

An Exploratory Investigation of Students' Use of Social Networking Sites and their Individual and Social Needs: A Case Study of the University of Botswana Undergraduates

**Bojelo Esther Mooketsi and
Athulang Mutshewa**

*Department of Library and Information
Studies,*

University of Botswana

Gaborone, Botswana

Mooketsibe@mopipi.ub.bw

Mutshewa@mopipi.ub.bw

Abstract

Globally, tertiary institutions, as it is the case with the University of Botswana, provide students with free access to social networking sites for educational purposes. However, not much research has been done on students' individual and social needs that are gratified by using social networking sites. This study therefore sought to fill this gap by investigating the University of Botswana undergraduate students' use of social networking sites and the individual and social needs that are gratified by using social networking sites. This exploratory study adopted an interpretivist approach and is qualitative. The study used Media Systems Dependency Theory to guide the investigation. The research data was obtained through semi-structured interviews with undergraduate students at the University of Botswana. The findings of the study show that undergraduate students depend on social networking sites to meet several individual and social needs. The findings also show that students' culture placed a constraint on how they used media.

Keywords: Personal Mass Media Dependency Factors; Social Mass Media Dependency Factors; Social Networks Usage; Undergraduates; Cyberbullying

Introduction

Digital technologies are continuing to have a tremendous impact on teaching and learning in universities (Ernst and Young, 2012). As a result, universities worldwide, including the University of Botswana, have, in addition to face-to-face contact for teaching and learning, adopted the use of technologies such as Learning Management Systems (LMSs) and other information technology tools such as smartphones for teaching and learning. In addition, the growing popularity and versatility of social networking sites (SNS) have led to their adoption as teaching and learning platforms (Severin and Tankard, 2001). SNS enable collaboration and are touted to have enormous potential to enhance teaching and learning. The platforms create opportunities for students to discuss class work, submit assignments and communicate with lecturers whilst physically apart (Lau, 2017; Al Musawi and Ammar, 2015; Eke, Omekwu and Odoh, 2014; Idakwo, 2011). Social networking sites, according to Essoungou (2010), allow everyone to send and retrieve information from the sites irrespective of geographical location. There are several types of SNS according to uses. These are:

- micro-blogging social media platforms such as Facebook, Twitter, Google Plus
- fully fledged blogging social media platforms such as WordPress, Tumblr, Blogger
- Image sharing social media platforms such as Snapchat, Pinterest, Instagram.
- Video sharing social media platforms such as Vine, YouTube.
- audio programs/podcasts like iTunes, Stitcher
- Synchronous communication tools like Skype, Google Hangouts, Second Life (Robbins and Singer, 2014).

Whilst universities provide students with access to SNS for teaching and learning, not much is really known about students' individual and social needs that are gratified by the usage of SNS. This is because there are very few studies conducted in universities that investigate students' individual and social needs gratification by the usage of SNS. Predominantly, studies conducted in universities on SNS focus on establishing popularity of social networking sites amongst university students, the amount of time students spend on these sites and use (Hussain and Rubab, 2014; Eke et al, 2014; Mesole, 2014; Ryan, 2014; Almarabeh, Majdalawi, Mohammad, 2016; Ogaji et al, 2017). Lineberry (2011) investigated how students' perceived value of social capital motivated them in the generation of user created content in SNS while Ryan (2014) investigated Facebook addiction amongst undergraduate students.

Similarly, studies on Internet access and use conducted on the University of Botswana students include, amongst others, studies by *Ojedokun* (2001) who investigated access and usage of the Internet by the University of Botswana students. Batane (2010) investigated plagiarism amongst the University of Botswana students, whilst Magogwe and Ntereke (2014) investigated the use of Facebook for teaching and learning. Kebaetse, Nkomazana and Haverkamp (2014) investigated the strategies used to implement eLearning at the University of Botswana School of Medicine. Umunnakwe and Sello (2016) investigated effective utilisation of information and communication technology (ICT) by first-year undergraduates of the University of Botswana in their reading and writing skills, whilst Witt et al (2016) investigated the perception of undergraduate medical students of the usefulness of tablets in medical education. Tsholetso, Maunganidze and Faimau (2017) established that, just like undergraduate students elsewhere, most undergraduate students at the University of Botswana who were SNS users spent more time on these sites than on their studies. However, their study did not investigate what students did whilst online and the needs that were met by these activities.

It is in recognition of the dearth of information on gratification of individual and social needs of students through the usage of social networking sites (SNS) that this exploratory study was carried out

on undergraduates at the University of Botswana. It is important to investigate this as media choice is said to be dependent on gratification fulfilment and potential to satisfying needs (Rubin, 2002). In addition, the study investigated how and what undergraduate students at the University of Botswana use SNS for and their mobile phone involvement and security practices whilst online. Investigating students' online security practices whilst using SNS was deemed important as Chin, Etudo and Harris (2016) have established that university students whilst on campus gain access to the Internet services provided by universities with privately owned technologies that do not have some of the security features installed in university ICT resources. They further established that students did not exercise caution when going online (Chin, Etudo and Harris, 2016). Similarly, Androulidakis and Kandus (2011) also established that university students are not adequately informed about security issues in regard to their mobile phones' options and technical characteristics, and they fail to follow proper security measures and practices.

The study was guided by the following research questions:

- *What are the individual and social needs of undergraduate students that are gratified by the usage of SNS?*
- *How do social conditions influence selection and usage of media?*
- *What security precautions do undergraduate students practise whilst online?*

The paper is organised as follows: a literature review on issues around SNS use by university students is presented first. The methodology used for the study is then described, followed by a discussion of the findings. The paper is then concluded.

Theoretical Framework

This study used the Media Systems Dependency Theory (MSD) by Ball-Rokeach and DeFleur (1976) which posits that media, individuals, their interpersonal environment, and the social environment are co-dependent. The theory was deemed suitable as it outlines conditions and relationships that influence media users' preferences and enables one

to establish the gratifications that media resources offer to individuals, which is the focus of this study. The theory claims that people depend on media to gain access to:

- Information about their social world
- Information that enables them to act meaningfully and effectively in the society
- Entertainment (Ball-Rokeach and DeFleur, 1976).

Establishing these relationships is in line with what this study sought to investigate. The theory further states that whilst people depend on media information to meet certain needs and achieve certain goals, this dependence is not spread out equally across all media as dependence is influenced by the extent to which a given media meets a number of their needs (Ball-Rokeach and DeFleur, 1976). Furthermore, whilst an individual might be considered to be in control of determining which media to use to meet his or her needs, it is important to note that this decision is shaped by culture and other social conditions, which are not necessarily controlled by an individual. This places constraint on what and how media can be used. The availability of other non-media alternatives is also a critical factor in individual's decision to use or not to use a given media (Ball-Rokeach and DeFleur, 1976).

Ball-Rokeach and DeFleur (1976) further posit that based on prevailing power structures, mass media systems can be classified as either asymmetrical or symmetrical based. In the context of this study, the Internet and SNS platforms are regarded as symmetrical in that each bona fide student has "free" and equal rights or access to the Internet, thus each student has equal power with no student having no control over more resources than the other.

Although the theory states that there are the macro level of the social environment and media systems, the micro level and the meso level, this study only discussed and investigated the micro level which deals with individuals' media dependencies and only derived claims from the theory pertaining to those. Adopting this approach is supported by DeFleur and Ball-Rokeach (1989) who state that an examination using MSD does not necessarily need to encompass the entire media structure since it is bound to be a mammoth task, thus next to impossible

to conduct. They further state that "... depending on the problem under investigation, MSD relations may be conceived to involve the whole media system or one of its empirical parts (e.g., television, radio, etc.)" (DeFleur and Ball Rokeach, 1989, pg 16).

Research Methodology

Given that this study is interpretive and qualitative in nature, the chosen research strategy was a case study to enable an investigation within a real-life context (Yin, 1994). This approach enabled the study to get in-depth understanding of the phenomenon within its context (Cavaye, 1996; Benbasat, Goldstein and Mead, 1987). Semi-structured interview questions were formulated based on the themes derived from the theoretical framework.

The selected study location was the University of Botswana. It is a government-funded institution in Gaborone, Botswana. The University has a student population of 12, 800 students, out of which 1850 are postgraduates. The University comprises eight faculties, namely Business, Education, Engineering and Technology, Health Sciences, Humanities, Medicine, Science, and Social Science (UB Annual Report, 2017). The study sample comprised 100 randomly selected undergraduate students drawn from the Faculty of Humanities. Selecting undergraduates as a sample population was influenced by an assertion that, predominantly, young people in Botswana mainly gain access to SNS in college campuses (Batane, 2013). In order to conceal the identity of the participants, respondents were coded as SN1 up to SN100.

A pilot study was carried out during the month of February 2018 with the aim of highlighting any potential problems in language usage in the research instruments, scope of questions asked, sequencing and format of the questions, thus improving the internal validity of the instruments (van Teijlingen and Hundley, 2001). The pilot semi-structured interviews were administered to three randomly selected Faculty of Humanities undergraduate students who were excluded from the full-scale study. The primary data was collected by the lead researcher during the months of March 2018 to May 2018. Semi-structured interviews were chosen because, according to Denzin and Lincoln (2005), they allow one to explore issues better as they are guided by set of issues that the researcher would like to highlight during the

interview, whilst allowing one to follow up on issues as and when they emerge during the interviews. Data analysis was done iteratively, and emerging patterns consistent with concepts and relationships derived from the research questions and theoretical framework were established (Fereday and Muir-Cochrane, 2006).

Findings

This section presents findings on the University of Botswana undergraduate students' use of social networking sites and the individual and social needs that are gratified by using the sites.

University of Botswana Undergraduate Students Use of Social Networking Sites

Although students stated that they used Facebook, Twitter, Instagram, WhatsApp, Tumbler, LinkedIn, Eskime, Snapchat, V.com, the study established that about 85 percent of the undergraduate students predominantly used Facebook, WhatsApp, Twitter and Instagram. These findings lead the study to conclude that the claim that although people depend on media information to meet certain needs and achieve certain goals, dependence is not spread out equally across all media is valid (Ball-Rokeach and DeFleur, 1976). Similarly, Alhabash and Ma (2017) and Mahadi et al (2016), Kim, Sin, and Yoo-Lee (2014) also established that students have platforms they preferred over others and that they mostly used Facebook, WhatsApp, Twitter and Instagram.

Whilst students were not asked which ICTs they used for accessing SNS, when asked about their involvement with their cellphone, they indicated that they were attached to their mobile phones as most of them reported that they often think about their phones when they are not using them. In addition, they stated that whenever they were contacted on their mobile phones, they interrupted whatever else they were doing. The students stated that the thought of being without their mobile phones made them distressed. They said that they used their mobile whether they were with friends or amongst strangers. This study concludes that undergraduates are attached to their mobile phones as these are tools with which they maintain and manage their relationships. According to Taroor et al. (2014), cell phone attachment is a bond connecting a person's

self and the device. The findings are similar to the ones by Mei et al. (2018), Akinleke and Omowunmi, (2017), Taroor et al. (2014), who also established that students were possessively and emotionally attached to their devices. However, Emmanuel et al. (2015 p. 2) state that 'people are not addicted to their smartphones, they are addicted to the information, entertainment, and personal connections they deliver' as they "provide a portable, instant way to stay informed, entertained, and connected".

Individual and Social Needs of Undergraduate Students Gratified by the Usage of SNS

This section presents findings related to the types of information needs met by the use of SNS, the relationships that undergraduate students create through SNS, as well as its use for entertainment.

Types of Information needs met by SNS

Students clarified that SNS allow them to be connected to other users to exchange information directly or indirectly. At a more personal level, students stated that they go online to gain access to information on upcoming social events, fashion trends, political information, gossip, relationship challenges, and health information, to advertise items for sale, job adverts and assignments. Students stated that they also obtained information that enabled them to understand others and how to interact with others in social settings. In addition, the students stated instances where they had to deal with a situation which they were unsure of how to deal with, such as going on a date or any social event they would go to Youtube to see how it is done rather than ask friends.

The participants also stated that they used SNS to access *information about* belief systems, *people and places*. Whilst students reported that they used SNS for learning purposes, they stated that they did not communicate with their lecturers via SNS. They preferred going online for information because it is a cheaper way of getting information. In addition, the information is usually more current and is accessible irrespective of geographic location, time or activities they are engaged in. SNS also enables students to keep close to colleagues and acquaintances who in turn provide them with access to information and opportunities that might not be available amongst their families or close friends.

Based on the empirical results, this study therefore concludes that indeed individuals develop dependency on SNS due to their need to get information that enables them to understand themselves, guide them in terms of how to behave and entertainment. Similarly, Wickramanayake and Jika (2018); Ikachoi (2017); Emmanuel et al. (2014) Eke, Omekwu, and Odoh (2014); Kim, Sin, and Yoo-Lee (2014) also established that, mostly, students use social networking sites to access online information, entertainment and to interact with friends, colleagues, acquaintances and family members.

Relationships in Social Networking Sites

This study established that relationships were important for students on SNS platforms, as they stated that they meet people online with the intention of meeting them offline. Students indicated that they liked having connections with family and close friends on SNS, as it means there is always someone they can talk to, especially when they feel lonely or stressed, thus assuring them emotional support. In addition, they stated that they used SNS to be free of everyday life responsibilities and to avoid being bored. Whilst students regarded knowing a person in real life as important in their selection of friends/followers, they did report that they had friends they had not met offline and stated that relationships that start on SNS sometimes evolve into meaningful relationships in real life. A person's country of origin, political views, values, norms and beliefs were also cited as important in selection of friends/followers in SNS, whilst ethnicity and religion were not considered as important in the selection of friends and/or followers.

Students stated that it was important for them to become members of like-minded groups on SNS. They stated that they mainly post, share and comment on sites accessible to or maintained by other in-group members or engage in discussions about issues that express group membership, and that they find these groups educational. They preferred taking part in such groups as they have information that they feel is beneficial. It was important to do so as one student stated, "*I do it because I like interacting with people as well as engaging in talks with them as well as discussions*" (SN4). They also stated that participating in group discussions enables them to

clarify issues without fear. One of the students explained that "*sensitive people online are sentimental about issues posted, so I refrain from them to avoid unnecessary fights or disagreements*" (SN3). However, other students such as SN9 mentioned that "*most groups do not usually maintain the purpose they were created for, so I avoid joining them*" while another felt that it was important to provide information freely not just to groups as "*everyone even people outside the group need to get information*" (SN17). Most students reported that they each had between 20 and around 2000 friends or followers on various SNS accounts. They stated that they have those numbers of followers because they are outgoing, enjoy chatting and they post '*too much*' in SNS. Others stated that it is because they were well known, as their friends and followers were mainly people who they knew. When asked who they thought viewed their profiles, the students stated that they thought their classmates, people they went to school with, people in their social circles, and members of their family did. They stated that they did not think their lecturers looked at their profiles. The students stated that it was important to always interact and be friendly with friends or followers on SNS. Some of the students believed that their "*online reputation extends to my reputation in my social circle*" (SN3). Having many followers and friends is also considered to "*boost your morale and confidence*" (SN3). They stated that more followers or friends meant that one "*gets exposed to more information*" (SN5). The students further stated that SNS friends, followers encourage them and give "*tips on health matters, motherhood, and relationships*" and "*keep me entertained and well informed*" (SN4).

The students also reported that friends also shared information and liked pictures and comments, and that it was important to have many likes and retweets, as it means that they are popular. Some of the students believed that "*It shows that my posts are of any interest to other people*" (SN18). The students stated that it was important for them to maintain continued interest of their friends and followers in their posts. They stated that they did the following to maintain continued interest in their posts:

- Updating and changing status frequently
- Getting involved in posts of their followers' chats to keep communication ongoing

- Sharing and re-posting whatever is current and of interest to me and others.

Students reported that it made them “*very happy*”, “*joyful*” if what they had posted was liked or they were followed by someone they looked up to on SNS. One student (SN89) stated, “*It felt really good because, like they recognize me*” and that “*I felt so humbled when a certain celebrity followed me and it made me feel important*” (SN7). However, other students did not regard it important to have likes as SN16 stated, “*Likes are a bad influence as those who post dirty things get more likes*”. Other factors motivating students to connect with others online include the need to boost popularity. When asked what makes others popular on SNS, the students listed the following:

- Beauty
- Power from outside SNS
- Money
- Family wealth
- Coming from expensive schools
- Ability to express emotions.

The participants indicated that education was not necessary for one to be popular on SNS. To most of the students, it was important to have lots of friends or followers and likes, thus students engaged in activities that ensured that they keep the numbers of followers and likes they get. This is because in the instance of mediated communication, users tend to rely on whatever limited cues may be “*given off*” by the audience; in the case of SNS, likes and followers are important determinants of how others view the individual (Goffman, 1959). Similarly, Cheung, Chiu and Lee (2011) also established that social presence was one of the key factors that determined students’ usage of Facebook.

Solitary Play

In terms of solitary play, students stated that they used SNS for entertainment. They also used SNS to post pictures of themselves in restaurants and other places. They clarified that selfies are important because they use them to express themselves and they allow them to publicize their experiences.

This study therefore concludes that individuals develop dependency on SNS as they enable them to

establish relationships and to understand themselves and others. The information students get from SNS also guides them in terms of how to do things and act and play in social settings. This study also concludes that relationships with those with similar interests, values, norms and beliefs are important for students on SNS platforms. Ajello (2012) also drew the same conclusion that SNS users with similar interests are more likely to be friends. Students also reported that they used the platforms for entertainment and self-documentation. This is not surprising as SNS is mainly driven by situational activities, such as chatting and exhibitions whereby one posts status updates and photos for an imagined audience (Hogan, 2010). Students also stated that they did not use SNS for academic learning. This is not surprising as Veglis (2014) established that students prefer to keep social networks and learning situations apart. Clark et al. (2009) termed this digital dissonance.

Social Conditions Which Place Constraint on What and How SNS Can Be Used

Students were asked if their parents or elders had access to their SNS accounts. Predominantly, students stated that their parents did not. Very few students allowed their parents access to their SNS accounts, with most students stating that they had blocked them. This extended to any other user students felt uncomfortable with. Students reported that they used privacy settings on their accounts to exclude certain users from viewing parts their profiles.

The reasons given for excluding parents include “*No, they will stalk on me and I won’t like it*” (SN1). Most students stated that their SNS accounts are private. One of the students (SN1) stated, “*I am an adult*”. They stated that if their parents had access to their SNS accounts, they would not post or watch some of the content they posted and watched. One student stated “*Nope, the things I share or watch are not what they understand at their age. They’re a different generation*” (SN23) whilst another stated, “*No because there are some conversation that are for peers not elderly*” (SN20). The few students who allowed their parents access to their SNS accounts stated that “*Yes, there is nothing wrong with what I post on SNS*” because “*I feel it is user-friendly and so they*

won't be ashamed or shocked" (SN9). The study therefore concludes that those who consider themselves careful users of SNS are the ones who allow their parents access, as SN26 stated "*Yes I will do because there is nothing wrong with whatever I post or talk about*".

This leads the study to establish that whilst parents might be privy to undergraduate students' activities online, students do not consider them to be part of their online audience. Students expressed the same sentiments towards their lecturers, as they stated that they did not communicate with their lecturers via SNS nor consider them to be part of their online audience. The study therefore draws a conclusion that the feeling of privacy from parents' eyes allows students to be freer to post or behave differently from how they would otherwise do if elders or parents were privy to the content. Litt (2011) states that in order to help control the impressions others form, individuals interact and adapt their behaviour based on who is in the actual audience (Goffman, 1959).

This study also established that culture placed a constraint on what and how media can be used. Predominantly, students stated that their culture influences what they post online. One student, SN10, responded, "*Yes, it does, being a Mosotho girl with morals, it comes as a responsibility*" whilst SN7 stated, "*Yes, as a Motswana woman; I am conservative. I cannot do my laundry in public. I have to protect the image of my culture and represent where I'm coming from*". Another student stated, "*I normally post about things that would not humiliate my family name in any way*" (SN6). Another student, SN13, said, "*My culture influences what I post online, things which are culturally wrong should not be posted online (at least by me)*." This assertion was supported by their answers when asked if they thought it was wrong to post pictures of newborn babies online. Most students responded yes. This is supported by culture, as newborn babies are not seen in public until after a certain time. In addition, the students stated that it was wrong to post sexually explicit content, nude pictures, accident scenes with car information and

car crash victims' names online. Students stated that their gender and social status did not determine how they behave and act on social networks, thus giving them freedom to be anything they wanted. Acar and Ayaka (2013) also established that there was a relationship between culture and Twitter use, as they established differences in usage that they attributed to culture.

Online Security Practices of Undergraduate Students

With respect to online security, undergraduate students stated that they did not share personal details, such as phone numbers and home addresses online. In addition, students reported that they used privacy settings on their accounts to exclude certain users from viewing parts of their profiles. Similarly, Kenny and Johnson (2016) established that most of the students in their study used privacy settings especially on Facebook where students reported using privacy settings "to limit their audience".

Conclusion

The results of this study show that SNS use by undergraduate students is driven by different needs. The study also shows that being popular online is important to students. There is need for studies to investigate how individuals who are popular on SNS accrue this strong social presence. Overlooking this tends to downplay the fact that relationships that exist on SNS are not at the same level. Whilst it may be accurate to assume that everybody on SNS is on equal footing, the truth is that some wield more power than others when it comes to presence or followers. This is because there are differences in SNS use and users. Predominantly, there are two main types of SNS users: posters and followers. Posters who are alternatively referred to as Influencers are those who actively participate in the content generation of SNS, thus reinforcing interest and activity (Grabowicz et al, 2012). Followers, on the other hand, are those who track the updates, view the contents, and typically take a passive role in SNS participation.

References

- Acar, A. and Ayaka, D. (2013). Culture and Social Media Usage: Analysis of Japanese Twitter Users. *International Journal of Electronic Commerce Studies, Vol 4 (1)* 21–32.
- Aiello, L. M., Barrat, A., Schifanella, R., Cattuto, C., Markines, B., and Menczer, F. (2012). Friendship prediction and homophily in social media. *ACM Trans. Web 6, 2, Article 9* (May 2012), 33 pages. DOI = 10.1145/2180861.2180866 <http://doi.acm.org/10.1145/2180861.2180866>
- Ajzen, I. (1991). The Theory of Planned Behaviour. *Organisational Behaviour and Human Decision Processes*, 50, 2, 179-211.
- Akinleke, O. and Omowunmi, O. (2017). Analysis of the Attitude of College Students towards Mobile Phone Usage in Nigeria. *International Journal of Education, Learning and Development*, Vol.5, No.6, pp.1-19.
- Al Musawi, A. and Ammar, M. (2015). Students Use of the Internet and Social Networking Sites for Learning and Other Activities at Sultan Qaboos University. *International Journal of Social Media and Interactive Learning Environments*, 3(2), 142-161, Inderscience Publishers.
- Alhabash, S. and Ma, M. (2017). A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media + Society* January-March 2017: 1–13.
- Almarabeh, T., Yousef Kh. M., Mohammad, H. (2016). Internet Usage, Challenges and Attitudes among University Students: Case Study of the University of Jordan *Journal of Software Engineering and Applications*.
- Androulidakis, I. and Kandus, G. (2011). Mobile Phone Brand Categorization vs. Users' Security Practices. *Engineering, Technology and Applied Science Research*, 1 (2), 30-35.
- Ball-Rokeach, S. (1998). A Theory of Media Power and a Theory of Media Use: Different Stories, Questions, and Ways of Thinking. *Mass Communication and Society*, 1:1-2, 5-40, DOI: [10.1080/15205436.1998.9676398](https://doi.org/10.1080/15205436.1998.9676398).
- Ball-Rokeach and DeFleur (1976). A Dependency Model of Mass-Media Effects. *Communication Research*, 3(1), 3-21. <http://dx.doi.org/10.1177/>
- DeFleur, M. L. and Ball-Rokeach, S. (1989). Theories of Mass Communication (5th ed.). White Plains, NY: Longman.
- Batane, T. (2010). Turning to Turnitin to Fight Plagiarism among University Students. *Educational Technology and Society*, v13 n2 p1-12 2010.
- Batane, T. (2013). Internet Access and Use among Young People in Botswana. *International Journal of Information and Education Technology*. 3(1).
- Benbasat, I., Goldstein, D.K. and Mead. M. (1987). The Case Research Strategy in Studies of information Systems. *MIS Quarterly*. 11(3), 369-387
- Boyd, D. and Ellison, N. B. (2007). 'Social Network Sites: Definition, History, and Scholarship'. *Journal of Computer-Mediated Communication*, 13/2: 210-230.
- Cavaye, A.L.M. (1996). Case Study Research: A Multi-Faceted Research Approach for IS. *Information Systems Journal*, 6, 227–242.
- Cheung, C. and Chiu, P. and Lee, M. (2011). Online Social Networks: Why do Students use Facebook? *Computers in Human Behavior*. 27 (4)
- Chin, A. Etudo, U. and Harris, M. (2016). On Mobile Device Security Practices and Training Efficacy: An Empirical Study, *Informatics in Education*. 15(2) 235-252.
- Clark, W., Logan, K., Luckin, R., Mee, A. and Oliver, M. (2009). Beyond Web 2.0: Mapping the Technology Landscapes of Young Learners. *Journal of Computer Assisted Learning*, 25(1), 56–69.
- DeFleur, M. L. and Ball-Rokeach, S. (1989). *Theories of Mass Communication* (5th Ed.). White Plains, NY: Longman

- Denzin, N. K. and Lincoln, Y. S. (2005). *Handbook of Qualitative Research*, 3rd edn. Sage.
- Eke, H. N., Omekwu, C. O. and Odoh, J. N. (2014). The Use of Social Networking Sites among the Undergraduate Students of University of Nigeria, Nsukka. *Library Philosophy and Practice*. <http://digitalcommons.unl.edu/libphilprac/1195>.
- Emmanuel, G. J., Neil, C., Bevan, D. S., Fraser, S. V., Stevenage, M. T. and Whitty *et al.* (2014). Who Am I? Representing the Self Offline and In Different Online Contexts *Computers in Human Behaviour*, 41 (2014), pp. 146-152, [10.1016/j.chb.2014.09.018](https://doi.org/10.1016/j.chb.2014.09.018).
- Ernst and Young, Australia (2012). University of the Future. A Thousand-Year-Old Industry on the Crisp of Profound Change.
- Erving, H. The Presentation of Self in Everyday Life. Garden City, NJ: Doubleday.
- Essoungou, A. M. (2010). Young Africans put Technology to New Uses (Kenyan Software a tool for Political Participation). Africa Renewal. United Nations Department of Public Information (24) 1. pp. 2-22.
- Fereday, J. and Muir-Cochrane, E. (2006). Demonstrating Rigour Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 80-92. <https://doi.org/10.1177/160940690600500107>.
- Goffman, E. (1959). The Presentation of Self in Everyday Life. University of Edinburgh Social Sciences Research Centre, 9 George Square, Edinburgh S Monograph No. 2.
- Grabowicz, P. A., Ramasco, J. J., Moro, E., Pujol, J. M., Eguiluz, V. M. (2012). Social Features of Online Networks the Strength of Intermediary Ties in Online Social Media. *PLoS One* 7, e29358.
- Hogan, B. (2010). The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online
- Hussain, M. and Rubab, T. (2014) Uses and Gratifications of Selected Social Network Services: Study of Lahore youth. *Journal of Media Studies*. 29(2).
- Idakwo, L. (2011). The Use of Media among Nigeria Youths. Retrieved from: <http://www.slideshare.net/goldlami/the-use-of-social-media-among-Nigeriayouth2>.
- Ikachoi, D. (2017.) Relationship between Social Media Use and Communication Skills of Undergraduate Students in Tanzania a dissertation submitted in partial fulfilment for the degree of Doctor of Philosophy in Mass Communication in Jomo Kenyatta University of Agriculture and Technology.
- Kaplan, A and Haenlein, M. (2010). Users of the World, Unite! The Challenges and Opportunities of Social Media Business. *Horizons, Volume 53, Issue 1*, January-February 2010, Pages 59-68.
- Kebaetse, M. B., Nkomazana, O. and Haverkamp, C. (2014). Integrating eLearning to Support Medical Education at the New University of Botswana School of Medicine. *Electronic Journal of e-Learning*, Volume 12, Number 1, 2014 ISSN 1479-4403.
- Kenny, P. and Johnson, G. (2016). SNS Use, Attitudes, Behaviours and Perceptions of Online Professionalism amongst Dental Students. *British Dental Journal*, 221, 651 -655. [10.1038/sj.bdj.2016.864](https://doi.org/10.1038/sj.bdj.2016.864) file.
- Kim, K. S., Sin, S. C. J. and Yoo-Lee, E. (2014). Undergraduates' Use Of SNS as Information Sources. *College and Research Libraries*, 75(4).
- Lau, W. W. (2017). Effects of SNS Usage and SNS Multitasking on the Academic Performance of University Students. *Computers in Human Behavior*, 68, 286-291.
- Lineberry, Zhang Xu, (2011). Uses and Gratifications on Social Networking Sites: Analysis of Use and Value of Social Networking Sites for Three Types of Social Capital on College Students. Graduate Theses and Dissertations. 12735. <https://lib.dr.iastate.edu/etd/12735>.
- Litt, D. (2011). Social Networking Sites and Adolescent Alcohol Use: The Role of Social Images.

- Magogwe, J. and Ntereke, B. (2014). Facebook and Classroom Group Work: A Trial Study Involving University of Botswana Advanced Oral Presentation Students. *British Journal of Educational Technology*.
- Mahadi, S. et al. (2016). The Impact of Social Media among Undergraduate Students: Attitude. 3rd global conference on business and social science December, Kaula Lumpur, Malaysia.
- Mei et al. (2018). The Relationship between Impulsivity and Internet Addiction in Chinese College Students: A Moderated Mediation Analysis of Meaning in Life and Self-Esteem." *PLoS ONE*, vol. 10, no. 7.
- Mesole, F. (2014). Use of Social Media as an Alternative News Sources among University Students. A partial fulfilment of the requirements for the Degree of Master of Arts in Communication and Media Studies. Eastern Mediterranean University, August 2014 Gazimağusa, North Cyprus.
- Ogaji, I. J. et al. GIVE OTHER NAMES (2017). Pattern of Use of Social Media Networking by Pharmacy Students of Kenyatta University, Nairobi, Kenya. *Computers in Human Behaviour*, 66, 211-216.
- Ojedokun, Ayoku A. (2001). "Internet Access and Usage by Students of the University of Botswana". *African Journal of Library, Archival and Information Sciences*, Vol.11, no.2. Pp.97.
- Robbins, S. P. and Singer, J. B. (2014). From the editor – The Medium is the Message: Integrating Social Media and Social Work education. *Journal of Social Work Education*, 50(3), 387–390. doi:10.1080/10437797.2014.916957.
- Rubin, A. M. (2002). The Uses-and-Gratifications Perspective of Media Effects. In J. Bryant and D. Zillmann (Eds.), *LEA's Communication Series. Media Effects: Advances in Theory and Research* (pp. 525-548). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Severin, W and Tankard, J. (2001). *Communication Theories: Origins, Methods and Uses in Mass Media*. 5th edition. NY. Longman.
- Almarabeh, T., Moidalawi, Y. and Mohammad, H. (2016). Internet Usage, Challenges, and Attitudes among University Students: Case Study of the University of Jordan. *Journal of Software Engineering and Applications*, Vol.9 No.12
- Taroor et al. (2014). Emotional Affinity towards Cell Phones among University Students in UAE. *The European Journal of Social and Behavioural Sciences*, (eISSN: 2301-2218).
- Tsholetso, T., Maunganidze, L. and Faimau, G. (2017). "Online Social Networking and Academic Performance at the University of Botswana." *Mosenodi: Journal of the Botswana Educational Research Association*, Vol. 20 (2): 4-15.
- Umunnakwe, N. and Sello. Q. (2016). Effective Utilization of ICT in English Language Learning — The Case of University of Botswana Undergraduates. *Universal Journal of Educational Research*, v4 n6 p1340-1350 2016.
- Van Teijlingen, E. and Hundley, V. (2001). The Importance of Pilot Studies. *Social Research Update 35*, Department of Sociology, University of Surrey
- Veglis, A. (2014). Models for Integrating Social Networking in Higher Education. *International Journal of Advanced Computer Science and Information Technology*, 3(3), 317–326.
- Wickramanayake and Jika (2018). Social Media Use by Undergraduate Students of Education in Nigeria: A Survey. *The Electronic Library*, 36 (2): 00-00.
- Witt, R. E., Kebaetse, M. B., Holmes, J. H., Ryan, L. Q., Ketshogileng, D., Antwi, C. and Nkomazana, O. (2016). The Role of Tablets in Accessing Information throughout Undergraduate Medical Education in Botswana. *International Journal of Medical Informatics*, 88, 71-77.
- Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd ed.). Newbury Park, CA: Sage Publications.

Bojelo Mooketsi is a Senior Lecturer in Information Systems in the Department of Library and Information Studies, University of Botswana. She holds a PhD in Information Systems from the University of Cape Town.



Athulang Mutshewa is Head of Department and Senior Lecturer in the Department of Library and Information Studies, University of Botswana. He holds Master's and PhD degrees in the areas of Information Systems and Library and Information Science.



