time ☐

6. What level of postgraduate programme are you?

Post-doc Doctoral ☐ PhD ☐ Masters ☐ Honours ☐

7. What year are you in postgraduate studies?

First year ☐ Second ☐ Third ☐

(8). In which faculty are you?

Social Sciences and Humanities ☐ Education ☐ Management and  
Commerce ☐ Law ☐ Science and Agriculture ☐

- (9). In which department are you? .....
10. Are you resident on campus?
- Yes ☐ No ☐
11. Before you came to University of Fort Hare did you consider yourself information literate?
- Not at all ☐ Partially ☐ Yes ☐

## SECTION B Information on accessibility

Questions here relate to the use of University of Fort Hare's computing facilities as well as support given by the School's IT department, whose duty is to promote effective use of technology.

12. Do you have access to computers, laptops and phones?
- Yes ☐ No ☐
13. How do you consider access to online materials?
- Poor ☐ good ☐ excellent ☐
14. How do you rate the email system and access to the internet?
- Poor ☐ good ☐ excellent ☐
15. How do you rate the provision of up to date and appropriate computer applications to help your study?
- Poor ☐ good ☐ excellent ☐
16. How do you consider the availability of online material sufficient for your study?
- Poor ☐ good ☐ excellent ☐



## SECTION C

### Accessing Social media as tool for research

The mission of the research is to evaluate students' use of social media as a research tool within their courses apart from being information literate. Please select the appropriate response and rate the following questions on a scale ranging from poor to excellent.

17. Have you used any of the social media as a tool of research before you came to UFH?

Yes ☐ No ☐

18. How accessible are the social media outside class?

Strongly accessible ☐ neutrally accessible ☐ not strongly accessible ☐

19. Which forms of social media are you familiar with?

Facebook ☐ Twitter ☐ Blogs ☐ Youtube ☐ others not specified here ☐

20. Which forms of social media do you frequently use?

Facebook ☐ Twitter ☐ Blogs ☐ YouTube ☐ others not specified here ☐

21. Where do you have access to any of the social media platforms?

Library ☐ mobile smart phone ☐ on laptop ☐ Laboratory ☐ cybercafé ☐

22. How accessible are the social media in the above option(s) picked in number 19 and 20?

Frequently ☐ Sometimes ☐ rarely ☐ never ☐

23. How often do you make use of the social media?

Frequently ☐ Sometimes ☐ rarely ☐ never ☐

24. How do you make use of the social media as part of academic activities?

Daily ☐ Weekly ☐ Monthly ☐ Yearly ☐

25. Does it ever occur to you that you can use social media as a research tool?

Frequently ☐ Sometimes ☐ rarely ☐ never ☐

26. Have you used the social media as a research tool?

Frequently ☐ Sometimes ☐ rarely ☐ never ☐

27. Has social media improved your research as a student in any way?

Yes ☐ No ☐ Partially ☐

If answer to 26 is yes, please specify what your research is on and which area.

.....

29. As a senior student, have you ever use social media as part of your acquisition of knowledge as a tutor or practical demonstration?

Frequently ☐ Sometimes ☐ rarely ☐ never ☐

30. Do you consider the social media as platform for research?

Good ☐ poor ☐ excellent ☐

THANK YOU.



**University of Fort Hare**  
*Together in Excellence*

**ETHICAL CLEARANCE CERTIFICATE**  
**REC-270710-028-RA Level 01**

Certificate Reference Number: OSU011SOGU01

Project title: **Perceptions of Social media as a tool for research : A study of postgraduate students : University of Fort Hare, Alice Campus**

Nature of Project: Masters

Principal Researcher: Adeyemi Abolanle Ogunnubi

Supervisor: Dr OO Osunkunle

Co-supervisor:

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

**Special conditions:** Research that includes children as per the official regulations of the act must take the following into account:


Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
  - Any unethical principal or practices are revealed or suspected
  - Relevant information has been withheld or misrepresented
  - Regulatory changes of whatsoever nature so require
  - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely



**Professor Gideon de Wet**  
**Dean of Research**

24 July 2014