

CHAPTER FOUR

SOCIAL MEDIA RESEARCH PHILOSOPHIES

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CHAPTER OBJECTIVES

- Conceptual explanations of social media concerning research philosophy.
- Overview of social media research philosophies.
- Kinds of social media research philosophies.

ABSTRACT

Social media has become an inevitable aspect of the entire life of mankind in the 21st century including research. In the last decade, research are carried out in the conventional mode of the use of methodologies that are more physical than digital. Contemporarily, social media is gradually usurping the mode of research in academia technically. Social sciences benefit more from the use of social media research methods because of the unfettered access to large data easily obtained from the comfort of internet gadgets. The main issue with any credible method of research is reliability and validity and social media has these potentials. One of the fundamental elements of research is philosophy. This chapter therefore examined analytically the social media research philosophies. Data were assembled from documented sources and interpreted using a content analysis method. The study discovered that the influx of internet and digital communication facilitates global research among academics and it has succeeded in improving the visibility of research and dissemination of data but any researcher that is using social media research method must adhere strictly to the ethics and philosophies of the research undertaking as discussed in the findings section of the study such as validity, reliability, ethics, confidentiality and other elements. The study recommends among others that the social media research method will dominate the future of research as it has already done in the 21st-century world of academia. Researchers should embrace and utilise positively the social media research methods but they should maintain the etiquette and philosophies to avoid unethical conduct and bastardisation of knowledge.

Keywords: Internet, Research method, Social media, Philosophies

INTRODUCTION

The emergence of the internet and mobile communication in modern times led to the revolution in another form of communication called ‘Social Media. Social media involves types and varieties of internet and mobile communications that allow users across the globe to interact personally either privately or publicly. Social media consists of blogs, networking, media sharing, bookmarks and other related contexts and contents. Social media evolves in the early 2000s and are in different varieties such as Facebook, WhatsApp, Twitter, Instagram, YouTube, LinkedIn, WeChat and many others (Dewing, 2012). Social media tools and internet apparatus offer the users a large data, information, networking, and cross-fertilisation of ideas and activities (Wooley & Howard, 2019: 3). Today’s society is described as the ‘Information Society’ because of the influx, influence, and revolution in the social media (Fuchs & Sandoval, 2014). Contemporarily, even journalism has been digitalised courtesy of the internet revolution and the emergence of social media (Howard & Hussain, 2013).

Social media is a new form of media that is referred to as personal and marketable interactive participation. The social media era has been seen as the era in which the broadcast media subsided for interactive media and journalism. With the emergence of social media, internet technologies, and mobile gadgets, a new variety of media age was born based on collective and easier interaction unprecedented in the history of mankind (Harvey, 2014). Social media created a pattern of relationships accompanied by visibility in modern times where the usage of the tools exposed an individual to public and private scrutiny (Busch, 2019). Social media has recently become the tool of business and marketing promotion by those who built the skills in doing so. Goods and services are promoted using the platform where millions of customers are reached. Thus, it is not only used for social networking or the expression of an opinion but rather for several purposes (Kelsey, 2017).

Social media has been reaching a wider population in the world in 2019 as revealed by the Global Web Index 2019. For instance, the total number of internet users in 2019 is reported as 4.388 billion which is more than half of the entire global population in the same year. The number of social media users is reported worldwide in 2019 as 3.484 billion which is nearly or equally half of the entire population of the world. The number of mobile phone users is recorded at 5.112 billion in 2019. The total percentage share of penetration of the use of social media is 3% up from 2018. The report further indicates that Europe has the highest number of internet users, mobile and social media users more than any other region in the world followed by North America while Sub-Saharan Africa and the African Continent are the least. The most frequent social media sites used by internet users are Facebook, YouTube, WhatsApp, Facebook Messenger, WeChat and Instagram (Global Web Index, 2019). These statistics revealed that social media is a global force that cannot be ignored in all ramifications. This is the reason why academics to are not left behind in the utilisation of social media for research and data gathering.

Academics and researchers in various fields of human endeavours have been exploring the contents of social media for academic activities currently. Many studies (Riffe, Lacy & Fico, 2008; Poynter, 2010, Tyson, 2012; Page, Barton, Unger & Zappavigna, 2014; Townsend & Wallace, 2015; Snelson, 2016, Matzner & Ochs, 2017; Wright, 2017; Queen-Haase & McCay-Peet, 2017; Kapoor, Tamilmani, Rana, Patil, Dwivedi & Nerur, 2018; Micova, 2019; Hasebrink & Holig, 2019; Arelli, Spezzano & Shrestha, 2019; Chesher, 2020; Pinto, 2020) agreed that social media is now a tool beyond mere social interaction but one of the reliable source of data collection and analysis. Surveys, interviews, studies and other forms of research techniques as well as statistics are now obtainable and applicable in the social media context. The studies further supported the fact that there are ethics, sources, philosophies and a designed method for data gathering, data dissemination and analysis in social media. This is a new field of research in academia which deserves much attention. This chapter is an effort in explaining social media research philosophies being one of the vital areas that are not properly and adequately addressed by researchers. The aim of contribution of this chapter is to present a new dimension in that perspective which will cover the research gap and enrich the existing body of knowledge in the subject matter of study. The chapter explored critically and analytically the overview of social media and kinds of social media research philosophies which provides a practical guide for academic researchers who find it interesting in utilising the platform of social media for data gathering and sharing of knowledge. It is a new field of research that has not been fully divested by researchers and which requires much attention because the future of academic research is seemingly inevitably in the use of social media platforms for the generation of data and its dissemination. Thus, the chapter was arranged in the following themes: an overview of social media; meaning, nature and dimension, global distribution in the usage of social media, an overview of social media research philosophies and kinds of social media research philosophies.

OVERVIEW OF SOCIAL MEDIA: MEANING, NATURE AND DIMENSION

Social media has a question attached to it ‘what is social about social media?’ The term was coined to identify the new demands for economic strategies of internet companies, especially after the ‘dot.com’ financial crisis that led to the crash of internet companies. The term social media has various concepts depending on the target and usage. For instance, Amazon, Google and Wikipedia are also social media but purposely aimed at business promotion and profit-making. Others such as Gmail, Yahoo, Facebook, WhatsApp, YouTube, Instagram and many are having a different perception. While they are still serving as a platform for internet companies to generate money, the users get much more personal and collective usage than Amazon or Google for example (Fuchs & Sandoval, 2014:2). Social media is tagged as ‘Digitalised media’ by Howard and Hussain (2013) is in their views, social restructuring and social movement in the modern era of democratisation which offered the civil societies and activists the leverage for the liberation of the society from dictatorship as in the case of the Arab Spring in North Africa which later spread into the Middle East.

Social media, according to Harvey (2014), is a term that is referring to new kinds of media that involves collective and interactive participation. They are some kind of digital platform

be it mobile or a stationary gadgets or equipment that are receptive to internet network. Social media involves participation and it does not accommodate passiveness because a user must create a profile even if it is a fake one at least, to be able to interact. Harvey (2014) identified different forms of social media including Email, Texters, Blogs, Message Boards, Connection Sites, Social Networking Sites, Games and Entertainment and Apps. Social media is viewed as the consequence of the spread of the internet and mobile phones where communications and activities were transferred and taken to the world of the internet. Online shopping, advertisements, e-governance, and economic activities such as tax collection, e-commerce and digital election or digital democracy are all carried out on various social media platforms in our contemporary world (Schwanholz & Graham, 2017:1).

Social media is perceived as a variety of internet technologies and mobile services which enable users to interact online, and join groups and communities and associations online. Some of the internet services that are associated or linked up with social media include Blogs which is mostly online journal, Wikis where someone has access to create his own page or modify information, and Social Bookmarking where individuals are allowed to share links to websites, Social Networks Sites where personal and private connections and communications are made, Status Update Services such as Twitter where people share an update, Virtual World Content where games and entertainments are offered for the visitors of the site and Media Sharing Sites where users post messages, videos and pictures such as Instagram and YouTube (Dewing, 2012). Social media is not only for entertainment it can be used for marketing and most of those who acquired skills in the attraction of customers online become hot cake in the global business environment. Kelsey (2017) presented four (4) basic areas where social media marketing is beneficial to the users which include Content, Adword, Social Media Marketing and Analytics (CASA). Stevenson (2011), Del Giudice, Peruta and Carayannis (2014) argued that social media such as Facebook, WhatsApp, LinkedIn, Twitter, YouTube and Instagram have come to stay and will be the dominant influence in people's life. The ability of a company or a business organisation to utilise the strategy of social media presence will determine its survival and success in the future.

The 21st century is flooded with the presence of various internet platforms that build on the ideological and technological foundation of 2.0 which witnessed the generation and sharing of content values by individuals and organisations. Unlike traditional media platforms where the users are the end recipient without input, social media distinguishes itself because it is action-oriented where the participants can initiate debates and actions in an equal flow. These are what social media assumed today in modern communication (Cheng & Cameron, 2018:9). Social media are internet platforms that offer the public an opportunity to share their pictures, videos and meet new friends or share views and ideas like never before in the history of the world (Greve, 2014). Apart from socialising in the internet, Bock (2012) believed that social media is used in contemporary world to prevent violence, especially against vulnerable groups through advocacy and sharing of vital information on impending or suspecting violence or the one that occurred to protect its re-occurrence.

Social media is a dramatic change that occurred in the life of mankind in some years ago. The internet technology revolution set the foundation for an easy means of spread of information with accessibility and affordability. Thus, communication, marketing and academic activities are now carried out in the social media arena unlike some years back when it is not possible. These social media tools are the platforms, apps and other designed means of sharing of data, information, news, pictures, videos, locations and virtually all the information and services that one needs in modern times to be comfortable (Young & Akerstrom, 2016:2). However, Merkelson, Mollerstrom & Platen, 2016:13) argued that social media is today beyond a personal or marketing communication. It is now the central dominant tool for Public Relations (PR) design and strategy. Young, Coombs and Holladay (2016:26) further supported and extended the above argument that modern technology enables the digital world to influence convincingly PR practice in both direct and indirect ways possible. Social media can claim credit for its sharing of information in an equal way or participatory approach. Initially, communication took the dimension of transmission of views only but social media made it possible today for a co-participatory perspective from both the supplier and recipient of the knowledge or information (Cassinger & Thelander, 2016:34).

The realm of public governance, democracy and citizenship has also been touched positively and is directly affected by social media. E-Governance or digital communication is now being embraced more by public organisations to communicate to the citizens or members of organisations. Tools such as Email, WhatsApp, Facebook, Telegram, YouTube, LinkedIn, Instagram and WeChat are utilised by organisations and national governments to communicate (Criado, Pastor & Villodre, 2018: 3). Some case studies China, (Ma, 2018), Sweden (Liden, 2018), Greece (Triantafillidou, Lappas, Kleftodimos & Yannas, 2018), Turkey (Sobaci, Hatipoglu, Mehmet & Korkmaz, 2018), USA (No & Park, 2018), Israel (Lev-On, 2018), Norway (Larsson, 2018) and Ecuador (Welp, Capra & Freidenberg, 2018), all revealed the level of engagements of citizens with their governments through the platforms of social media in terms of elections, policy-making participation and lamentations. The studies, although, revealed several challenges that vary from one area to another, disclosed that the level of engagement and utilisation of social media is commendable and progressive.

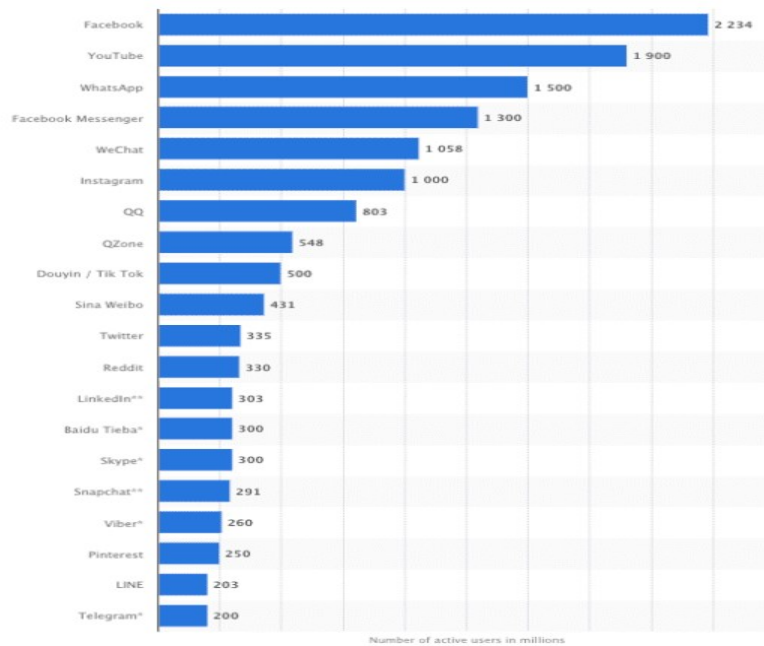
Thus, drawing from the above various views and submissions of scholars in the field, social media from the perspective of this study is deduced as a new platform and source of data collection online for academic research through data collection in both primary and secondary methods, data dissemination and revelation of information as well as public engagement through advocacy and political as well as socioeconomic development.

SOCIAL MEDIA USAGE: A GLOBAL VIEW

Social media and social network services and activities have become so dominant and permeative today that the percentage of global users keeps on rising annually. The nature and pattern of penetration are satisfactory for the pundits that are keeping a close watch on social media research. Although the level and pattern of the usage of social media vary from one

The global increase in social media usage since January 2018 is 9%. Saudi Arabia has the largest social media penetration in 2019 at 99%, which is well above the global average of 45% (Global Web Index, 2019). Other countries with the largest social media penetration included Taiwan, South Korea and Singapore. Ghana, Kenya and Nigeria have the lowest levels of social media penetration. The global distribution of social media usage indicates that Facebook is the most used or visited the site. The Global Web Index used the methodology of identifying the most frequently visited site on social media and the time spent on it for the period of 2019. Facebook is inarguably the most popular going by the registered users of over 2 billion followed by YouTube with 1.9 billion users, WhatsApp with 1.5 billion users and others as revealed in the statistics below.

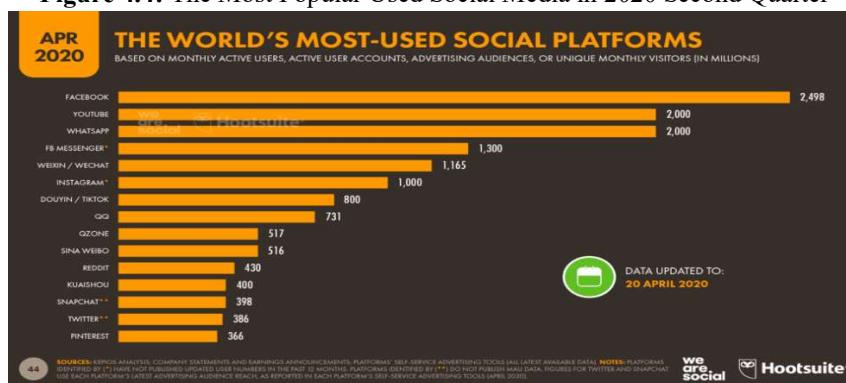
Figure 4.3: The Most Popular Social Media Platforms Based on Population of Users



Source: Global Web Index 2019

In the wake of COVID-19 pandemic, the most popular used social media in the second quarter of 2020 revealed the following statistics.

Figure 4.4: The Most Popular Used Social Media in 2020 Second Quarter



Source: Adopted from Kemp (2020)

Africa is one of the continents that is much interesting in this study. It is a continent bedevilled with myriads of political, socioeconomic and technological backwardness. But to show how effective and vehement the internet and social media are, the level of penetration displayed how defiant of all the odds the digital age is in terms of usage and accessibility. For instance, in the first quarter of 2020, the percentage of internet penetration in Africa reached 39.3%. This is significant even though, the rest of the world recorded 62.9% with a global average of penetration of 58.8%. Countries with high penetration percentage in 2020 consisted of Kenya (87.2%), Libya (74.2%), Seychelles (72.5%), Mauritius (67%), Tunisia (66.8%), Morocco (64.3%), Cape Verde (63.3%), Mali (61.6%), Nigeria (61.2%), Gabon (58.8%), Senegal (58.2%), Algeria (58.0%), Zimbabwe (56.5%), South Africa (55%), Djibouti (55.5%), Zambia (53.7%) and Namibia (53%) (Internet World Stats, 2020). This sample is taken only from countries in the report who meet up the criteria of 50% penetration and above in this study. Africa recorded 11.5% global internet penetration in the first quarter of 2020 as against the rest of the world with 88.5% penetration (Global Web Index, 2020). In the realm of social media usage in Africa, statistics revealed that 66.71% used Facebook, 18.16% used YouTube, 8.27% Pinterest, 5.66% Twitter, 0.75% on Instagram and 0.17% Tumblr (Social Media Stats Africa, 2020).

The above data point toward one interesting philosophy for this research; the use of social media for academic research. Indeed, previous researchers in the world of academia had never had it this easy as their contemporary counterparts in data collection with ease of accessibility and breaking the barrier of time and financial constraints (Romele & Terrone, 2018). A platform that is engaging nearly one-third of the global population cannot be ignored by researchers and it should be a viable platform for generating data and disseminating them (Bachimont, 2018). This work is interested in the above figures and statistics to show the necessity and the urgent desire for undertaking the project itself, and to show, why social media research method is inevitable today. Surveys, qualitative and quantitative approaches, interviews and other methods of data collection are now carried out by millions of researchers through social media. The biggest challenge is the question of validity, reliability and checkmating fake news and cooked data which have been dominating the social media arena (Ferraris, 2018). This study will come up with some philosophies and guidance towards scientific and reliable ethics and philosophies of data collection, data dissemination and other methods of undertaking research using social media instruments.

There are various divergent views on the impacts of the explosion of social media on research. For instance, Ali (2019) argues that the explosive number of users of internet and social media as reported by data from 2017 to 2019 reveals that in the near future, the entire activities of research in terms of data gathering, information dissemination and research would be taken to the arena of social media as it has started manifesting today. However, it is emphasised that the nature of anonymity and numerous fake data sharing on social media means that researchers should be extra cautious than in the conventional research method because it is easier to fall into the trap of gathering unreliable data, especially considering the number of those who are frequenting the social media today (Audenhove & Donders, 2019).

In another view, it is observed that the fact that nearly half of the global population in 2019 are using internet and social media means that the platforms cannot be ignored in academic research but at the same time it cannot be relied upon entirely for valid research except if the researchers take extra care to distinguish between the authentic deposited data or gathered data from the fake ones that are provided on the social media platform daily (Bastos, 2020). In a different view, a study (Bonenfant & Meurs, 2020) argues that social media has emerged as a formidable force in research that must be utilised owing to the number of internet users and social media visitors. Data in large quantities is now generated and shared easily but it has its own point of concern majorly which is the issue of anonymity and fake data that a researcher has to identify and take care of.

PERSPECTIVES ON PHILOSOPHY

Philosophy is what we do every day in search of answers to the most demanding questions of life. It is not what the world views it in terms of eccentric thinking and an exclusive reasoning of some extraordinary men of wisdom. It consists of using reason and logic to answer or inquire on positions and conventional arguments without believing in them except on being convinced beyond doubt. Philosophy is the archetypal use of logic and reasoning through language and knowledge to present ideas, views, principles and perceptions in a most fashionable way (Buckingham, Burnham, King, Hill, Weeks & Marenbon, 2011). Philosophy involved the use of some techniques and tools to examine and understand ideas and the world around them. These techniques include arguments, deductive reasoning, inductive reasoning, validity, invalidity, consistency, fallacies, refutation, axioms, hypotheses, dialectics, analogies, intuition, logical constructions and other related methods of epistemology (Baggini & Fosl, 2010; Kelley, 2013). Philosophy is an attempt to get to the bottom of things by asking questions and answers. The foundation of philosophy is concerned with asking questions about religion, universe, arts, mathematics, psychology, languages and general science. Philosophy or philosophical thinking does not imply that only the philosophers or a certain section of society is saddled with the task of philosophy. Mankind in all his life has a philosophy of living and existence. One can become a philosopher if he thinks and reasons beyond doubt on what he feels is believable, presentable and dependable by science and knowledge (Loewer, 2009).

Philosophy is perceived to have been the process of equipping oneself with the tools of analysis on why argument is important, how to argue, how to refute arguments, how to present arguments and how to establish facts and eschew distortions and fallacies scientifically (Simnott-Armstrong, 2018). From the above diverse scholastic views and drawing from the inferences towards the study at hand, philosophy is thus, regarded as the objectives, principles and values that are provided in a convincing argument on why social media research is necessary contemporarily and the ways in which some ethics and arguments can be adopted in undertaking social media research as discussed extensively in later sections of the work.

OVERVIEW OF SOCIAL MEDIA RESEARCH PHILOSOPHIES

Social media research is an offshoot of media communication research according to Riffe et al. (Riffe et al., 2005). Media communication uses mostly content analysis in data generation and analysis. However, for the purpose of this study, social media research is now beyond media communication research. The internet explosion and the proliferation of social media tools enable all fields of academic research to utilise social media as a methodology for conducting research. Tyson (2010) postulates that there are some strategies of social media research that should start with coming to terms with telling your story taking into consideration the risks and rewards involved, how to get oneself enlisted in the media coverage, developing a media strategy, resources for contacting social media, media interview which can be either for a special in-depth or general random sampling and presenting new research findings in professionalism. Data can be gathered through opinion articles, interviews, feedback and report. Friedrichsen and Muhl-Benninghaus (2013) argued that social media has become a new strategy of research by academicians through the use of techniques of data gathering such as opinion polls, opinion articles, interviews, sharing of findings for feedback and searching for new data posted online for consumption.

A collection of an edited volume identified several ways in the nature, pattern and dimension of social media research. A study by Vintimilla-Tapia, Bravo-Torres, Gallegos-Segovia, Ordonez-Morales, Lopez-Norez and Blanco-Fernandez (2019:1) suggests that initially, social media was used for an inter-personal relationships but that aim has since been changed as it is now actively used for education in terms of student-teacher interaction and for academic research especially apps such as Facebook, WhatsApp, YouTube and Instagram. Research is carried out in social media through surveys, participants' observation, outreach to experts in various fields, improving knowledge transfer, and the use of powerful electronic and telecommunications systems to reach out to the target audience for the collection of data all which promoted the use of different learning skills and models. For instance, if a researcher consulted Wikipedia, a book may likely be consulted in the process and data has been accessed through social media. Video materials for lectures are pasted in YouTube, Facebook, Instagram and WhatsApp which facilitate learning and sharing of information for research (Vintimilla-Tapia et al., 2019:2). However, even with the numerous advantages of the use of social media for academic research, several obstacles are encountered. One of these difficulties is the security and privacy of the consulting site which are not adequate unlike books and other printed materials which are safe. There may also occur the case of information isolation where the data is not properly managed or understood and there are no experts to be consulted for clarification (Vintimilla-Tapia et al., 2019:3).

The traditional research method tools used by academicians are now transformed into full usage through the instrument of social media as in the case of Wu, Hsieh, Cheng, Yang and Fanghuizhu (2019:27) who used regression method to study model of the online customer review. Another study (Amornbunchornvej, Crofoot & Berger-Wolf, 2018:39) used social media to study academically the trait of leaders in movement initiation. In another dimension, diffusion algorithms in multimedia social networks were studied by Amato, Moscato,

Picariello and Sperli (Amato, Moscato, Picariello & Sperli, 2019). Snelson (2016) presented some steps in undertaking social media research using both qualitative and quantitative methods. The researcher argued that the most important first step is in the search for literature or data, keywords strategies can be used to search on Facebook, Twitter, YouTube and WhatsApp or the author search. The next step is the search proper where the exact title of interest is typed or looked for in the social media platform. The third step is the filter of the data obtained to select the relevant and reliable one and the final step is the analysis using a suitable method of interpretation.

Rich data is gathered from social media for research across all sectors of knowledge. Social media data includes content users create such as comments, tweets, videos, pictures, blog posts and other ones. Data that indicate the records of users' engagement with content and other users including likes, shares, retweets, followers, friends and related terms. Other user data that is collected by a social media company probably without the prior knowledge of the user such as location also disclosed the level of interaction and engagement. Social media data can be used for different purposes depending on the nature of the research. Some of the applications of social media data in research involves observing social media users gain insight into a social phenomenon. Another use is using social media to test a new tool (The Sheffield University, 2017).

The strategies of researching in social media contexts can place different emphasis on the extent to which "human subjects" are important to the project in question. Methods include multiple activities, from directly interacting with people through interviews and surveys, to collecting samples of materials that have been published online by people (including publications that may be anonymous or written under a pseudonymous user name), to programming tools that will scrape large sets of text and metadata that are selected without any regard for the text's authorship (Page et al., 2014:59). Different research models can be generated through the social media platform. The methods can include a qualitative method, ethnographic approaches and quantitative approaches. The ethics and philosophy of undertaking such research in a normal form should be observed strictly or even with extra care because of the nature of anonymity, privacy and vulnerability in the context of social media (Page et al., 2014:83).

There are proposed steps in collecting quantitative and qualitative data from social media. They are presented and analysed below.

Formulation of research questions: The first stage is the formulation of research questions which should be based on the target population, the context and situation of the research project. The questions when designed should take into consideration the target population of the study (Ali, 2019) and the target audience for response accordingly (Audenhove et al., 2019). The questions should be precise, either open-ended or closed-ended, or even flexible depending on the purpose of the research (Bruns, 2020). Research questions are in their nature formulated using plain language, unambiguous terms and an easily perceptible form.

In social media research approach, it should be more precise and plainer because the target informants or respondents are mostly not physically contacted in case of seeking additional clarification. They should be in such a way that it will look as if the researcher is directly talking and asking the respondents or informants without any barrier to accurate responses (Esser, 2019).

The linkage between research questions and variables: The second stage is the identification of the linkage between the research questions and variables that they seek to answer or to counter. In designing a research question using the platform of social media for collecting data, one fundamental issue that should not be overlooked is the direct linkage between the asked questions and variables. The linkage should be to either establish support for an existing knowledge or to debunk it and reconstruct a new model (Greve, 2018). A good instance is where a political researcher is trying to connect the link between election and response to policy choice by the voters. Such questions indicating a required response on voting behaviour are necessary for establishing a linkage between how the voters voted and the performance of political office holders. An assumed point can be proved or dismissed based on the responses. The voting behaviour pattern is the question here while the response to policy choice in terms of support or opposition to politicians is the variable that is connected (Criado, Pastor & Villodre, 2018).

Choosing a type of sampling: The next stage is to determine after the formulation of research questions and variables what type of sampling and representatives one is looking for. Is he using existing data for content analysis or is he looking for a response from the users of social media? If he is looking for content analysis, what type of data is the specifically targeting and where to source for them and if he is looking for responses, who are the target, the sample size, the population and the nature of responses or type of tools for gathering of data? All these should be carefully chosen. The tools to use for generating data especially if it has to do with primary sources include surveys, experiments and quasi-experiments, metadata and social streaming data. After the data collection from the contexts of quantitative and qualitative data, the next step is coding and interpretation. The most important point to consider here is how to organise the data in which a specific method is identified and chosen such as tables or graphs or content analysis, moving beyond raw frequency in calculations of generated data, and using varieties of tools for analysis such as concordance software, visualisations, pictures and others (Page et al., 2014).

Social networks are studied with the techniques of social network analysis where each character in the studied group is examined based on the link and the structure of the network. Mathematical tools like block modelling and graphical illustration can be used in the study specifically in the presentation of data. Another option is the use of probability concepts in the contextual contents of the data generated from social media (Forestier, Stavrianou, Velcin & Zighed, 2017). Internet research or social media has now taken the arena of academic investigations in various fields as studied by Hunsinger (2020), Allgaier (2020), Bastos (2020), Bruns (2020) and specifically on the collaboration or inter-marriage between social

sciences and computer sciences (Bonenfant & Meurs, 2020). A study (Wright, 2017) established that there is a strong evidence of the use of social media by the academics for data gathering, passing and dissemination of information to peers and public engagement or advocacy. Many research teams have promoted interest in their general research area through social media, and such efforts can be seen as steps toward engagement. Research news and new research findings are presented in Twitter, Facebook, YouTube and other social media by academicians. Some social media platforms are highly academic in nature and are purposely created to disseminate research and knowledge. ResearchGate (www.researchgate.net) is available to host millions of academic researchers where individual pages are opened by academic researchers, they upload their works, connect with colleagues across the globe, ask questions, and responses and access data for future research. Another similar page is Academia.edu (www.academia.edu) accessible which has similar purposes and futures to that of ResearchGate. Kudos is another academic social media page where researchers meet and share knowledge for research purposes. Any researcher that successfully published an article in the Scopus web index or Sage and other high-profile journals can get registered in Kudos where their works are automatically uploaded for sharing of data with academic community. In addition, there are other related sites such as Mendeley Elsevier, Google Scholar Citation and Publons. All these platforms are Internet media sites that accommodate researchers across the world where data of great magnitude are shared and accessed by academics without any barrier. Previously, data can be accessed mostly through contact with hard copies or a physical approaches but these platforms today make research a global affair with utmost ease.

The power of social media in shaping political behaviour and changing the trend and dimension of politics in many societies made it a viable alternative for research by academicians. The internet politics is now going transcendental beyond regions as observed by Calderaro (Calderaro, 2014). Contemporary social movements are gaining more momentum on the web than even physical engagement (Romero, 2014). Some tools are analysed to arrive at research findings as in the case of the application of the Graph Theory Algorithm to study or analyse political blogs (Patrut & Popa, 2014) and analysing of the frequency of the use of Twitter in the Italian 2013 Election (Di Fraia & Missaglia, 2014).

Previously, researchers gathered information on attitudes and behaviours through different methods such as questionnaires, in-depth interviews and observation. Such data is often now accessible within a blink of an eye. Such data, found on social media platforms, online discussion forums and blogs are typically rich, numerous and naturally occurring. Contemporarily, social media platforms such as Twitter are becoming popular field sites for data collection by researchers across diverse disciplines. Some ethical issues are vital in the consideration of data collection and information sharing in social media research. These include among others publicity versus the privacy of the data, informed consent, anonymity, risk or harm involved and consideration of reliability (Townsend et al., 2015).

The current state of affairs of survey research is facing several problems such as non-response and the question of reliability. The social media research is becoming closer to resolving the issues associated with the failure of the traditional survey method used reliably previously by social science researchers. Social media research provides simplicity in terms of variety, volume, velocity, and validity. There is no doubt that adding social media to the tools of survey research is now inevitable in the current state of affairs of research. YouTube, Facebook Twitter, WhatsApp, Instagram and other social media outlets are providing big data that cannot be ignored by researchers. Multiple methods, netnography, are some of the approaches used in survey in social media research (Hill, Dean & Murphy, 2014:6). A study (Kim, Murphy, Richard, Hansen, Powell & Haney, 2014:61) predicts that tweets can replace polls in the near future which is one of the most conservative ways of survey in research. In another study (Sage, 2014:87), it is emphasises that the use of Facebook plug-ins, data, graphs, applications and other tools can serve as a good instrument for surveys in future. Crowdsourcing is a good method of survey where a large and rich data can be obtained using social media and the tools for this method consists of group modelling and the use CISCO model to coalesce information that is vital for the research needs (Keating, Rhodes & Richards, 2014:179).

Notably, an online media quantitative survey is not that much different from other models of quantitative research methods. Techniques and styles are applicable in social media research as in other methods of research. Online data collection should be designed in stages such as creating and agreeing with the target respondents and designing a questionnaire, hosting the survey by installing the questionnaire on a chosen social media platform, testing and approving the survey, inviting people to take the survey, monitor the survey, close the survey and analyse the collected data using several tools of research interpretation as appropriately chosen. In designing online qualitative research, the following are steps to be adopted which include focus groups with selected targets, in-depth interviews via phone or social media apps, observational qualitative research, ethnographic approach, blog and buzz mining and online discussions (Poynter, 2010).

Social media has several research designs which are carried out online involving case study research (Micova, 2019:71), comparative research (Esser, 2019:85), meta-analysis (Meier, 2019:103) and action research (Hearn, Swan & Geels, 2019:121). Data can be generated through surveys (Hasebrink & Holig, 2019:143), qualitative interviews (Selm & Helberger, 2019:161), expert interviews and elite interviews (Audenhove & Donders, 2019:179), Focus Group (Lunt, 2019:199), observation (Jackson & Glowacki, 2019:215), experiments (Handke & Herzog, 2019:233), document analysis (Karppinen & Moe, 2019:249), media content analysis (Schweizer, 2019:263), content and link analyses (Just, 2019:295) and official and industry statistics (Komorowski, 2019:311).

The data collected can be analysed using statistical analyses (Minnebo & Cambre, 2019:329), qualitative content analysis (Puppis, 2019:367), thematic analyses (Herzog, Handke & Hitters, 2019:385), discourse analyses (Ali, 2019:403), frame analyses (Loblich, 2019:419)

and Nvivo (Mortelmans, 2019:235). Important research questions in social media can be asked appropriately (McCay-Peet & Queen-Haase, 2017:13) which is tantamount to big data generation (Kitchin, 2017:29).

Kinds of social media research philosophies

In undertaking social media research, just like the traditional (a seemingly new coinage to refer to other previous methods of research before social media), there are philosophies and ethics of consideration to ensure professionalism and scientificity of the work. These philosophies are aimed at avoiding fake data, manipulation and presentation of non-reliable and non-valid data and to enable attracting the confidence and support of the intellectual world and the wider world in accepting research outcomes with fewer doubts. To this end, this section will examine some of these philosophies and how they can be situated within the context of social media research which is, undoubtedly, the future of academic research in the world in the near future.

Epistemology

Epistemology is the philosophy of doing everything based on beliefs and values that are in line with how best it should be. It is simply the quest and engagement exercise with objective knowledge and information sharing scholastically. Kant (1986) argues that epistemology is the critique of pure reason and its replacement with scientific and ethical values of conducting scholarly research for the purpose of the production of knowledge. In the tradition of the conventional research method, each research methodology or design has its own philosophy ranging from the motivation behind the choice of the topic of study and the population of the study, to the data gathering and method of data analysis. This has been observed in both the qualitative and quantitative approaches to the research (Creswell, 2014; Lune & Berg, 2017). In this perspective, social media research too has a philosophy which is of paramount importance for the academic researchers that decided to engage in using it for research purposes.

Social media research should have the philosophy of data gathering, knowledge distribution and information spreading as well as knowledge acquiring from the perspective of research purpose. Posts are made on social media which are sometimes for entertainment purposes. Some posts are for social interaction, some are for amusement while some are informative (McFarland & Ployhart, 2015). In the case of social media research which in most cases is academic; there are several investigations or data that are gathered for marketing purposes or public opinion shaping, they are also more related to academic purposes since they are targetted at data assembling for a research purpose, it is expected that the philosophy of the research or researcher should be on emphasis in knowledge generation and knowledge distribution ethically (Page et al., 2014).

Social media research should ask what type of problem or knowledge is investigated. How is it investigated and why? In doing so, it should be noted that the major aim of the research is to produce new knowledge for the consumption of a target community be it the entire society,

community of belonging or a specific organisation (Di Fraia et al., 2014). Epistemology in social media research should consider that the entire process of data gathering is to generate reliable and accurate information or data that can be used for research purposes with the aim of influencing a certain behaviour or action from the outcome of the research. Thus, if the purpose is to generate reliable data, then the outcome of the shared data on the social media platforms too should consider the validity and reliability of the shared data to ensure that society is protected from fake information that may be harmful or misleading to the populace (Forestier et al., 2017).

Epistemology in social media research is much concerned with addressing social problems and providing solutions to them. The academic researchers are in their sublime effort to provide an easy and accurate means of the methodology of research undertaking finding social media as a viable tool for investigation. Thus, social media is utilised in order to generate knowledge, advance it, enrich it, support it or debunk it, deconstruct it and reconstruct a new one. This is why social media research method is now a good means of research because the audience is reach more than other existing means (Handke et al., 2019).

Ethics

One of the basic requirements for scientific, valid and reliable academic research irrespective of the methodology or approach adopted is the observation of ethical conduct of the environment and the parties involved in addition to the procedures examined (Harvey, 2014). This is because researchers have responsibility and confidentiality with the people that they engaged within the process (Hearn et al., 2019). This includes the participants, the targetted audience, the environment, institutions of affiliation and the community. The research design, implementation and dissemination of findings should take into consideration all the above-mentioned parties that are involved. Some practices are unethical which may consist of fabrication of data, manipulation of results, diversion of analyses and findings and this led to harm to the researcher or the audience that may consume his information (Page et al., 2014:58). Designing of models and frameworks for conducting social media research and strict regulations are important in this regard (The University of Sheffield, 2017).

Social media research is anchored on the threshold of a private world with privacy that should be observed strictly. In conducting social media research, the privacy of the participants and the beneficiaries is important. It is easier to have a confidential outing with your informants or participants in conventional research methods but in the current trend of social media, privacy may be breached (Herzog et al., 2019). For instance, data generated through an interview either through WhatsApp, Facebook, YouTube, Twitter, Instagram or Email can be revealed unnecessarily. This ethics should be observed strictly. Other ethical practices that should be observed in the philosophy of the social media research comprises of honesty in data generation, presentation of the data as genuinely interpreted, avoid hoarding of information, avoid diverting the discussion as in the case of responses in Twitter to sway opinion and other values that promote integrity should be maintained strictly (Matzner et al., 2017:39).

Social media research must be ethical because the purpose of research is to produce a reliable and valid knowledge that could be utilised immediately or in the future. The ethics in social media research should consider that what is undertaken is the trust and confidence of the public which should be secured and maintained continuously (Buchanan, 2017). Faking data, manipulation of data and misinterpretation of data deliberately are what an ethical social media researcher should desist from in his utilisation of the platform for research conduct (Matzner et al., 2017). This can be done if he keeps to the flow of the generated data or presents the derived data from his fieldwork in their pure and accurate nature (Hutchinson, Martin & Sinpeng, 2017). Control of flow is important and relativity. When many works point towards a certain finding with an approach or a methodology that is satisfactory, a researcher came up with a contradictory presentation which will raise doubt and validity questions even though, it cannot be totally debunked until it is further investigated (Puschmann, 2017). Thus, a researcher can be just in generating and disseminating data by maintaining originality and trustfulness in his work. This is important because social media data are accessible to billions today rapidly more than ever before in the history of world research. A misrepresentation can affect a large number of audiences unlike in the previous mode where the number is less. Furthermore, manipulation of data in its generation and sharing can erode people's confidence and support in the use of the method (Seko & Lewis, 2017).

Anonymity

One of the philosophies to consider in social media research is the doctrine of anonymity. Anonymity simply means the extent to which a user on the internet can be identified or the extent to which he can hide his identity and behaviour. This is because being associated with an idea will link somebody consciously to that idea, behaviour or movement publicly. Sometimes revealing vital or shocking facts, especially that concerns us is difficult. People prefer to do so in a private discussion. In the generation of data using social media research, the researchers may encounter the problem of anonymity. In a non-digital world, it is difficult to be anonymous. In the era of the digital world, it is easier to go anonymous. This means somebody be it an informer or a participant under the guise of anonymity may release harmful or wrong information or data undetected. The information or data can be realised as fake or dangerous while the anonymous party may not be detected. In this regard, it is essential for academic researchers that are focusing on the social media as their instrument of research to be extra careful with the risk involved in the course of their research due to anonymity (McFarland et al., 2015).

Digital media is providing an opportunity for the users to be anonymous. Through this process, they can create pages and platforms with fake names, fake pictures and fake locations to release dangerous information, unreliable, invalid and unscientific. However, like in the usual social science research method of data collection, the informants or participants are relaxed in releasing information under privacy. In this regard, the philosophy that an academic researcher can use to handle the issue of anonymity is to verify the pages and platforms of the respondents. The targets can be clear and specific and in a situation whereby

a random and neutral survey is carried out, the best way to measure the reliability of the anonymous data or information provided is the flow of the discussion and the context which can significantly determine the direction to which it should be (McFarland et al., 2015).

Anonymity is equivalent to the doctrine of confidentiality in conventional research methods and that is exactly the argument here. The doctrine of anonymity is what is important in terms of maintaining privacy. Unlike the previous method of research which is undertaken under the oath of secrecy, confidentiality and non-disclosure, the social media and internet research method is already fully-loaded with anonymous personalities, anonymous data, anonymous respondents and anonymous researchers (Hill et al., 2014). How can this anonymity in social media research be attained? Personal biodata of the respondents or informants can be skipped or ignored with an emphasis on the required data. The personal information and profile of the informants or respondents can be ignored or remain hidden under the license of anonymity but that should not warrant a total ignorance of the informants, respondents or sources of data. The major point of concern is for the identity of the interviewers to be preserved for research ethics while it is confirmed as an authentic source or genuine social media account to prevent a fake supply of data or information (Hunsinger, 2020). Anonymity can be preserved during the process of data generation but it is not relevant to maintain it after the processing of the data and the findings. The identity of the source of information may be revealed especially in a rigorous academic exercise such as corruption perception data, poverty index generation or indicators of good governance (Just, 2019).

Objectivity

In social media data gathering, one vital aspect, like any other research method, is the concept of objectivity. A research philosophy must take into its ethics and responsibility to ensure objectivity in handling the responses of the participants or the informants. A researcher should not attempt to redirect the flow of the debates or the information that is being supplied even if it is against what he is anticipating. For instance, a researcher who designed a questionnaire or initiated a survey to gather data from his respondents should allow them to flow freely without unnecessary intervention except where there is a question asked or confusion that he needs to clarify. It is a known tradition that objectivity in research simply means the ability to present issues based on their natural flow irrespective of the outcome (Page et al., 2014). The tribe, religion, community and organisation of the researcher may not get a favourable or convenient response. In this regard, presenting the issues as they are is the best option for a serious neutral and professional researcher. The way to handle such negativity is only to make recommendations based on the way forward for the undesired comments. Sometimes researchers are found to have indulged in the act of manipulating data or diverting findings deliberately. In this regard, wrong information may emanate which can harm the society or the environment of the researcher unwittingly due to his unethical conduct. To avoid this, he should be reminded of his tasks and responsibilities to the beneficial targets of his work. Presenting issues without fear, favour, sentiments, and manipulation is a research philosophy that must be observed in the social media method of conducting research (Matzner et al., 2017).

Objectivity is what keeps the confidence of the research community and the society in general. The need for objectivity in the use of social media research is to ensure that the numerous big data in existence or to be generated did not mislead the investigation through manipulation or adoption of unreliable and inaccurate data. How can this objective of objectivity be achieved? It can be approached in many ways but the most important epic centre is gathering data as they are presented and presenting them or analysing them as they are gathered without an attempt to influence any of the variables outside the flow and direction of the revealed information (Jackson et al., 2019). The reason for an emphasis on objectivity is the direction of giving the research a scientific basis and concrete support for the reliability and future occurrences using the investigated work (Kapoor et al., 2018).

Validity and reliability

The extent to which data or information can be checked, proved, confirmed or debunked is the validity of research. In every research, the methodology carries along it the instruments or scientific tools that can convince the academic community that the work can be subjected to thorough and rigorous critical observation to identify how true or otherwise the data were generated and whether the tools used for analyses are appropriate or inappropriate. In the social media research method, it is even more difficult to identify the validity of the instruments and the data obtained due to many factors such as privacy, anonymity, big data, multiple occurrences and other related issues (The University of Sheffield, 2017). If the instruments used in data collection, the process of data collection and the process of data dissemination are not found to be valid, there is no reliability and the research findings cannot be used for academic works in the future. It will not be a reference for future academic engagements. In order to have profound and valid reliable research using the social media research method, it is imminent to adopt techniques of research that will dismiss all doubts and look scientific in all ramifications. One of these ways is to generate data in the most suitable way for a type of research. If research involves for instance a particular community, and the researcher decided to collect data from another community, he has opened a room for doubt and non-reliability. Research method or data collection in the social media should utilise methods based on the topics of study and the population of the study should be selected based on the philosophy of social media engagement while in the same way, tools of analyses should be chosen based on the possibility of the outcome that will not cast any doubt on the research outcome (Page et al., 2014; McFarland et al., 2015; Matzner et al., 2017).

Validity and reliability are what keep scientific research naturally scientific (Jackson et al., 2019). It is simply anchored on the threshold of adopting sources and tools of research in the social media approach that can guarantee and safeguard confidence and acceptability in the academic community (Karppinen et al., 2019). How can validity and reliability be achieved in this perspective? It is easy and difficult at the same time. It is easy because a researcher must understand the pattern and nature of his research, identified the tool that is suitable for data collection, the time of social media platform suitable for his research work and the alternative option or tool for data analysis in the internet and the social media research (Keating, 2014).

Social responsibility

Research undertaking is a matter of social services or respond to many groups involving the researcher, educational institutions, organisations that sponsor the research and the community that is targetted with the research accordingly. This philosophy of social responsibility should equip the researcher with the knowledge and integrity of carrying out research based on what would promote peace, political development, economic prosperity, social cohesion, cultural tolerance, and cooperation and harmony. Research that can fuel discord, create chaos, lead to violence, and promote disunity or mutual suspicion are not the practices of ethical and progressive researchers even if such researchers can benefit their principal such as their community or the organisations that sponsor such researchers. Many scholars (Page et al., 2014; McFarland et al., 2015; Matzner et al., 2017; The University of Sheffield 2017) suggested that using social media research method should consider social responsibility as a philosophy that will guide the purpose of the research. A societal problem identified is the target of investigation for a solution. In this regard, a social media researcher should ensure that the method to be used in data collection and data distribution is taking into consideration a survey or sampling that will provide reliable, valid and ethical data which can be used for policy agenda setting.

Social responsibility is the consideration of the urgent needs of the host society of the social media researcher such as the use of media for hate speech in Nigerian context, the spread of fake news in Nigerian environment and the use of social media for marketing in other countries as a social responsibility. This can be achieved through the formation of a certain opinion and then allow the target audience to respond accordingly flowing their views on the nature and manifestation of the problem as well as the recommendations (Kitchin, 2017). Why is this so? It is simply because any marketer, producer and other aspects of human endeavour in the society are bearing in its venture social services. Research is not an exception but rather a forefront of such social venture. Research is a community service that is aimed at making society better and a social media research should be seen as such (Lev-On, 2018).

CONCLUSION

The chapter examined ethics and responsibilities in social media from the perspectives of research philosophy. The chapter is a new approach to research undertaking using the modern tools of investigation. The chapter has practical implications for different stakeholders that are affected by the subject matter of study. Researchers in various fields especially in social sciences are guided in the study towards conducting research by utilising the tools and platforms of social media. Individual users are also provided with the basic background of the philosophy of social media and its basic principles. Some terminologies and simple data that introduced the audience to the current situation of social media are also examined accordingly. The chapter summarily explored the social media research philosophies. The term social media was identified in its various meanings and dimensions including the coinage itself. Various forms and platforms of social media were examined such as WhatsApp, Facebook, YouTube, Twitter, Instagram, LinkedIn and specifically the academic

social media site such as ResearchGate, Academia, Kudos, Google Scholar, Mendeley and Publons which is a network of an academic community in their millions across the globe. In addition, the chapter investigated the social media research techniques and methods including sources of data in the social media research work, tools of data collection, tools of data analysis as well as qualitative and quantitative approaches to scientific research methods. The chapter concludes by examining the social media research philosophies in their what, how and why including epistemology, ethics, anonymity, objectivity, reliability and validity as well as social responsibility.

The study concludes that social media research is inevitably the future of academic research in the world. It has already been providing big and reliable data in both data generation and dissemination. Like the conventional research method, social media research has its own philosophy and ethics that are guiding it. A researcher that is using social media research method should be conscious of the philosophies and factors that will make his research valid and reliable. These should include among others the appropriate choice of tools for data collection and a suitable platform. The researcher should identify where best his targets are whether it is Facebook, Twitter, WhatsApp, Instagram, YouTube or any other platform that he knows his respondents or informants can provide information conveniently. He should also identify the best tools for analysis. In addition, the study concludes that there is a need for a researcher that is using social media research platforms to observe and respect the identified philosophies in this study, observe them, respect them and consider them constantly for reliable and acceptable knowledge production.

This chapter suggests that social media will dominate the future of academic research in no time precisely in the near future. The scientific investigation would be taken into the arena of social media theatre soonest more than ever before. The researchers should utilise the research philosophies identified in this chapter to provide reliable and valid data or to produce knowledge and information that can be relied upon confidently. It is better if the future research method is concentrated on social media with effect from now to save much energy in future as it is glaringly an inevitable research venture that must be turned to for relief in terms of methodology in research.

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