

THE EFFECT OF SOCIAL MEDIA ON STUDENT ENGAGEMENT AND COLLABORATION: THE USE OF FACEBOOK AT THE UNIVERSITY OF BOTSWANA.

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Abstract

In the context of today's electronic media, social networking sites have come to mean individuals, using the internet and web application to communicate in previously impossible ways. This study sought to explore the effects of social media on collaboration and engagement among students in the University of Botswana particularly the use of Facebook. The study adopted the descriptive survey research design which was employed to derive responses from sample size of 100 undergraduate in the Bachelor of Social Work programme; who were selected via random sampling techniques. Data was collected from this population using questionnaire. The participants completed and returned the questionnaire correctly representing 100% response rate. The result of the study reveals that all the participants were using social networking sites in interacting with friends, connecting to their classmates for online study and for discussions on issues of national interest. Drawn from the findings, 98% reported to have an active Facebook account. Furthermore, the survey established that there are laudable benefits of using social networking sites and dangers associated with social networking, as 70% of participants disclosed that they use social media whilst studying although it is distractive at the same time. In addition, future research directions and useful suggestions are discussed.

Keywords: social media, facebook, student engagement, internet use, learning, Botswana.

Introduction and background

The internet is an attractive medium throughout the world that has impacted people in different ways (Alabdulkareem, 2015). Students, amongst internet user population, have also been impacted one way or the other, in particular the learning process and activeness in education. As social media continues to grow in popularity, the authors concur with the school of thought that the use of technology through social media is vital in students' academic succession. In the last decade, the online world has changed radically (Ahn, 2013). It is quite evident that the use of technology has brought with it a tremendous change in people's lives, from personal to professional lives as well as from the way people store, exchange and access information with the option of sharing or retrieving information sparingly or completely. To date statistics on

social media usage in America have revealed that 90% of young adults of ages between 18 to 29 use social media fully as compared to the less 35% -75% of the older generation (Perrin, 2015).

This is to show that young people, particularly tertiary students, are more into social media as compared to any other age group. This is a concern especially in developed countries like the United States America and European countries (Johnson, 2013). Inquisitively, the fact that the trend in the usage of social media and its impact is not well documented in literature amongst African countries including Botswana does not mean that this is not an issue of concern. The study of this phenomenon has not yet penetrated the field of research as it has in the western countries. Furthermore, this might be due to the fact that the study of social media is a new phenomenon in accordance with the new trend of the use of internet and social media. The continued growth of the cyberspace however, is clearly noticeable as it has brought with it permanent changes in the way that students interact and socialize (Wolfe & College, 2014). Nevertheless, an alarming concern over the use of social media has raised the eyebrows of many especially parents of college students about the way in which social networks are misused by their children. Every day, many students are spending countless hours immersed on social media such as Facebook, WhatsApp and YouTube (Wang et al 2011).

According to Kemp (2015) the world population stands at 7.3 billion and out of which, 3.1 billion are internet users, from which over 2.02 billion are active social media users. This is a significant figure considering that it has been only a little over 10 years since the development of social media, just following the accessibility of internet. Surely this channel must have in some way or the other impacted teaching and learning as it is a means through which information is carried and accessed. The immersion of youth on social media has led to many scholars to focus on the impact of social media on different aspects of life, including social relationships (see for example, Ahn, 2011; Akbiyik, 2013; Eke, Omekwu & Jennifer, 2014; Hadebe, Owalabi & Mlabo, 2016). However, regionally, prior few studies have been conducted in Ghana, Nigeria and South Africa exploring the effect of social media on student learning. In Botswana, Batane (2013) focused specifically on internet access and use among young people. Hence, a gap has been noted with regards to the use of social media and its effects on learning in tertiary institutions.. Therefore, the study intends to find out whether the use of social media is of benefit to student learning in Botswana and elsewhere in Africa.

Problem statment

The use of social media has become eminent especially among the youth in tertiary schools. Most students spend too much time on facebook and other social media mainly pursuing unrelated school activies. The phenomenon is an international concern as literature reveals that about 99% of students in America are on social media and the time that they spend is alarming (Johnson, 2013).The problem also exists in South Africa and Ghana where some scholars have focused on how social media affects student performance and engagement (Eke et al, 2014). The possible impacts of the use of social media on student learning needs to be studied as it may help understand how to best use the technology for academic purposes. Ahn (2011) argues that social media has a lot of implications on students in general, for instance, cyberbullying has been some of the results of negative social media usage, broken relationships have aslo occurred due to the wrong use of social media, account hacking and human trafficking.

Therefore, this study explores whether social media can be incorporated in the curriculum for academic purpose. This paper argues that the impacts of social media on students learning is a phenomenon that needs to be studied as this may help to come up with long lasting solutions on how social media can effectively be used to help students engage more in their studies.. This problem impacts students mostly as they are more involved in social media platforms. Like any other institution of high learning, University of Botswana (UB) main library has processes in place for easy management thus security personnel frequently patrol the computer sections especially during examination preparations period checking without prior warning to monitor what students are doing in the computers. Normally when students are found watching videos that are not related to academics on YouTube, they are given a warning and sometimes asked to log out of the computers systems. Likewise, if they are found to be on Facebook regardless of what they are doing, they would be questioned and asked to log-out from their Facebook profiles. It is against this background that this study is concerned with the trend of use of sites, what benefits students derive from using the sites, the dangers associated with them and ways to avert such dangers. This research will be a base foundation for further research to be carried out in the future in Botswana.

Theoretical framework

Over the years the three main learning theories have been behaviorism, cognitivism and constructivism. However, these theories were developed whilst learning had not yet been impacted by technology (Siemens, 2009). Devoid of doubt, technology has reorganized the way people live, communicate and learn. The theoretical framework adopted in study is connectivism theory, which is described as the learning theory for the digital age. Therefore connectivism theory is as an alternative theory of learning that addresses the inadequacies of present theoretical models. Today, other ways of achieving and reaching learning have arisen because of social networks and the types of connections that the worldwide web allows.

Connectivism is a new theory of learning that recognizes that technology has impacted society and that thoughts on how we work and learn are shifting (Uden et al., 2012). This is to say that beforehand, it was not as easy as it is to locate where to find knowledge as it is today with the advancement of technology. Connectivism posits that “know-how” is now replaced by “know-where” the information is, hence proposing a more flexible and networked learning environment (Siemens, 2005). The theory furthermore states that “knowledge and therefore learning of knowledge is distributive, that is, not located in any given place but rather consists of the network of connections formed from experience and interactions with knowing community,” (Bessenyei, 2007). In connectivism, learning is considered as a process of information exchange, organized into networks and support with electronic tools such as social networks like LinkedIn, MySpace, Facebook, Blogs, Wikis and YouTube etc. (Uden et al., 2012).

Siemens (2005) further argues that behaviorism, cognitivism and constructivism do not address the learning outside the person, this is knowledge stored in database or other electronic information holders that are accessible through the internet. The learning theories also do not address learning as it occurs with organizations but between people such as organizational learning and informal learning (Uitgeverij, 2009). According to Uden et al (2012) connectivism is the integration of principles explored by chaos, network, and complexity and self-organization

theories. This puts emphasis of students with skills to search for, filter, analyse and synthesize information that they gather while exploring networks in order to attain knowledge.

The theory further posits that decision-making is itself a learning process (Lytras et al., 2010). It is on this basis that choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision. It is reasonable to suggest that social media allows students to choose whom to follow online and thus to acquire knowledge. The choosing in itself shows that the student has an idea of what might benefit them hence learning is enhanced. This clearly came out in the findings as students decide to follow and collaborate with their classmate, lecturers and other experts using social media to gain and access knowledge. The theory is further incorporated in the discussion chapter of this paper.

Methodology

Participants

The sample included 100 undergraduate students from Bachelor of Social Work (BSW) Programme in the University of Botswana. Out of the 100 participants sampled, 25 were from each stream (Year one through four). The students completed a self-administered questionnaire and returned the questionnaire correctly representing 100% response rate.

Survey instrument

The questionnaires consisted of 5 sections: (a) demographic details; (b) access to social media platforms; (c) time spent on social media; (d) activities students engage on social media; (e) social media and learning. It is worth noting that, the questionnaire also included a number of vignettes accompanied by a series of closed ended questions. Arrangements were made with lecturers as we used their lecture time to request permission for the students to take part in the study.

Sampling techniques

The researchers obtained information regarding the class list of registered students under BSW programme from the Departmental Secretary. For the reason that generally it's impossible to study the entire population, we relied on sampling to acquire a section of BSW students to observe. That was achieved through probability sampling technique which involves random selection of the participants in the study. Since the representation of the participants was 100 in total, we saw it vital to use probability sampling as every student in BSW programme stood equal chance of being selected. We therefore selected names or numbers at random from a list of all potential participants with each having an equal chance to participate. Participants were divided according to their level of study in which 25 participants were sampled through simple random sampling as they all had equal chance of being selected.

Analysis

The research was quantitative in nature hence the statistical package for social sciences was used in data analysis. Statistical data in the form of tabulations were used due to the fact that the data entry was numeric. All responses were analysed through the use of descriptive statistics comprising frequencies, percentages, and charts. Moreover, for a very few open ended questions, we identified underlying meanings and summarised all data with the aim of identifying major

themes. Connectivism theory was used in the data analysis for interpretation of the study results. The theory is further incorporated in the next section on discussion of results.

Ethical Considerations

It was upon us to protect the participants, as such; they were assured that information obtained from them will be kept confidential. The names of the participants were not disclosed at any time to ensure that their anonymity is protected and to eliminate harm. Further, no one was deliberately misled in order to get certain information. It is of utmost importance to note that the study was submitted to the University of Botswana Institutional Review Board (UB IRB) for ethical clearance and permission was sought and granted from Department of Social Work (UB).

Presentation of findings

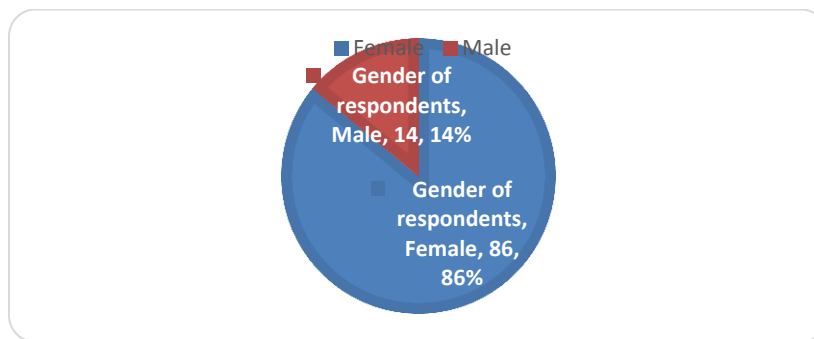


Figure 1: Gender of the participants

Out of the 100 participants, 14% were males whilst 86% were females. This is due to the fact that social work profession is mostly dominated by females in Botswana and elsewhere. Such a consideration was not brought to mind during the probability sampling. The understanding of the gender disparity is however of great importance so as to understand the dynamics, perspective as well as nature of findings in light of whether the participants were females or males. With regards age, 27% were 20 years and below while the majority (60%) were aged between 21 and 24 years. Participants aged between 25 and 30 constituted 11% and only 1% indicated that they were above 30 years old.

Access to social media platform

Table 1: Ownership of smartphone

Response	ownership	Access
Yes	80	80
No	20	-
Total	100	80

In as far as accessing social media is concerned, smartphones have been found to be the leading gadgets used as sources of social media applications like Facebook. Drawn from the findings as indicated in the above table, a majority of participants represented by (80%) own a smart phone, whilst only a few (20%) do not own a smart phone. These results are of no surprise as smart phones have recently become trendy and most young people can afford them and they make it

easier to access social media platforms. Out of the 80% of the participants who confirmed ownership of smart phones, all of them further reported to have social media applications downloaded on their phones which makes them have easier and quicker access to social media.

With regard to the time spent on social media during school hours on average, 22% of the participants indicated that they spend 6 hours and more on social media; 32% stated that they spend 2-5 hours followed by 33% of those who spend an hour daily. A small proportion of 13% reported spending 30 minutes and less on a daily basis on social media platforms. The results show that, on average, more than half of the students spent at least 2 hours on social media daily.

Activities students engage in on social media

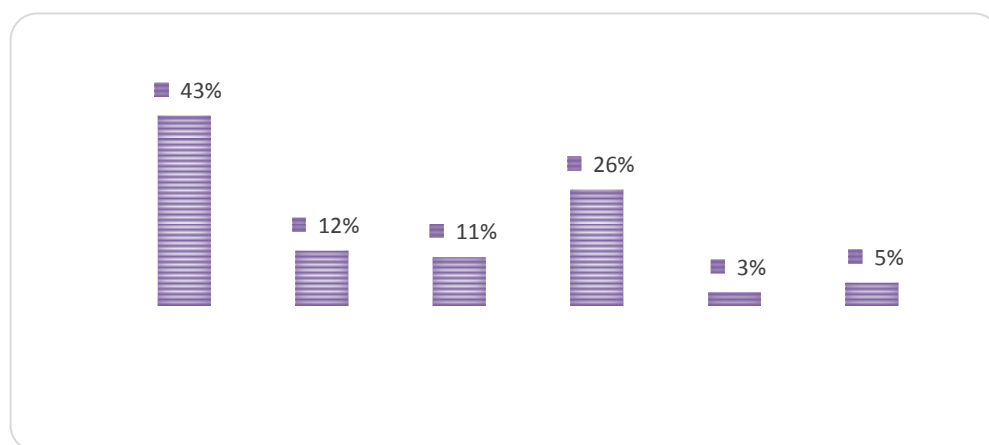


Figure 2: Reasons for using facebook during school hours

In relation to the interest of the study participants were asked to show whether they have active Facebook accounts. The results in figure above show that most of the students (98%) reported having an active account of Facebook whilst 2% mentioned that they do not have accounts. In seeking to understand the main usage of Facebook by students specifically during school hours, they were allowed to give as many reasons as they could think of. The bulk (43%) reasoned that they use it for chatting with friends. Another 26% showed that they use social media mostly for entertainment like watching videos and following on their liked pages.

A few study participants represented by (12%) indicated that they use Facebook for school group discussions as most students are active Facebook users. Some participants (11%) showed that they use Facebook as a way of staying in touch with their families while 5% expressed that they use Facebook to get updates on the latest news of what is happening around the world. Finally, 3% reported that they stalk or follow people's profiles to see what they are "up-to" by looking at their photos which is a normal Facebook activity according to their disposition.

Reasons for using WhatsApp during school hours

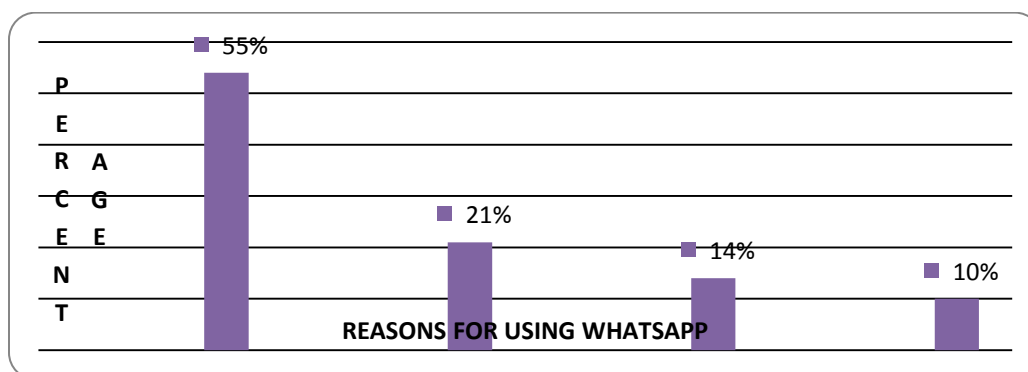


Figure 3: WhatsApp usage

In as far as the usage of WhatsApp is concerned, participants were asked to choose one or more options of what they mostly use it for during school hours. Figure 3 indicates that chatting with friends emerged the major reason at 55% followed by 21% that use it for school groups' discussions. A few students (14%) indicated that they use WhatsApp in order to stay in touch with their families. As a means of entertainment like sending photos and videos, 10% showed that they use WhatsApp for that particular reason for entertaining themselves.

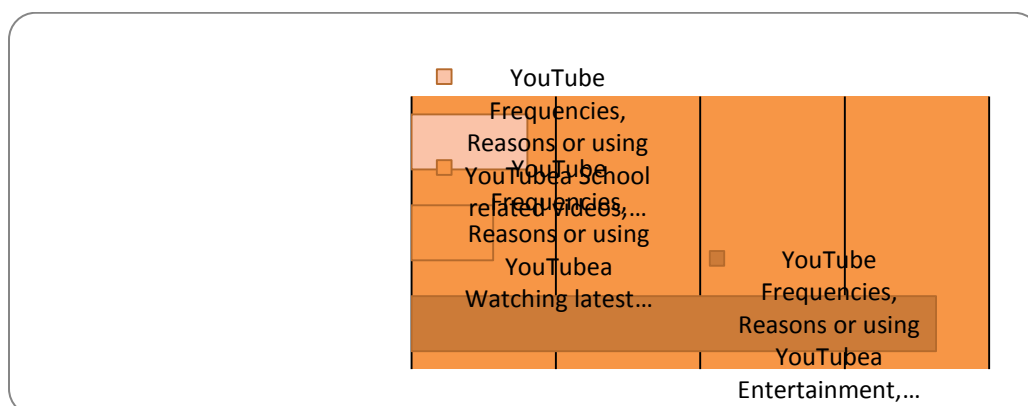


Figure 4: Youtube usage

With regard to Youtube, the findings presented above show an overwhelming majority of the participants (72.6%) reported Youtube as their most frequently used website for accessing all kinds of videos on entertainment. A few (16%) stated that they use it for watching school related videos and 11.3% for watching the latest news. Therefore, it can be deduced that students use Youtube mainly for purposes of leisure and entertainment, whilst a minority only use it for academic purposes.

Social media and learning

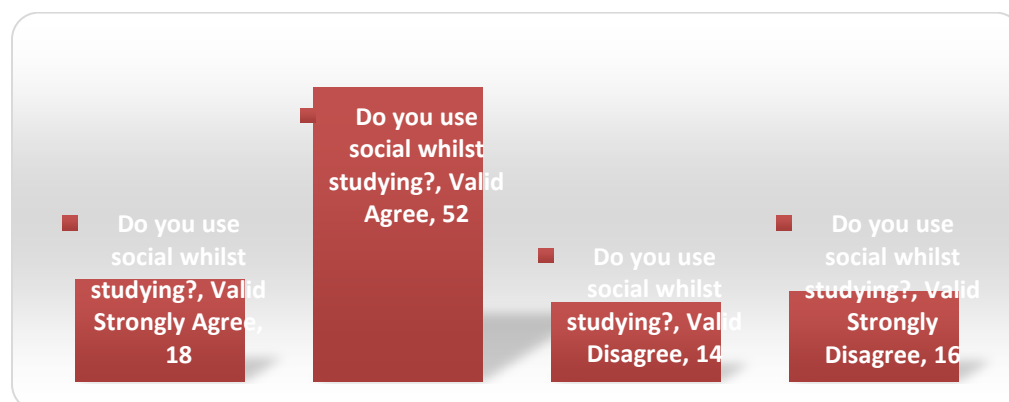


Figure 5: Social media usage whilst studying

With regard to the extent to which participants use social media whilst studying, this has been leveled in the intensity of 4 options strongly agree which may be illustrated as all the time, agree as some times, disagree which indicates that they don't and strongly disagree that they would never. Out of the total population, 18% of the participants reported that they indeed use social media whilst studying, 52 indicate that they sometimes use social media whilst studying. Contrariwise, 14 students showed that they don't use social media whilst studying but not to say that it is impossible for them to do so and 16 reported that they strongly disagree that they use social media whilst studying and would never do so.

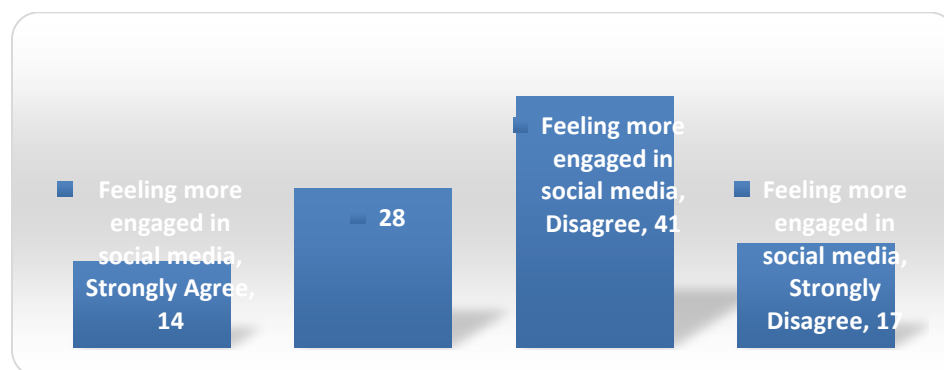


Figure 6: Engagement in studies whilst on social media

Student engagement in school work has different forms, through interactive face to face and through technology with the use of social media. Therefore in trying to understand whether students feel more actively engaged when they collaborate through social media the above figure indicates that 14% agreed strongly to this variable; 28% agreed making a total of 42% students who agreed altogether that they feel more engaged in school work when they use social media. A total of 58% disagreed with the notion with 41% disagreeing and 17% totally disagreeing that they feel more engaged in school work when they use social media.

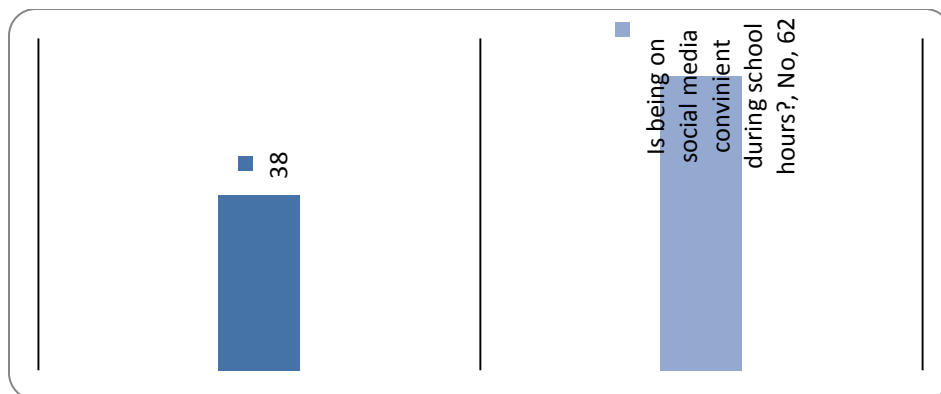


Figure 7: Time spent on social media during school hours

In demonstrating the reliability and convenience of social media during school hours, 38% students showed that indeed it is convenient for them to use social media during school hours whilst 62% disagreed. This finding shows that majority of 62% of the participants did not find social media to be of good use to them during school hours.

Ability to express opinions openly in the classroom versus on social media

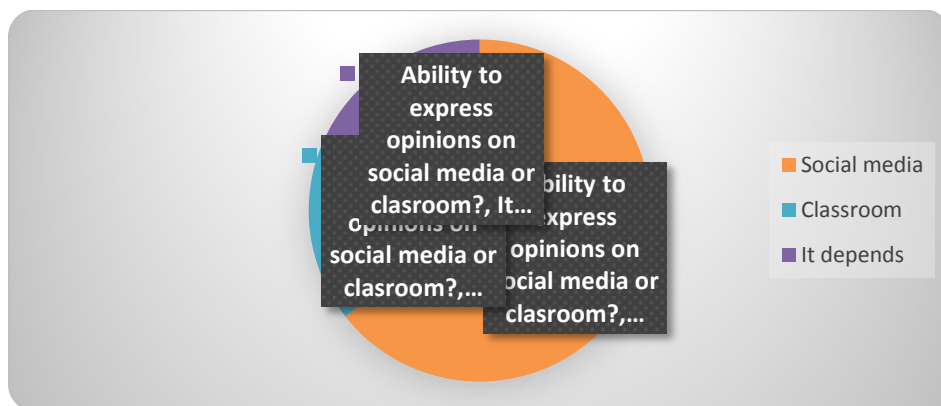


Figure 8: Expression on opinion in class versus on social media

In understanding their comfort in collaborating and expressing their views in the classroom versus the social media, a significant majority of the participants (64%) indicated that they prefer social media. Only 17% of the participants reported that they are much more comfortable doing so in the classroom. A smaller quantity 19% reported that they are able to express their opinions freely on both social media and in the classroom depending on what is being discussed.

A more precise question sought to find out whether students would prefer “informal” social media platforms to be created on social media that could enable them to interact with lectures and with one another after school hours to allow more collaborative learning. Most participants represented by 64% bought the idea, whilst a minority (29%) indicated having not given it a thought as whether it is a good initiative or not. Only 2% rejected the idea showing that they do not think the initiative would be a good idea.

Discussion of the results

Access to social media platforms for collaboration

It is evident that the majority of the students are on social media, with a significant majority owning smart phones and having personal computers. This gives way for students to collaborate and use social media platforms for engaging with one another for exchanging information. As such, the use of social media if used for educational and learning purposes, will inevitably give rise to increased flow of information amongst students which is consistent with the finding of Liccardi et al (2007) that students are socially linked with each other for sharing their day-to-day learning experiences through social media. According to connectivism theory technology has reorganized how people do things. In other words, interactions are now through mediums such as phones and computers. Previously, it was not as easy as it is today to locate where to find knowledge. With the advancement of technology through social media, students can easily locate where to find the information they need at the tip of their hands. Therefore, the findings are in agreement with the position of the theory that social media has an implication in student learning as they exchange information

Rationale for using social media during school hours

From this study, 98% of the students in the Social Work Department have an active Facebook account which is no surprise at all because through globalization there has been a more even distribution of technology, websites around the world being availed to developing countries. So it is not a surprise that many students are on Facebook. In a survey that was carried out in several colleges by Ahn (2011) in the U.S.A, it was found out that 99% of the students are active Facebookers which is similar to the findings of this study that the majority of students use Facebook. Nevertheless, what students really do mostly when they are on social media during school hours is the question which will show some of the reasons or the rationale of why students use social media during school hours. Poore (2012) posits that because of the interaction nature, social media has made it easier for people to share content and therefore can serve as a source of students' learning. For instance, Facebook allows students to share their opinions online on a topic. Also, YouTube allows them to upload videos that visualize the content thus making it easier to memorize the information. This finding is encouraging as it shows that social media can also be highly motivational to students.

From the study on the use of Facebook many participants showed that they chat with their friends more through (inbox) than any other activity. This shows that the use of social media among social work students is more recreational than academic and they prefer much to use social media for talking to their friends. However, the study did not examine what the students mostly chat about. It could be extrapolated that the respondents chat with their classmates about their assignment papers, tests and examinations and/or about something that is school related. A relatively small number of students reported that they use Facebook for school group discussions. Although most students are on Facebook, it does not necessarily mean that they use the platform only for activities that are school related. This limitation is based on the trick of coming up with tasks that demand deep, considered engagement with a topic as opposed to surface occupation with a technology tool as suggested by the theory of connectivism. Facebook has many features for instance uploading photos, posting, following pages, videos, games, and links and so on. This is why the number of chats is higher than that of school group discussions.

Similarly, WhatsApp has rankings like those of Facebook when it comes to the main reason for using social media during school hours. With 55% of students showing that they mostly use WhatsApp to chat with friends and 21% indicated that they use it for engaging in school discussions. This is a marginal difference of 34% showing that students tend to keep up with their social life more at the same time trying to concentrate on their school work. This finding reveals that WhatsApp is fundamentally not an academic tool made for students to strictly adhere to discussions but it depends on the discretion of the user. However as suggested by connectivism, it provides the ability for learners to engage in effective collaboration with peers and facilitators which can in the end benefit the learners.

Impacts of social media on learning

From this study, many students showed that they spend more than two hours on social media on average daily. However, the far much spent hours on social media are an incredible phenomenal to consider in this era. Kuppaswamy & Narayan (2010) argues that social media tends to grab the attention of students and deter them to non-educational and unfitting actions like useless chatting. Along the same line, Khan (2012) also viewed that social media may badly affect the academic life and learning experience of students. The conclusions posit that the more hours students spend on social media the more they are likely to derail from their school work thereby making their school work to suffer.

Conversely, it can be argued that should students spend much time on social media precisely for collaborating on school related topics their school work performance could be enhanced. However from this study, there is no precise correlation on hours spent on social media on academic learning. That is, the more hours spent on social media, the less the performance of students or the less hours spent, the better the performance of students.

Attitudes of students on the use of social media

Pertaining to the attitudes that students have as far as using social media for school work purposes, it was measured whether participants were able to express themselves more on social media or in the classroom. Most participants responded positively that indeed they prefer social media as a gateway to say assert their opinions. Social media as outlined is a flexible environment which leaves out intimidation in order for people to express their opinions freely without fear. This is cordially in relational to the assumption made in this study through the theory of connectivism that social media would be more preferred over the traditional classroom when expressing opinions about a subject as far as collaboration amongst students is concerned. This therefore raises the possibility that students will in the near future, engage more on school related topics when on social media and platforms will therefore be created as a means of engaging them more outside the classroom to enhance learning.

Furthermore, a majority of participants reported that they would appreciate a platform to be created on social media to allow easier engagement and collaboration with other students and interactions with lecturers on social media. The findings are consistent with the results of Wolfe & College (2012) where the students suggested that social media can be used for interaction with other students for group discussions as well as instructors for clarifications. The findings that 70% of the students use social media whilst studying in this research replicates the findings of earlier research conducted by Wang et al (2011). The results showed that 80% of the participants

admitted that they posted or responded while completing homework. Due to the entertaining features of social media, the study revealed that 99% of students spent their time on social media on entertainment (Wang et al., 2011). From this present, a majority of participants also indicated that they use social media for entertainment purposes. Therefore these findings indicate that the use of social media during study may otherwise prove distractive to the fulfillment of students' studies or completion of homework.

Implications for the future

Based on the findings drawn from this study, future research should seek to measure initial students' performances by using control groups whereby two groups of students will be used to measure the performance of students with one using social media platforms for studying whilst the other does not. By using clear and precise indicators, the findings of such a study will provide answers of whether social media can enhance students' performance when used accordingly in platforms which allows collaboration or not. There is need to formulate policy strategies on the use of social media by students especially during school hours in the University of Botswana. This can be achieved by controlling access of social media on the internet, blocking social media sites when students don't use social media for academic purposes during school hours can ease the negative outcomes that come with the wrong use of social media by students which may otherwise prove critical to their performance.

There should be an Education seminar every semester by the IT Department in every Faculty in the University of Botswana on the use of social media and how they could use it to benefit them academically, as well giving students tips and hints on how to manage their time for studying and keeping up with their social life. This research has an implication on social work students and lecturers to create a platform whereby contemporary issues are discussed on social media and every question is addressed accordingly by airing views and exploring ways of dealing with such issues.

Limitations of the study

The study findings should be cautiously interpreted due to some limitations. Using the quantitative research method was disadvantageous on the grounds that, it led to collection of much narrower information since participants were mostly given options to choose from. Furthermore, the sample size was small as this was not a national study thus limiting external validity of the findings.

Conclusion

The phenomenon of using social media for purposes other than academic pursuits is a worldwide problem including in Botswana. Students in this era tend to spend endless hours on social media for chatting and entertainment activities unrelated to their school work. This is a concern especially when students use the social media during classes when they should be concentrating on academic work. However, the use of social media for students' collaboration and engagement is vital as it looks into constructive ways in which social media can help enhance students' learning, competence and ultimately performance.

Social media is here to stay and because the majority of students are on it, measures need to be taken on how to address the negative consequences of social media which tend to derail students

from studying effectively. Interestingly, although the use of social media platforms by students is a relatively new research topic, social media have positive contributions that have potential to enhance students' engagement and collaboration in academic learning. Therefore, when used correctly, students may gain some competence.. The major limitation of this research was bringing into light the correlation of the use of social media and students performances. There is no precise description of what determines better performance when students engage with one another on social media. There are no key implications that identifies with performance when using social media by students. However, this paper concludes thus, it is important for the educators to remember that even within strictly traditional institutions of higher learning, the informal aspects of learning is still very much important.

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