


# Ubiquitous Technologies and Learning: Exploring Perceived Academic Benefits of Social Media Among Undergraduate Students

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## ABSTRACT

This study makes an original contribution to the literature on social media usage for learning purposes through the phenomenological approach of enquiry. It examined the general motivations for social media usage, how social media is used to meet academic needs, perceived academic benefits, and how social media usage disrupts studies. A total of 24 undergraduate students were engaged in rigorous focus group discussions. Results showed that social media has been adapted to suit the academic needs of users through the process of appropriation. It was found that although social media could be a viable platform for inter-university collaborative learning, respondents hardly engaged in that. It was suggested that students create inter-university social media groups for collaborative learning. There were accounts of negative implications of using social media, like addiction and distractions. Students must adopt tactics to handle distractions which could prove helpful in out-of-school settings like the workplace.

## KEYWORDS

Learning, Perceived Benefits, Social Media, Technology Appropriation, Ubiquitous Learning, Ubiquitous Technologies, Undergraduates, University Students

## INTRODUCTION

Internet-enabled digital communications technologies, such as mobile phones, are considered disruptive technologies because they are creative and at the same time have displaced or chipped away how humans originally communicated or interacted, while at the same time shifting how organisations operate, [nearly] sweeping away the communications systems or habits they replace because of their noticeably superior features (Smith, 2020). Digital communications technologies can also be considered ubiquitous because they have become pervasive, permeating every facet of our lives. Their ubiquity is propelled by their ability to enable individuals, groups, or communities to communicate and participate for various purposes, including learning. The devices that house the various digitally enabled communications platforms are typically small and [sometimes] inexpensive and utilise telecommunication [internet] networks to connect people and devices locally and globally

DOI: 10.4018/IJICTE.286758

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(Brown, Keller & de Lima, 2018). These platforms are also easily accessible and delivered in a manner appropriate to the location and context (Greenfield, 2010).

Social media are interactive digital tools that allow for the creation and sharing of information, interests, ideas and other forms of expressions or communications with the public (Kietzmann et al., 2011). As a disruptive technology, it has transformed the interaction and communication of individuals throughout the globe and is fast changing society's public exchange of ideas or interaction. Being a medium for social communication, the sense of being in a community and interacting with people who share similar interests is deemed the major reason for the success of social media (Kumar, 2014). Due to its reach, speed and ease of operation, social media enhance engagement of a multitude of topics, including entertainment, politics and environmental concerns. Widespread network access eliminates time and location barriers, meaning users can access social media globally and around the clock (Asur & Huberman, 2010, p.1), no matter the location of participants and time. This has resulted in the acceleration of a set of media practices that are very much rooted in other media modalities, such as television viewing, making social media a common feature of young people's everyday lives (Swist, 2015). Mobile communications technologies are also ubiquitous in settings where learning occurs (Lepp, Barkley & Karpinski, 2015). However, there is a likelihood for interruptions to occur when learning takes place in spaces where mobile phones are being used at the same time. In the case of using social media for learning purposes, the disruptions could be even greater as messages or alerts that are non-academic related could disrupt learning. Thus, although social media can be used to enhance learning, it can also interrupt it.

## The Context

According to the Technology Appropriation Model, technology can be transformed as users appropriate it. This is because users find new modes of using the technologies than what they were originally intended for. Therefore, in the process of appropriating technologies, "technology-as-designed" can be altered or transformed during the process of usage ["technology-in-use"] (Alberts, 2013). The alterations or transformations that occur during technology-in-use are the result of users finding other uses for them. Traxler (2010) states that although mobile communications technologies are used for learning, they were originally developed and designed for various retail niches and corporate markets rather than for learning. Adjin-Tettey and Akrobotu (2018) also argue that digital devices have features which demonstrate that they were not originally made for education but corporate businesses and individual lifestyle customers. Yet, these devices are used by students for academic purposes, lending credence to postulations in the Technology Appropriation Model.

With a large body of evidence indicative of young people being active social media participants and their lives intrinsically woven around same (Anderson & Jiang, 2018; Boczkowski, et al. 2018; Dzisah, 2018), this present study avers that students spend a significant amount of time on social media. It is no doubt that social media was created to facilitate communication and socialisation. However, as it becomes entrenched into the daily lifestyles of users, student users, for example, are adopting it as a medium for academic discussions and sending and retrieving of educational materials. To this end, it may be said that users have altered the original intent for use of social media, which was to facilitate social communication, to using it for educational or academic purposes.

Previous studies have reported both positive and negative effects of general social media usage as well as its effects on academic performance of higher education students (Kauser & Awan, 2019; Alamri, 2019; Giunchiglia, et al. 2018). Apart from the fact that most of such studies were conducted in different contexts, the literature shows a dearth of studies that use qualitative means for data collection to explore this phenomenon. This qualitative approach provides the opportunity to explore the depth and uniqueness of each participant's experiences using social media for academic purposes and the perceived benefits obtained from using them for such purposes.

This study explored the experiences of using social media among a group of university students to achieve academic needs; the perceived benefits of using social media for learning purposes; as

well as whether any disruptions occur while using social media for academic purposes. A total of 24 participants were recruited to partake in the study. The following were the specific research questions that guided the study:

- What motivate(s) social media usage?
- How is social media deployed to meet academic needs?
- What are the perceived benefits obtained from using social media for educational/academic purposes?
- How does social media disrupt learning and what is done to curb disruptions?

## **THEORETICAL FRAMEWORK**

### **Model of Technology Appropriation**

The term “appropriation” was first introduced in Information Systems (IS) by Poole and DeSanctis (1989). Appropriation is often a part of a model that describes the use and meaning of technology. A key aspect of this theory is the idea that technology is not static, but rather dynamic as users ascribe meaning to it in the process of appropriation. In describing the use of technology, Poole and DeSactis (1989) used appropriation to explain that people will often not use technology only in pre-defined ways, but they will alter the system while using it. Poole and DeSanctis (1989, p.150) further explained the resultant consequence of appropriation:

This implies that the realization of any object may differ across cases and that the object itself can change as people change their mode of using it.

Thus, an Information System can change/evolve as people use it differently. The same system can be used differently in two different companies or between two different individuals to achieve similar or different results.

Carroll et al. (2001) further elucidated that technology is transformed into appropriation and differentiated between “technology-as-designed” and “technology-in-use”. Technology-as-designed means the use of technology as ascribed by its designer. This further implies that a group of users of technology can stick to its actual use and not change its usage and purpose. Technology-in-use implies that other users may shift from the actual use of technology and adapt to new ways of using the same technologies to suit their preferences when the technology is fully appropriated. In the case of social media, usage can be transformed from using social media for social communication and socialisation to using it for academic purposes.

Traxler (2010) considers mobile technologies and the usage of their platforms in the classroom as parasitic because of their incoherence, transience and diversity. This is the result of altering their original use and positioning them in the academic context. Their parasitic nature calls for the need to investigate how they are used for academic purposes and the consequences of their usage. This study takes the stance that social media has been altered by students as a medium for social communication and is being used as a medium for academic communication, as well as a medium for the sharing and retrieval of educational resources. It therefore explores how university students are appropriating or adapting social media for academic purposes and the perceived benefits of doing so.

## **METHODS**

This was a qualitative exploratory study grounded in the phenomenological approach of enquiry. It was primarily aimed to understand students’ experiences with social media for learning purposes; how social media usage disrupts their studies and their perceptions about the academic benefits of using social media for learning purposes. A phenomenological method/approach is:

[...] an inductive, descriptive research approach with the aim to describe an experience as it is actually lived by individuals. Phenomenological methodology attempts to explain the meaning structures developed through the experience of the person being questioned (Holroyd, 2001, p.2).

A phenomenological point of view presupposes a creative interaction between individuals and their environment. The approach takes the stance that individual persona or what a person becomes is not simply passively shaped by internal motivational or external situational forces, but that people are active agents and have a measure of control over their environment and their lives (Mason & Metz, 2017). For that reason, they consciously design how they want to be and are also able to know who they are and what makes them who they are. This self-awareness was at the core of finding out from the participants how they used social media for academic purposes; if and how social media usage disrupts their studies; and their perceptions about the academic benefits of social media for learning purposes.

This approach was settled on because the researchers wanted participants' perspectives on how they use social media for academic purposes; their perceived benefits of using social media for academic purposes; and how social media usage disrupts their studies if it does. The researchers purposively selected undergraduate students from all levels (from the first year to fourth [final] year) of the University of Professional Studies, Accra to take part in Focus Group Discussions (FGDs). Potential participants were approached during lunch hours and briefed about the purpose of the study and asked preliminary questions to ascertain whether they used social media for learning purposes. Overall, 24 students, considered to be eligible were recruited for the study. Their phone numbers and email addresses were taken. They were later contacted to schedule days, times and venue for the Focus Group Discussions.

According to Gill, Stewart, Treasure and Chadwick (2008), the optimum number of participants (excluding the researcher) in a focus group is six to eight. The focus group discussions were held in four (4) folds, each team consisting of six (6) participants.

Table 1. Demographic profile of respondents

Year (Level) of respondent	Number of respondents	Gender of respondents
Year one	6	2 males, 4 females
Year two	6	3 males, 3 females
Year three	6	4 males, 2 females
Year four	6	1 male, 5 females
Total	24	

## Data Collection and Analysis

FGDs were audiotaped. The researchers also took note of the non-verbal cues of the participants. The focus group discussions were later transcribed. Guided by Schweitzer's (1998) adaptation of Giorgi's (1997, as cited in Holroyd, 2001, pp. 2-3) six-stage methodological model to explain the experience. This involved the first stage of intuitive/holistic understanding of the raw data, followed by forming a constituent profile, forming a thematic index, searching the thematic index, arriving at an extended description interpretive and synthesis of extended descriptions.

## **Ethical Considerations**

Participants in all cases were treated with respect and were not cajoled or compelled to partake in the study. The informed consent of each participant was sought before the FGDs. As a way of protecting participants' anonymity, no identifying information is included in data presentation. Pseudonyms have rather been used in place of actual names. Audio recordings from focus group discussions as well as contact details of respondents have been kept away from third party access.

### *Validity and Reliability*

Since this was a qualitative study and the researcher(s) is/are largely the instrument for data collection, it was ensured that personal biases were eliminated from data collection processes. An inquiry audit was used to ensure validity and dependability/trustworthiness of the study. Participants were asked open-ended questions and were allowed to provide their answers without any leadings or giving of cues.

Besides, data analysis and interpretations were limited to responses given by participants and observations made. Although qualitative research is subjective, there was at no point the researchers arbitrarily interpreted the data to suit their personal biases. The researchers confirmed with participants to be sure their interpretations aligned with what they [the participants] intended to communicate. The use of a third party to review the research processes and data analysis as well as the researchers' reflexivity helped guard against any biases and subjectivity.

## **RESULTS**

Before establishing how participants used social media to meet academic needs, participants were asked several other important preliminary questions including which social media platforms they used predominantly, the extent of usage of social media, and what generally motivated their social media usage.

### **SOCIAL MEDIA PLATFORMS PROMINENTLY USED BY PARTICIPANTS**

Predominantly, WhatsApp, Instagram and Facebook were mentioned as the platforms used. Twitter, Snapchat, LinkedIn and YouTube were occasionally mentioned while WordPress was rarely mentioned by the participants. However, WhatsApp stood out as the social media platform which was used very often. Although study data was collected prior 2021, it speaks to Statistica's publication to the effect that WhatsApp was the most popular social media platform used in Ghana as of January 2021. WhatsApp could therefore be an important platform for students, be it for learning, communication, or socialization.

### **The Extent of Usage – Amount of Time Spent on Social Media**

About time spent using social media, some participants admitted visiting social media sites as long as they were awake and had internet data. Some even noted visiting social media sites during lecture hours. Most of the participants noted spending about 8 to 12 hours maximum on social media a day. This, some participants said, is because they keep receiving social media messages which they are compelled to attend to. Other participants also spent more hours on social media while in school due to the convenience it provides in acquiring information for academic purposes. They admitted being able to easily contact colleagues to request them to forward academic information or documents to them or asking them to help them complete academic tasks. Others spent lesser hours on social media depending on their learning and business schedules.

As long as I have bundle, I am always online, unless my bundle is finished. Even if I am sleeping, I switch on my data because I might wake up at dawn and look out for some information (Mark, Focus Group Discussion Participant).

When I am in school, I am mostly online but when I am at home I hardly go online [...] I would not have time to be online. When I am in school, because I am mainly on my own, I am online mostly 8 hours (Peace, Focus Group Discussion Participant).

With WhatsApp, the messages keep coming and most of the time you would have to be in touch to get the information from there. It seems when I get there too it is difficult for me to get off. I get stuck on it [Giggles]... For Facebook, just once in a while (Job, Focus Group Discussion Participant).

Educause describes the times we live in as ultra-connected times. When students have unhindered access to digital technologies, they do not necessarily use it for academic purposes, even though the opportunity is afforded them. The responses given showed participants spent significant amount of time on social media. However, if students spend too much time on social media for non-academic purposes, it will likely eat into their study time, or worse, social media could replace the recommended study time of, at least, an hour per class per week (McGee-Thompson, 2021)

### *General Benefits Derived from Using Social Media*

Quan-Haase and Young (2010) found social media to offer socialisation needs which ultimately provide a means of escape from daily routines. Along similar lines, this study has established that participants sought escape while using social media. Some of the participants mentioned using social media for entertainment and following trends. Social media thus provide the means to turn attention to other things to help relieve stress or pass time. A lot of people crave to belong to a community of like-minded people (Korhan, 2010). This craving persists and possibly becomes aggravated when one is isolated physically from significant others, as students usually are. Social media provides the platform to continue to feel a sense of belonging even when one is physically isolated from their family and friends. Thus, students who have had to leave their homes to go to school get the opportunity to continue to keep in touch with offline connections, sometimes in real-time, despite the physical distance.

Addressing what general benefits they derive from using social media, participants revealed that the main benefit is the socialisation affordances and the fact that they could use them to achieve academic needs. Regarding using social media for academic purposes, participants indicated that they used it for group discussions related to assignments and sharing of slides. Other benefits mentioned included entertainment, business, acquisition of news/information, following trends and expression of ideas.

### *Social Media for Social Inclusion and Socialisation*

In most cases, participants reported using social media for engagements with colleagues and other people whom they did not know, and to keep tabs on those they have off-line relations with. They also used social media to keep abreast with what is happening around them, especially information related to the entertainment industry and to feel a sense of belonging.

I cannot go a day without knowing what's up in the entertainment world and to connect with my friends (Peace, Focus Group Discussion Participant).

I don't remember the last time I sent an SMS. It's all WhatsApp messages or WhatsApp Video calls ... just to connect with loved ones (Mathew, Focus Group Discussion Participant).

[...] Also, with Facebook, I connect with friends I do not know and the ones I know like [pauses] the long-time friends. This helps me experience the feeling that I still belong to a community. (Joy, Focus Group Discussion Participant).

### *Social Media for Business*

Apart from being students, some of the participants are involved in some business endeavours. Such participants indicated using social media to help them with their businesses and careers. A participant who was also a Network Marketer point out how social media has been beneficial to him in his business venture:

With social media, my greatest benefit is it has helped me reach more networkers because I am a network marketer, so I have reached more marketers online and then we transact business. Academically, via WhatsApp as we have been saying, sharing of course content (Mary, Focus Group Discussions, Participant)

Another participant, Abraham, also had this to say:

I am addicted to social media because it is helping me do almost everything that I have to do as in my schoolwork, and business. Regarding business, I am able to advertise my products on my WhatsApp status. I also post them on my Facebook and Instagram pages.

Two participants who said they were up and coming music artistes said they use social media to promote their music:

I am an underground dancehall music artiste. One of the ways of making myself visible is recording short videos of my rehearsal sessions and posting them on social media. I get people to comment and share. Gradually I am promoting my craft and talent (Jay, Focus Group Discussion Participant)

I have been able to connect with people outside Ghana and it has really helped me a lot in terms of promoting my music. I do not use social media for academic purposes even though colleagues use WhatsApp platforms to share information, but personally I do not use social media for academic purposes (Martha, Focus Group Discussion Participant).

These diverse motivations for social media usage lend credence to the Technology Appropriation Model's proposition that technology usage is not static as users may shift from using technology-as-designed and alter it during usage. This is when there is bridge between technology usage and outcome (Lim, et al., 2013).

## **USE OF SOCIAL MEDIA TO MEET ACADEMIC NEEDS**

Participants noted using social media to get information related to their studies. In this regard, some noted using social media to share slides and keeping up-to-dated with issues regarding their studies, especially lectures. The following quotes from the interview illustrate how WhatsApp comes in handy to help in the academic lives of participants:

I use my WhatsApp for group discussions with friends when I am not able to come for group meetings. Most of the time, I send my input on our group platform. I get to also do video call to share my views on presentation topics sometimes (Andy, Focus Group Discussion Participant).

I use WhatsApp to get to know what is going on, maybe if lectures are cancelled. Had it not been WhatsApp, I would have missed out on an Interim Assessment. Fortunately, one of my friends sent me a message an hour before the time, asking if I was ready for the exam. It was a lifesaver (Mary, Focus Group Discussion Participant).

Another participant talked about the usefulness of WhatsApp and other social media platforms in helping to realise academic goals:

I personally use WhatsApp to collaborate and associate with people, interact with friends when I want to share anything with them. We recently had some slides and PDFs on our class page, and I had to download them and then read from there to make my own notes. With Facebook too it helps to create personal content, maybe I want to share something online or I want to express how I feel or anything I want the world to know about, I post it online and then I am able to interact with friends through their comments and other things. And with YouTube too I go there for information, maybe I want to watch video about what I have been taught in class to get more practical knowledge about it. (Jesse, Focus Group Discussion Participant)

## **HOW USAGE OF SOCIAL MEDIA DISRUPTS STUDIES**

Since most of the participants acknowledged spending long hours on social media, the researchers further enquired how the huge amount of time spent on social media has affected them as individuals

and in their academic lives. Two broad themes emerged- social media as an addiction and social media as a distraction.

### **Social Media as an Addiction**

While some reported visiting social media only when they need to or have something doing on social media, others considered themselves addicted to social media, pointing to the convenience associated with social media as a factor:

I am addicted to social media because it is helping me do almost everything that I have to do as in my schoolwork, and business (Abraham, Focus Group Discussion Participant).

For me even when I am in class, I am still on WhatsApp, so I am very addicted to social media (Joy, Focus Group Discussion Participant).

I wouldn't say I am addicted to social media because I use it when I have to, maybe during or after classes when I have something to check but I would prefer watching movies to being online (Peace, Focus Group Discussion Participant).

### **Social Media as a Distraction to Studies**

On the issue of social media as a distraction, the researchers identified that most participants believed social media is a big distraction while others reported devising new ways of learning without social media after discovering how distracting it has been or can be to them. Some reported sticking to strict personal timetables to avoid being distracted while some switched off their mobile data or phones while learning to avoid the temptation of attending to social media. Some of the participants who perceived social media to be a distraction had these to say:

I realized that each and every minute messages keep coming and I will be tempted to open them so I realized that if I scheduled at least one hour for studies I will use like half an hour to be checking social media, so I decided to stop. I just turn off my phone or even put it somewhere else while I study (Mary, Focus Group Discussion Participant).

With all honesty, my phone is my biggest distraction. I use it for a lot of things, I use it to study but when I am studying on my phone, that is my biggest challenge because there are some messages you would want to avoid but once they come you cannot let them go so what I do now is that I do not walk with my phone, if I am doing something, I make sure I put my phone away (Jesse, Focus Group Discussion Participant).

On the other hand, a participant who did not regard social media as a distraction to his studies said:

For me it doesn't distract me because there is time for everything. When it is time for me to learn I will learn because I have a timetable. I learn without social media. I do not reply social media messages when I am learning. The same way if you miss a phone call you return the call when you send me a message and I am busy I will reply you when I am done. (Paul, Focus Group Discussion Participant)

Although the intent of the study was not to explore the physical or mental health consequences of social media usage, participants perceived social media as addictive. If they are indeed addicted to social media, as they claim, it is a cause for great concern. This is because Akhtar (2013) noted that addiction could be a hindrance to a healthy academic life. In this study, some participants knowing very well the addictive and distractive nature of social media employed measures such as putting their mobile phones away or switching off their mobile data or even turning off their mobile phones while learning to concentrate fully on academic activities. These are effective ways of dealing with a habit that could potentially be detrimental to them in diverse ways.

Moreover, participants may also be victims of pathological internet use, which has been defined as "disturbed patterns of Internet use", causing "a specified number of symptoms, including mood-altering use of the Internet, failure to fulfil major role obligations, guilt, and craving (Morahan-Martin and Schumacher, 2000, p. 14).



## Perceived Benefits Derived from Using Social Media for Academic Purposes

Here, it was observed that most of the participants believed social media helped them to acquire additional information for academic work. As a result, they believed that should they stay away from social media usage, it is highly likely that they may not be able to catch up with important information that would help them pass their exams. One of the participants held strong views about that:

I think my CGPA [Cumulative Grade Point Average] is very strong but in calculating how social media has helped my CGPA, I will say it has contributed 20%. Social media has helped my CGPA in the sense that when we are getting closer to writing exams, sometimes I will be studying and there are certain points or calculations that I do not really understand but through social media, I am able to ask in a group or my friends and they are able to explain to me and that one helps.

This view was contrary to what other participants held - that social media is addictive and distractive and that staying away from social media could rather boost their academic performance. Some participants, on the other hand, perceived the benefits of social media to be largely dependent on what users use it for and how they use it, amongst other factors:

For me it helps me get information in addition to what the lecturer teaches in class because sometimes you look at the course outline, some of the topics do not have notes under them so sometimes you have to go to social media, find out what is going on and to get help from colleagues. Moreover, I do not think social media can solely be a factor that can affect your performance, there may be other factors (Jesse, Focus Group Discussion Participant).

Being self-disciplined and having control over one's impulses and cravings were also considered a factor for controlling how social media negatively influences an individual.

It depends on discipline, when you are disciplined, you can combine the two and it will still give you a positive result. I do more of the social media as I said earlier. When the messages are coming, I will stop and reply to them so I think the effect it will have on you will depend on your discipline (Mark, Focus Group Discussion Participant)

## DISCUSSION OF RESULTS

This study investigated how a group of undergraduate students used social media to meet academic needs; how usage of social media disrupted their studies and the perceived benefits obtained from using social media for educational/academic purposes. Although time spent on social media is varied, there is a general trend of young people spending a significant amount of time on social media daily. Recent statistics of social media usage indicate that the average duration internet users aged between 16 - 64 spend on different media devices are as follows: Using the internet - 6 hrs 43 mins; using social media - 2 hrs 23 mins; and listening to music streaming services - 1 hr 26 mins (SMPerth, 2020). In this study some participants admitted visiting social media sites so long as they had internet data, including visiting social media sites during lecture hours. This study also found that the foremost social media platform that participants used often and for academic purposes was WhatsApp, corroborating a publication on Statista that WhatsApp is the most popular social media app in Ghana (Sasu, 2021).

Benefits that motivated participants' usage of social media transcend socialisation, social inclusion, and business affordances to academic uses. The diverse benefits that motivate using social media indicate that the Technology Appropriation Model is entirely correct to stipulate that technology usage, in this case, social media, is not static because users may shift from the actual use of technology and adapt to new ways of using it to suit their lifestyles. Unarguably, the intended purpose for creating WhatsApp was not to share slides or even have academic discussions but students have ably taken advantage of its affordances and transformed its usage for their benefit. Rather than just using the platforms for social interactions, students can streamline these discussions to achieve academic goals. This study has also established that social media platforms, although they provide an alternative for engaging in academic discourse, can distract learning. While using it for academic

discourse, participants face distractions due to social messages and irrelevant posts getting in the way of the purpose for use at that moment. This is largely because social media was not originally designed for learning but has only been appropriated into learning practices. This affirms the assertion that educational technologies are parasitic (Traxler, 2010). Users, in this context, have become like parasites who are “parasitizing” social media, which is mainly for social communication, by taking advantage of the affordances of social media for their academic gains.

Besides, the distractions that occur could lead to the temptation to multitask which also has its implications. In a study by Lau (2017) to examine the relationship between social media multitasking and academic performance of undergraduate students, it was found that even though social media for learning purposes may not have a direct positive effect on academic performance, its excessive usage for non-academic activities, especially, when it is done in the context of multitasking with learning, could potentially impact negatively on academic performance.

Social media could distract learning occurring in the classroom (Kuznekoff & Titsworth, 2013; Sana, Weston & Cepeda, 2013). Students who often texted while lessons were ongoing did not write good notes and performed badly in exams because of their inability to remember a lot of information due to minimal attention they gave in class (Kuznekoff & Titsworth, 2013). In this study, some participants admitted attending to social media messages while in class. However, like Sana et al.'s (2013) study, participants recognise the addictive and distracting tendencies of social media. According to Akhtar (2013), excessive and unguarded internet usage can result in addiction which could potentially lead to poor academic performance, minimal interest in extracurricular activities as well as general lack of interest in academic activities. It is, however, positive that participants suggested ways of dealing with addiction to social media. This is because excessive dependence on social media (or the internet) goes beyond affecting academic performance to associations with physical and mental health as well as the adverse impact on family life (Masih & Rajkumar, 2019). So, it is certainly a good sign that most participants had an idea about how they could handle such an urge.

Beyond the classroom, social media could equally be a distraction in the workplace and can result in unproductivity. So, the ability to deal with social media distractions that occur in private and academic life could prove important and helpful when students find themselves as employees later in life. Students must thus find means of dealing with social media distractions now to be able to handle such distractions in different contexts and phases of their lives.

Essentially, the affordances of the technology have been found to be useful for educational purposes and users have, thus, appropriated them for their gain, in this case, academic. This satisfactorily speaks to the MTAs tenet that technology use is not static. Because technology use is dynamic, as student users appropriate technological platforms like social media, they ascribe new meanings to it. Accordingly, just as Poole and DeSactis (1989) proffered, these students, through the process of appropriation, have resolved to not only use social media as it was pre-defined by altering it for academic purposes. The affordances and attributes of social media make it easy to adjust it to meet the academic needs of students. Students have academic discussions through real-time chats or messaging and video calls as well as share and retrieve educational content or resources. However, it must be noted that spending time on social media for non-academic activities will likely eat into time spent learning, which can subsequently affect academic performance negatively. On the other hand, if time spent on social media is altered for academic discourse, rather than for social conversations, it is likely to reflect positively on time spent learning and the probable positive effect on academic performance. In this case, social media would have been ably transformed to meet academic needs and not only social (communication) needs, thereby reflecting the tenets of the Technology Appropriation Model.

Note worthily, social media provides an opportunity for students to overcome barriers related to the distance which otherwise could prevent them from engaging in academic discussions among themselves. Students, instead of converging on social media platforms to engage in social communication, can conveniently use that time to discuss topics that were discussed in class or may

be up for discussion in the next lecture. They do not need to meet physically to do so, as would have been the case if there were no social media. Social media can also help them connect with other students in other universities to share ideas related to their field of study, which did not emerge as something they are exploring, despite the possibility. This can help them broaden their perspectives about the topics they are studying.

The evolving nature of the use of Information Systems (in this case social media) has become evident in this study as students have found additional uses for technological platforms which were not expressly designed for educational purposes. So, while others may stick to using social media as designed and intended by their creators or designers, student users have transformed, added on, or found new ways of making them more useful and to suit their daily lifestyles and commitments. Thus, social media as designed is not solely used as they were purposed but have been transformed in the process of being used as Carroll et al. (2001) submitted in the MTA, albeit with some challenges.

## **THEORETICAL IMPLICATIONS**

As has already been established, social media usage for academic purposes could be regarded as parasitic (Traxler, 2010). The reason is that users essentially take advantage of its affordances for learning purposes. Relating this to the MTA, one can draw associations between altering the use of a technological platform which characteristically aids interactivity and interconnectivity to meet academic needs.

Lim, et al. (2013) argue that usage and outcome gaps of educational technologies are two significant gaps in educational uses of technology that must be addressed. Although Lim and his colleagues were essentially referring to educational technologies, this article also provides another dimension of a technology which was not made for educational purposes but has found its way there due to its parasitic nature as well as its affordances. The underpinning theory of this study, MTA, adequately speaks to how users appropriating technology navigate the unavoidable disruption of shortcomings of such technologies in the appropriation process. This study thus adequately speaks to three dynamic processes/phases of appropriation: efforts to make sense of technology within one's own contexts (Gonzalez, Kraemer & Castro, 2009); adopting and adapting technology to integrate it into one's lifestyle and routines (Janneck, 2009); and adjusting the technology for one's best practice (Beenkens & Verburg, 2008).

Further, most studies that use MTA as a theoretical framework use quantitative data collection techniques and test hypotheses. This study distinctively settled on the qualitative techniques to explore the depth and uniqueness of each participant's experiences using social media for academic purposes and the perceived benefits obtained from using them. The tenets of the MTA speaks to the fact that technology users are rational active users of technologies. By appropriating the technologies, they show agency and use technologies in ways that suit them. Just like the MTA, using the phenomenological approach to study use of social media for academic purposes presupposes a creative interaction between individuals and their environment (in this case social media) in ways that were not predesigned. Phenomenology takes the stance that individual persona or what a person becomes is not simply passively shaped by internal motivational or external situational forces, but that people are active agents and have a measure of control over their environment and their lives (Mason & Metz, 2017). Social media is characteristically disruptive where learning occurs. Studying how users alter its use to meet academic needs and how they navigate its disruptive tendencies qualitatively provides the depth that is lacking in MTA literature and provides a critical new dimension to the theory.

## **CONCLUSION**

This study makes an original contribution to the literature on social media usage for learning purposes by providing the opportunity for participants to express their experiences, thoughts and

perceptions about the general use of social media and use of social media for academic purposes. The phenomenological approach of enquiry adopted was deemed important to let participants describe their lived experiences with using social media and to explain the meaning structures they have developed while using it; this was found to be lacking in the MTA literature. The study is therefore important because it recognises that individuals have agency and are not simply passively shaped by internal motivational or external situational forces while using social media. So, while using social media, users are conscious of how they use it and how it shapes their lives, including how social media help them to achieve academic needs.

This study, therefore, has both theoretical and practical implications. Social media usage provides a variety of benefits to students but also could be addictive and could distract from learning. The strategies adopted by participants to handle distractions could prove helpful to deal with not only social media distractions in the classroom, but in other contexts such as the workplace which demands a certain level of productivity.

## **GENERAL RECOMMENDATIONS**

In line with the findings, it is apt to recommend that students take advantage of the participatory and communicative attributes of social media for academic discourse with colleagues especially when one is constrained by time and distance. Besides Learning Management Systems, social media can be effective and accessible platforms that faculty can use as a conduit to engage their students outside the classroom. It is recommended that faculty encourages students to take advantage of the opportunities social media presents for learning. On the other hand, it was found that even though social media could be a viable platform for inter-university-collaborative-learning, which holds the potential to provide opportunities for interconnectivity of students and institutions across the world, participants hardly did that. Students can create inter-university social media groups for the sharing of ideas and discussion of topics related to their fields of study. This will help students in institutions who may not have the full complement of resources for learning to leverage these platforms and fill in where they are lacking. Besides, with the seeming prevalence of usage of mobile communication devices among university students, established by Adjin-Tetty's (2017) study, institutions can consider developing school-specific applications for mobile devices, so students can use them to support learning.

The researchers also recommend, based on the reported distractive tendencies of social media, that students, while learning offline, consider putting their mobile data and phone Wi-Fi off to avoid the temptation of responding to social media messages at the expense of learning. This habit can prove beneficial even in out-of-school contexts such as in the workplace. In the classroom, even though undergraduate students are usually considered adults and, therefore, are typically not restricted on how they use their mobile devices, it is recommended that non-academic use of mobile devices are restricted when lectures are ongoing, so students are not distracted in class.

Finally, the researchers recommend that students consider deliberately spending less time on social media, if it is not for serious academic interaction, due to its perceived addictiveness.

## **RECOMMENDATIONS FOR FURTHER STUDIES**

The researchers suggest a similar study at lower levels of the educational ladder. Researchers could go a step further to ascertain the effect social media has on academic performance and develop institutional policies to that effect. In doing so, quantitative techniques and analysis can be employed to establish the relationship between social media usage and actual grades of students. Researchers who seek to understand the phenomenon in a way that can allow them to do rigorous classifications, statistical tests and generalize findings could also adopt quantitative techniques to study the same phenomenon.

## **TRANSFERABILITY OF FINDINGS**

Results from qualitative approaches cannot be extended to wider populations with a similar degree of certainty that quantitative approaches can. This is because findings of qualitative research “are not tested to discover whether they are statistically significant or due to chance” (Ochieng 2009, 17). Since this was a qualitative study, one cannot transfer or generalise results in similar contexts because the results are discussed based on the experiences and opinions of participants. However, other researchers could follow the methodology and carry out a similar study in other contexts and compare results with this one.

Furthermore, this study was conducted pre-Covid-19. With the explosive social media usage during the pandemic, amid anxieties, psychological stress and threat of physical health and the fact that most universities moved learning online, findings would likely vary considering current circumstances. This study’s results may therefore not sufficiently reflect social media usage and learning, especially in an online context, during the pandemic. It may also not reasonably reflect what motivate(s) social media usage and how social media disrupt learning during a pandemic when conventional ways of communicating and socializing are disrupted, owing to lockdowns and physical distancing regulations. Howbeit, these do not render the findings of this study irrelevant as they reflect the impressions of participants at a particular time under different circumstances.

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