

A Uses and Gratification Perspective on Social Network Sites among Private University Students in Kenya

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Abstract

Despite a number of studies exploring the uses and gratifications of social network sites (SNS) in Sub-Saharan Africa, few seek to know which gratifications lead to high dependence in the use of a particular SNS and how it enhances the sense of social presence among students. Informed by uses and gratification theory and social presence theory, this paper sought to fill this gap. The researchers used a stratified random sample of 489 students from a private university in Kenya. These students filled a survey between February and May 2018 that focused on the types of social media sites students sought and their gratifications. The data collected was analysed using content analysis, hierarchical and logistic regression. Results showed that students sought various gratifications from SNS. First, they sought SNS that enabled them to communicate, interact, socialize and connect with friends, and family; secondly, to get updates and trending news; furthermore, students sought SNS to access new technologies and innovations. Other gratifications sought were: to transact business; carry out work-related duties; enhance learning; entertain, and enjoy the attributes of the SNS. Purposive value influenced dependence on Facebook and WhatsApp, Purposive value (information) and entertainment influenced dependency on Google, while entertainment influenced dependency on YouTube. There were positive relationships between social presence with purposive value, self-discovery, and entertainment. Some practical implications include: first, the universities should channel the gratifications that students seek in social media to enhance learning activities. Secondly, YouTube should be incorporated into learning and teaching activities.

Keywords: University students, social network sites, uses and gratifications, social presence theory

Introduction

Since the communication revolution began taking place, there is ubiquitous use of social network sites in people's daily lives. Statistics show that the number of social media users worldwide has grown from 970 million in 2010 to 2.46 billion in 2017 and is projected to rise to 3.02 billion users in 2021. Africa's social media users are approximately six percent of the entire world's social media users. As one of Africa's fastest growing countries in information technology, Kenya has a significantly high social media use which is popular with all ages. A significant proportion of Kenyans, about 25.6 million, have internet access. Boyd and Ellison (2017) perceive social network sites as those web-based services that allow individuals to: construct a public or semi-public profile within a bounded system; articulate a list of other users with whom they share a connection and view and traverse their list of connection and those made by others within the system.

Research shows students' SNS use and gratification vary according to their socio-demographic characteristics, personality types and the type of SNS they are engaged in (Kircaburun, Alhabash, Tosuntas, & Griffiths, 2018; Hwang & Lombard, 2006). However, few studies have addressed the issues related to the driving force behind the heavy use of particular SNS nor on a comparative analysis on the use of gratifications among various SNS or even linked how the various gratifications contribute to social presence. Thus this was the motivation for this study, which seeks to fill this gap in knowledge by attempting to unravel these issues. Using Uses and Gratification Theory and Social Presence Theory, the purpose of this paper was to explore whether the type and nature of social media gratifications determine the use of social network sites among students. The Uses and Gratification Theory (UGT) was deemed appropriate for the study because of its capability of exploring interactive systems such as social network sites in a detailed and concise manner (Xu, Ryan, Prybutok & Wen, 2012; Froget, 2013).

On the other hand, Social Presence Theory (SPT) has been used to find out if social network sites can create social presence to enhance learning activities (Kabilan, Ahmed, & Abidin, 2010). In fact, in a bid to enhance social presence, most universities in Kenya seek to increase their internet bandwidth with the hope that internet connectivity will increase the use of virtual academic interaction and learning among students. It is against this background therefore that the research sought to investigate the nexus between SNS and social presence. To achieve this, the study was organized into the following titles; first, it gives an overview of social network sites then it continues to discuss the theories of SNS. Thereafter, it presents literature review, methodology then goes on to present the results and discussions. Finally it gave the conclusion and recommendations based on the findings.

Social Network Sites

There are more than 60 social network sites that are currently in use worldwide (Jamie, 2018). Out of these, the most popular ones include: Facebook, WhatsApp, Instagram, Snapchat, YouTube and Google. However, it is Facebook that has the greatest following; in fact, by January 2018, statistics from facebook.com show that the platform had managed to register 2.2 billion active users. Coming to the Kenyan context, in the year 2017, the monthly users of common social network sites were: WhatsApp which had 12 million users; Facebook with 7.1 million users, YouTube with 8 million users and Instagram with 4 million, LinkedIn with 1

million, Twitter with 1 million and Snapchat with 0.25 million (Bloggers Association of Kenya, 2017).

Whereas Facebook enables sharing of photos, videos comments, create and update status, private messaging, and broadcasting live streams, WhatsApp (WA) on the other hand, is the most popular platform in Kenya. It has an instant messaging feature. WA is used by individuals and groups such as family, and people living within the same neighbourhoods to not only share information, videos, documents, video calling, but also to support small businesses. It can be used to maintain existing friends rather than creating new friends (Soko Directory, 2018). YouTube is a video-sharing platform where people can share their music and even educational materials (Hanson & Haridakis, 2008). YouTube allows users to create and share content (Balakrishnan & Griffins, 2017).

Google has several user friendly features; it has Google plus which allows instant messaging, video conferencing with friends and groups. The application has features similar to both Twitter and Facebook. Its circle feature allows the users to place different friends into different categories and share appropriate content with each category. The hangouts allow a live and multi-user video conferencing, and there is group instant messaging among other features (Curran, Morrison & Cauley, 2012).

Theoretical and Literature Review

Theoretical Review

This paper employed the Uses and Gratification Theory and the Social Presence Theory. The Uses and Gratification Theory was propounded by Blumler & Katz (1974). This is a communication theory that seeks to understand people's use, motivations, and attitudes towards the use of a particular medium. Despite Technology Adoption Models (TAM) being a dominant theory in understanding technology adoption, UGT is more appropriate in exploring the individual selection of social network sites, how people select a media to gratify a need, and why one media is chosen over another. According to Xu, Ryan, Prybutok, & Wen, (2012) Technology Adoption Models tend to treat information technology as a black box and as such ends up failing to answer the question as to what makes a system useful.

In regard to motivations, several scholars have sought to identify the nature of motivations that people derive when using social network sites (SNS). For instance, Nyland (2007) used UGT, the theory of the niche in a sample of 340 undergraduates to find out the nature of gratifications from internet social network compared to email and face to face communication, and whether SNS had displaced the other media – email and face to face communication. The study revealed three major gratifications: gratification opportunities, social utility, and entertainment. SNS were popular because they were a convenient place to hang, and had a broad niche in gratification opportunities and entertainment gratifications, but they did not displace the other media. Hwang (2006) classified gratifications into gratification sought and gratification obtained. The former entailed what the users look for in an SNS while in the former, it explains what users gain from these sites.

Xu Ryan, Prybutok, & Wen (2012) assert that UGT is suited in studying socio-psychological factors such as loneliness and how they contribute to an individual adopting SNS. In addition, Kuss & Griffins (2011) explored in their theoretical review whether there was a relationship between the five personality traits and SNS addiction using the UGT paradigm. In this case, the motivations and gratifications were equated to addictions. SNS addiction disorders are characterized by a neglected personal life, too much mental preoccupation, and escapism, mood modifying experiences and concealing behaviours which are found among heavy SNS users. The study found people with high social identity altruism and telepresence used SNS for social networks. Extroverts tended to use SNS for enhancement while introverts for social compensation leading to high usage of SNS. There was more SNS usage among men than women. Teenagers had higher SNS followers than older people of above 60 years. High usage was also related to low conscientiousness and high narcissism.

Although cases of SNS addiction are reported elsewhere, closer home in Nigeria, Asemah, Okpanachi & Edgoh (2013) found a negative relationship between SNS usage and academic performance among students of Koigi State University. Asemah et al. (2013), used the social information processing theory and media equation theory. On average the students surfed for two hours. The lack of addiction among these students was attributed to the high monetary costs associated with SNS usage but still, there was potential for addiction. From the above discussion, UGT is suited to study the motivations that lead students to seek social network sites, and the gratifications they enjoy from them including the possibilities of abuse and addiction. In Kenya, there are a few studies that have sought to determine the extent of SNS usage or the motives behind it or linking SNS with the personality-oriented factors among students in institutions of higher learning. Research shows that the popularity of a medium is derived from the pleasure and attitudes people have towards its content (Sampath, Kalyani, Soohinda & Dutta, 2018). Despite different SNS possessing different functionalities, they are occasionally lumped together. This necessitates the need to find the type of gratifications that university students seek in Kenya.

Literature Review

a) UGT and Individual Network Sites

The use of social network sites is associated with various types of gratifications. For instance, Stafford, Stafford, and Schkade (2004) postulated three types of gratifications (content--information, process—entertainment and passing time, and social gratifications—build social relationships). Liu, Cheung, and Lee (2010) added another gratification technology gratification—in assessing social network sites. This section explored the extent to which the various SNS gratifications contribute to individual SNS usage and dependency (addiction). This study specifically focused on those sites which are common in Kenya. These included Facebook, WhatsApp, YouTube, and Google. Many studies that have explored the nature of gratifications identified with Facebook. For instance, Sendurur and Yilmaz (2015) did a study on the social network site patterns among pre-service teachers. They found out that SNS allowed users to keep up with close and distant friends, for information and education, passing time and promoting the self.

In addition, Kircaburun, and Griffins (2018), did a study to find out the relationship between social media use and problematic social media use among Turkish undergraduates. In this study they controlled for personality types, demographics, and popular media sites; the social media use and problematic social media use were dependent variables, while gender, age and personality traits, social media motives were the independent variables in the hierarchical regressions conducted.

Kircaburun et al (2018) study among Turkish university students found that women used social network sites more than men for maintaining relationships, managing tasks, information, and educational motives. Women tended to be more problematic users of Facebook, suggesting women can get addicted to social interactive activities of the social media sites. Men used the SNS for socializing and making new friends. Age was positively associated with SNS motives with the exception of task management, information and education gratifications. Facebook was the fourth used SNS in the study and was related to higher social media use of information and educational purposes and problematic use of social media. Passing time was the strongest predictor of problematic use of social media. For learning purposes, Manasijević, Živković, Arsić, and Milošević, (2016) conducted a study in Belgrade University to investigate why students use Facebook and how Facebook enhanced learning purposes. These authors found that Facebook was associated with education gratifications through creating groups (communities) and exchanging course-related content, depicting that Facebook satisfied a variety of gratifications. However, the question that remains is whether these gratifications are the same for other SNS such as WhatsApp.

The UGT theory has been used to study the influence of WhatsApp (WA) on students' learning habits in Ghana (Appiah, 2016). Appiah's descriptive study found out that among 200 students in four universities, 46.7% used WA ten or more times a day, 40% spent 15 to 30 minutes in each visit while 20% spent 30-45 minutes on each visit. In addition, 40% of the students used WhatsApp on campus during lectures and 33% used in the hostels. Students used WA for studying, group discussions, network and sharing content in the form of news, videos, and photos. Sharing their experiences and insights, killing loneliness, for politicking, business, and romantic relationships. This study indicated cases of WA addiction as students reported the use of WA had affected their academic performance, 33.3% had back pain, 26.7% had neck pain, 60% eye irritation, and 66.7% had financial restrictions. The author recommended that universities should devise policies to regulate the use of social media. In order to find out dependence (addiction) on a WA, further analysis of what causes dependence has to be identified.

In a study aimed at examining the causes of WA dependency in India, Sampath, Kalyani, Dutta (2018) found out that students with WA dependence had greater odds of positive attitudes towards WA use as it was an indispensable part of their life. WA enabled students to make new friends, overcome boredom, and improve their social status/popularity. Non-WA dependents had a more positive attitude than dependents on how WA enabled them to organize meetings or gatherings. Students with WA dependence had lesser odds of endorsing negative attitudes on the constructs. Students with WA dependence had greater odds on salience, tolerance, mood modification, relapse, withdrawal, and conflict than non-WA users. In their study, 12% of the

students were WA dependents. The authors recommended the use of mobile phone in college settings and the need to increase awareness of the dangers of addiction.

Moreover, the UGT has been used to find how college students use and share out news content on YouTube. Those who loved traditional media tended to watch YouTube for information gratifications, while those who watched the news in comedy and satire sought entertainment gratifications. The sharing of the videos was predicted by the interpersonal communication gratifications. Viewers could be driven by a different set of motives for watching the news clips on YouTube from those of sharing the video content (Hanson & Haridaki, 2008).

YouTube allows users to satisfy both gratifications for conventional media and social media (Hanson & Haridaki 2008; Balakrishnan & Griffins, 2017). It is associated with four types of gratifications content, social, process, and technology. Balakrishnan and Griffins (2017) sought to find out which YouTube gratifications had a significant relationship with YouTube content creation and YouTube content viewing and could possibly lead to addiction among Indian university students. They found that YouTube content creation could lead to higher levels of addiction than YouTube content viewing. Social gratifications had a significant relationship with content creation than content viewing, content had positive significance with content creation but not with content viewing, technology gratifications had positive significance with both content creation and viewing. Technology gratifications encourage people to engage in any social media domain. Process gratifications had a significant relationship with YouTube content viewing but not with content creation.

In the above studies it follows that apart from attitudes, there could be certain gratifications that led to the dependence of a particular SNS. In this study, addictions are equated to dependence and the researchers sought to find the gratifications that lead to heavy dependence of each particular SNS site.

b) The Social Presence Theory

The second theory discussed is the social presence theory--SP (Short, Williams & Christie, 1976). This theory is widely used to understand why people interact socially in online learning platforms and in interpersonal relationships (Gooch & Watts, 2015; Lowenthal, 2009). Lowenthal (2009) noted that the definition of social presence has undergone a lot of changes over time, with no one agreed definition. The definition adopted for this study is that by Gunawardena (1995) who defines social presence as, “the degree to which a person is perceived as a real person in mediated communication,” (p. 151). Social presence has to do with the feeling of being “there” and “real” during the virtual interaction, a degree of salience (Lowenthal, 2009). Most media lack the cues that are present in the face-to-face communication.

The early proponents of SP found out some e-media lacked the visual cues in social presence richness. For instance, the video had higher social presence salience than the audio and the media with high social presence were considered as warm and personal unlike those with a low social presence (Lowenthal (2009). Though, further studies have found that people can introduce new cues as well or they are not essential for virtual communication. Education is a social practice and has to support the notion of social presence, making social presence a key theoretical construct. For example, in an online discussion, learners have to create a social presence and fill

in the missing cues. Thus, the social presence theory has moved away from task-oriented communication to more relational and social communication.

Researchers have further explored how SNS creates a social presence that enhances learning activities. For instance, Kabilan, Ahmed, and Abidin (2010) explored the extent to which Facebook created an enhanced and meaningful learning environment that supported the learning of English as a second language among undergraduate students in Universiti Sains Malaysia. Kabilan et al., (2010) inquired from students their general Facebook practices, usage, and their language ability.

They found that students incorporated Facebook in learning English which led to improved language skills, confidence, motivation to communicate in English, and improved attitude to learning English. Kabilan et al., (2010) recommended the use of predetermined goals and an assessment tool to gauge whether the use of Facebook leads to tangible results. In their study, Facebook as a learning tool created a shared learning environment. This particular research was focused on deciphering what motivates students to utilize SNS in Kenyan private universities.

Researchers such as Hwang (2006) advocate social presence to be incorporated in the uses and gratification research as an important variable to explain what various users do with the variety of media they are indulged in. Furthermore, Hwang (2006) explored the interconnectedness of gratifications with instant messaging among college students. The path analysis revealed that there was a relationship between social presence and gratifications sought or obtained with the effect on gratification obtained being larger than gratification sought. There was also an indirect relationship between social presence and instant messaging via gratifications sought and obtained. The inference from these studies is that students use SNS to enhance social presence in a give and take fashion; they are more comfortable when they feel part and parcel of the networking community, it gives them a sense of belonging. At the same time, it can be inferred that the use of SNS accrues social benefits to the students; the students are able to keep up with speed with the happenings in and outside the university, provided that such happenings have an impact on their social life. As such, this study sought to explore if a similar relationship exists between social presence and SNS gratifications in a private university in Kenya. Below are a summary of the research questions:

RQ1: “What are the gratifications that students seek from social network sites?”

RQ2: Which gratifications lead to more dependence for each particular SNS?

RQ3: To what extent does social presence influence SNS gratifications among college students?

Methodology

Participants and Procedure

In order to answer the above research questions, the study employed a descriptive survey design method. It used stratified random sampling in which students pursuing different programs were grouped into strata that was picked randomly. Random sampling was then employed in which respondents picked were administered with a survey that had both closed and open-ended

questions. This was done between February and May 2018 within the four campuses of a private university. A total of 600 questionnaires were distributed using the various strata among the campuses and 489 (81.5%) were properly filled and used for further analysis. The strata that was employed included students who pursue the different courses from Certificate programme 17%, Diploma 35%, Undergraduate, 43% Masters 4% and Ph.D. 1%. Males were 47% and females 53%. The students who aged below 20 years were 20%, between 20-24 years were 51%; between 25-29 were 17%; 30-34 years were 5 %; 35-40 years were 4% and above 40 years were 3%.

The authors sought the students' consent before distributing the surveys and the participants were assured of anonymity and confidentiality of their responses. Additionally, the university and the National Commission for Science, Technology, and Innovation (NACOSTI) approved the study. The survey was pretested to ensure reliability and validity, also provided are the Cronbach alpha levels of the various measures.

Measures

To find out the students' gratifications, two types of questions were used; the first one was open-ended questions and then closed-ended questions. The open-ended question sought to find out the motivations that led students to use the various SNS sites (see Table 1). The closed-ended questions were in two categories, the first one presented various social media sites and students were requested to rank the level of use within a week's as follows: 0 times, once, twice, thrice, four times, five times, six-time and more.

While the closed-ended questions were adopted from Dholakia, Bagozzi, and Pearo (2004) and Gefen and Straub, (2004). Dholakia et al (2004) scales asked students to rate the extent to which social media satisfied their various needs (information, self-discovery, self-identity, connecting with others and entertainment) on a Likert scale of 1= Not at all; 2 = small extent, 3= moderate extent, 4 = large extent, and 5 = very large extent. These authors had four sets of questions:

- i) Information (purposive value): it had a set of nine questions. An exemplary question was, "to provide others with information".
- ii) Self-discovery: It had two questions. An exemplary question was, "to learn about myself and others." Self-identity (social enhancement): It had two questions. An exemplary question was, "To impress".
- iii) Connecting with others (interpersonal interconnectivity): It had two questions. An exemplary question was, "To have something to do with others".
- iv) The 'entertainment value': It had four questions. An exemplary question was, "to be entertained".
- v) Social presence. This scale was adapted from Gefen and Straub (2004). It had four items: it measured the extent to which social media enhanced the individual's social presence in the virtual space. The scale ranged from 1 = Not at all to 5 to a great extent. An exemplary question was, "There is a sense of human sensitivity".

Data Analysis

Analysis took two forms: on one hand, responses from open-ended questions were analysed using content analysis. The closed ended questions, on the other hand, were analysed using descriptive and inferential statistics that was aided by the SPSS Statistics 20.

Results and Discussions

The results section is organized as follows, first, the content analysis is provided, followed by descriptive analysis and finally inferential analysis. The first questions sought to find out the gratifications that students seek from social network sites. A total of 487 students responded to the open-ended question that sought to find students' motivation for using social network sites. The question generated eight categories with 692 mentions. The unit of analysis is the student, a mention from a student is recorded once See Table 1 below.

Students sought the SNS: 1) to communicate with others and share information, 2) to interact, socialize and connect with friends, and family (both new friends and old friends), 3) to get updates and trending news 4) for technology and innovation ideas, 5) for business, marketing and work-oriented purposes, 6) to enhance learning, connect with teachers, carry out assignments and research, 7) for entertainment, and 8) for the attribute of SNS. These gratifications agree with those of Nyland (2007) who found SNS offered opportunities for social utility and entertainment. They agree with Xu et al. (2013) who hypothesized that loneliness can be a reason for using SNS. In our study, students used SNS to avoid idleness, boredom and to pass time. This comes about during times of loneliness. The study also agrees with Kircaburun et al. (2018) who found out that students use SNS for connecting with friends, information, education, passing time, and promoting the self. These results also affirm Liu et al. (2010) who hypothesized that that internet offers technology gratifications due to their medium appeal and convenience in use. This study found out that students' use of SNS was not only social and academic, but also economically motivated.

Table1: Motivations for Use of Social Network Sites

Motivations	Explanation	Number of Mentions-692	%	Examples
Communicate share information	The use of SNS to share information	65	10	Communicate with and productive groups
To interact, socialize and connect with friends and family	The SNS provides a space to socialize, with friends and family and followings	110	16	Catching up with friends
Update and trending news	Use SNS to get updates and what is trending in the world.	105	15	The zeal to know what is trending and stalking celebrities

Technology and information	A source of inspiration on new technology and innovations available.	14	2	Innovative information
Business, marketing and work oriented purposes.	Use SNS to search for markets and business opportunities and for carrying out work assignments.	18	2	Marketing on social media is easy and cheap
Enhance learning connect with teachers, carry out assignments and research.	Use the rich social media platforms to learn- acquire skills, knowledge carry out assignments and research work.	220	32	They are detailed and good for research.
Entertainment	Use the various platforms for entertainment - passing time and killing boredom	110	16	Entertain me when I am bored; break from work.
The attribute of SNS media	Students choose to use SNS because they are fast, easy, accessible, reliable, and convenient and offer immediate feedback among others.	50	7	It is fast compared to the other forms, it is awesome.

4.1 Gratification and Dependency of SNS Uses

The second question sought to find which gratifications led to a particular SNS dependence. Students also indicated the number of times they visited SNS within a week. (See Figure 1)

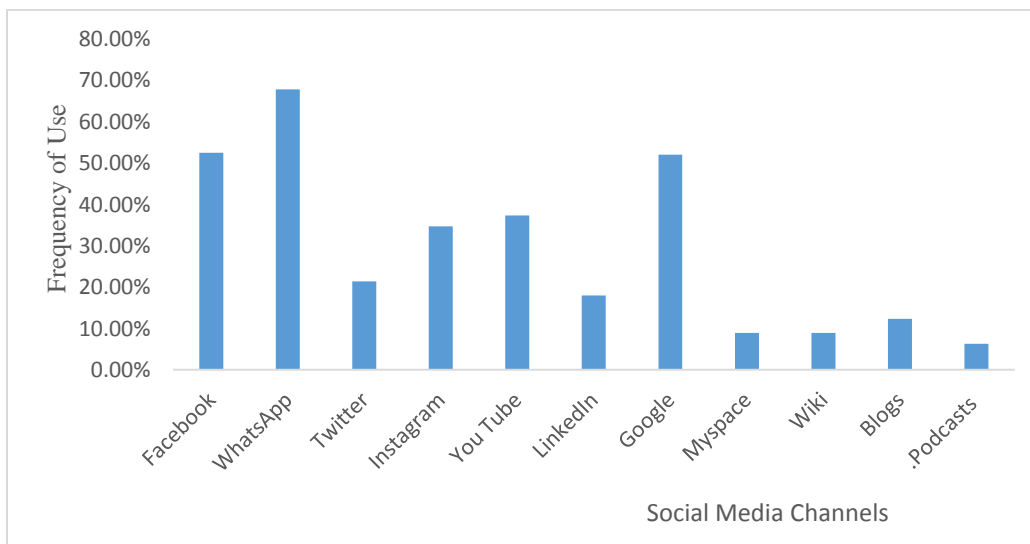


Figure1: SNS with High Dependence Levels

It portrays the percentage of high dependence (who spent six times or more in a week) among various social media channels. It follows that students visited WhatsApp, Facebook, YouTube and Google the most. We further explored these four SNS to establish the gratification that led to their high dependence. (see Table 2 for correlations)

Table 2: Correlation and Inter-Correlations and Cronbach Alpha of Main Study Variables

	N	M	SD	σ	1	2	3	4
1. Purposive value	398	3.74	.98	.74	1			
2. Self-disclosure	441	3.35	1.53	.53	.53**	1		
3. Entertainment	408	3.49	1.09	.63	.48**	.36**	1	
4. Social Presence	314	3.27	1.08	.75	.43**	.40**	.42**	1

** = Correlations significant at .01 level

Note: Self-identity and Interpersonal connectivity had very low Cronbach alpha values and were omitted from further analysis.

To determine dependence, the users of these SNS sites were coded into two categories: 0= low dependence and 1= high dependence users. Students who spent between 0-5 times (visits) a week were coded low dependence users, and those who spent six times and more in a week as high dependence users. On each visit, students could spend not less than a half an hour. The usage of SNS is a proxy of the extent of how much someone depends on it or is addicted to it (Sampath, et al, 2018; Appiah, 2016).

The second research question sought to find out which gratifications lead to more dependence for each particular SNS. We conducted four logistic regression for each of the four SNS. For each regression, the dependent variable was a binary variable measuring the use of that particular SNS, which had two outcomes 0 = low dependence and 1 = high dependence. The independent variables were: gender, purpose value, self-discovery and entertainment. The gender variable was dummy coded as 0 (males) and 1(females) to make it a continuous variable.

4.3 Gratifications and Facebook Dependence

The model fit was poor as the Hosme-Lemeshow test was significant (χ^2 (n = 344)= 17.56, df = 8 , p <.05; The effect size were small: Cox and Snell ‘s R^2 = .06 ; Nagelkerker R square = .08. Only purposive value was significant, that is it could distinguish between low and high dependence among Facebook users (Wald = 5.99, df= 1, p < .05). The odd ratio of purposive value suggests that for every one-point increase in purposive value, the odds are 150.5% greater for being a high dependent Facebook user than a low Facebook user. The ‘self- discovery’ and entertainment predictors were non-significant. This implies the odds for being low or high dependence user are the same for such gratifications.

Overall, the logistic regression accurately predicted 62.8% of the students with high dependence being more correctly predicted (86.2%) than low dependence Facebook users (26%). Kappa coefficient =.14(small) provides evidence that the predictions based on the logistic regression model are statistically significant and not out of chance. This study shows that people depended on Facebook for information (purposive value) see Table 3. However, the research could not establish whether this type of information is for learning or social purposes. Therefore, more studies can seek to find the nature of information Facebook users seek.

Table 3: Facebook Regression Results

	B	SE	Wald	Exp (B)	Lower	Upper
Intercept	-1.59	.52	9.44	.20*		
Purposive value	.41	.17	5.99	1.50*	1.09	2.09
Entertainment	.11	.12	.75	1.11	.87	1.28
Gender	-.12	.23	.28	.89	.56	1.40

*P<. 05

4.4 Gratifications and Google Dependence

A logistic regression was conducted to find out whether the level of social media use (low dependence on Google and High dependence on Google) could be predicted from gender and the various gratifications - purposive value, self-discovery, and entertainment. A good model fit was evidenced by the non-statistical significance of the Hosmer and Lemoshow test, χ^2 (n = 344) = 7.06, df = 8, p = .53. The effect size were interpreted using Cohen 1988 Cox and Snell R^2 = .09 NagelKerke R^2 = .13. It implies the predictors as a set reliably distinguished between google low dependence users and google high dependence users. Two predictors were significant, entertainment, Wald =4.78, df = 1, p<.05; purposive value, Wald = 8.99, df = 1, p <. 05. One point increase in entertainment, the odds are 134% of being a high dependence google user, while for purposive value, and a one point increase leads to 175% increase in odds of being a high dependence google user. The other predictors -- self-discovery and gender were not significant and this implies the odd of having low or a high dependence on google are similar.

Overall, the logistic regression model accurately predicted 74.1% of which 26% had low dependence on google and 93.8% had high dependence on google. To account for chance agreement in classification, Kappa coefficient was calculated (.24, p <.001) showing the logistic regression model is statistically significant better than chance see Table 4 for regression coefficients, Wald ratio, odd ratio and 95% confidence interval. The results indicate people depend more on Google for purposive value and entertainment. These two factors can cause addiction of the Google tools. Google and its related products offer opportunities for learning and for research purposes.

Table 4: Logistic Regression Results for Google Users

	B	SE	Wald	Exp (B)	Lower	Upper
Intercept	-2.05	.56	13.40	.13*		
Purposive value	.56	.19	8.99	1.76*	1.22	2.54
Entertainment	.30	.14	4.78	1.35*	1.03	1.76
Gender	.12	.25	.25	1.13	.69	1.85

*P<. 05

4.5 Gratifications and Dependence on WhatsApp

A logistic regression was conducted to find out whether the level of social media use (WhatsApp low dependence and high dependence on WhatsApp) could be predicted from gender and the various gratifications - purposive value, self -discovery, and entertainment. A good model fit was evidenced by the non-statistical significance of the Hosmer and Lemoshow test, χ^2 (n = 344) = 5.76, df = 8, p = .67. The effect size were interpreted using Cohen 1988 Cox and Snell $R^2 = .12$ Nagelkerke $R^2 = .18$. It implies the predictors as a set reliably distinguished between WA low dependence users and WA high dependence heavy users. Only one predictor was significant, purposive value, Wald =17.68, df = 1, p<.001. One point increase in purposive value, the odds are 251.2% of having a high dependence on WhatsApp. The other predictors self-discovery, entertainment and gender were not significant and this implies the odd of being a low or a heavy WhatsApp user are similar.

Overall, the logistic regression model accurately predicted 78.8% of which 19% of were low dependence on WhatsApp and 96.6% of high dependence on WhatsApp. To account for chance agreement in classification, Kappa coefficient was calculated (.21, p <.001) showing the logistic regression model is statistically significant better than chance, see Table 5 for regression coefficients, Wald ratio, odd ratio and 95% Confidence interval. The only gratification that could lead to dependence is purposive value. The qualitative component showed students created a WhatsApp group, indicating it can be used for educational purposes. This agrees with Appiah (2016) who found students used WA for studying, group discussion as one of the uses. It disagreed with Kircaburun et al (2018) which did not find education gratifications, but found WA was used to maintain existing relationships.

Table 5: WhatsApp Logistic Regression Users Results

	B	SE	Wald	Exp (B)	Lower	95% confidence level for Exp (B) Upper
Intercept	-2.53	.62	16.86	.08*		

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Purposive value	.92	.22	17.68	2.51*	1.64	8.36
Self-discovery	-.17	-.10	2.69	.84	2.51	1.64
Entertainment	.23	.15	2.69	.84	.69	1.03
Gender	.43	.28	2.36	1.53	.94	1.69

*P <.05

4.6 Gratifications and Dependence on YouTube

A logistic regression was conducted to find out whether the level of social media use (YouTube low users and YouTube heavy users) could be predicted from gender and the various gratifications - purposive value, self-discovery, and entertainment. A poor model fit was evidenced by the statistical significance of the Hosmer and Lemeshow test, χ^2 (n = 344) = 17.851, df = 8, p = .022. The effect size were interpreted using Cohen 1988 Cox and Snell R^2 = .06 Nagelkerke R^2 = .08. It implies the predictors as a set reliably distinguish between YouTube low users and YouTube heavy users. Only one predictor was significant--entertainment, Wald = 4.45, df = 1, p<.05. One point increase in entertainment, the odds are 129.6% of being a YouTube user. The other predictors' purposive value self-discovery, and gender were not significant and this implies the odd of being a low or a heavy YouTube user are similar.

Overall, the logistic regression model accurately predicted 68.3% of which 30.8% had low dependence on YouTube and 91.1% of high dependence on YouTube. To account for chance agreement in classification Kappa coefficient was calculated (.25, p <.001) showing the logistic regression model is statistically significantly better than chance (see Table 6 for regression coefficients, Wald ratio, odd ratio, and 95% Confidence interval). This study shows high dependence on YouTube because of its ability to entertain. It also shows YouTube is not yet well utilized for information purposes such as education. In all these regression gender was not a predictor of SNS use. This agrees with Kircaburun et al. (2018) that it was used for entertainment among other uses. This study agrees partly with Balakrishnan and Griffins (2017) only in regard to process gratifications which entails entertainment and passing time, but not for social or content gratifications. Gender did not influence usage of SNS which differs with Kircaburun et al., (2018) and Kuss and Griffiths (2011) studies which identified particular gender with specific gratifications. Kircaburun et al., (2018) found that women and introverts tended to rely more on SNS.

Table 6: YouTube Logistic Regression user Results

	B	SE	Wald	Exp (B)	Lower	Upper
Intercept	-1.56	.51	9.22	.21		
Purposive value	.24	.16	2.47	1.28	.94	1.73
Self-discovery	.08	.09	.66	1.08	.90	1.30

Entertainment	.26	.12	4.45	1.30*	1.02	1.65
Gender	-.05	.23	.05	.95	.60	1.49

* P = < .05

The following section explored the relationship between gratifications and social presence.

4.7 Gratifications and Social Presence

The third question sought to find out the extent to which social presence influenced the various SNS gratifications among college students. To answer this question, a regression model was conducted to find whether the purposive value, self-discovery and entertainment contributed significant influence in social presence using the enter method. The dependent variable was the social presence and the independent variable were purposive value, self-discovery, and entertainment. The independent variables were centred to reduce multicollinearity. Findings showed that $R^2 = .28$, adjusted $R^2 = .27$, $F(3, 321) = 41.67$, $P < .001$. Individual regression coefficients are shown below. (see Table 7)

Table 7: Gratifications and Social Presence

Predictor	B	Std. Error	Beta	t
Purposive value	.21	.08	.18	2.74*
Self -discovery	.21	.05	.26	4.27*
Entertainment	.22	.06	.21	3.77*

* P < .05

The study indicates that the three gratifications are related with the social presence, with self-discovery, entertainment and the purposive value indicating the more social presence in that order. This study agrees with Hwang and Lombard (2006) who found that there was a positive relationship between social presence and these gratifications—social utility, interpersonal utility, convenience, and entertainment. In this study, the only gratification that matches with their study is entertainment gratification.

5.0 Conclusions

The findings demonstrated that social presence was a motivating factor for the use of SNS in the university. At the same time, it was established that the UGT and Social Presence Theories are appropriate in the study of SNS choice and gratifications. This was observed by Liu et al. (2010) and Balakrishnan & Griffins (2017). In addition, this study revealed that students use various SNS to gratify different gratifications. For instance, Facebook, Whatsapp, and Google are associated with the purposive value. Educators can maximize these gratifications for learning purposes and other university-related information. YouTube and Google are associated with entertainment. This implies students are yet to associate YouTube for learning purposes. Since the university has invested heavily on campus WIFI, a campaign should be made to use YouTube for information and learning purposes. The qualitative component shed more light to

show that students use SNS for learning purposes, to connect with teachers, do assignments and research. However, universities should also teach students about the dangers of addiction that SNS may pose to students' academic performance.

5.1 Limitations of the Study

The study is a cross-sectional study which relied on self-reported measures. It's only for one private university which may not be representative of private university students in Kenya. The Cronbach alpha of self-disclosure was a bit low at 0.53. However, it offers immensurable insights on the value and gratifications students seek in SNS.

References

- Appiah, M. K. (2016). Influence of WhatsApp on study habit of university students in Ghana. *International Journal of Research in Economics and Social Sciences*, 6(3), 280- 292.
- Asemah, E. S., & Edegoh, L. O. N. (2013). Influence of social media on the academic performance of the undergraduate students of Kogi State University, Anyigba, Nigeria. *Journal of Research and Contemporary Issues*, 7.
- Bake <https://sokodirectory.com/2018/02/number-kenyans-social-media-platforms-increases-bake/>
- Balakrishnan, J., & Griffiths, M. D. (2017). Social media addiction: What is the role of content in YouTube? *Journal of behavioral addictions*, 6(3), 364-377.
- Bloggers Association of Kenya. (2017). State of the internet in Kenya 2019. <https://www.ifree.co.ke/wp-content/uploads/2018/02/State-of-the-Internet-in-Kenya-report-2017.pdf>
- Blumler, J. G., & Katz, E. (Eds.). (1974). *The uses of mass communications: Current perspectives on gratifications research*. Beverly Hills, CA: Sage
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-mediated Communication*, 13(1), 210-230.
- Curran, K., Morrison, S., & Mc Cauley, S. (2012). Google+ vs Facebook: The Comparison. *TELKOMNIKA (Telecommunication Computing Electronics andControl)*, 10(2), 379-388.
- Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network-and small-group-based virtual communities. *International Journal of Research in Marketing*, 21(3), 241-263.
- Froget, J. R. L., Baghestan, A. G., & Asfaranjan, Y. S. (2013). A uses and gratification perspective on social media usage and online marketing. *Middle-East Journal of Scientific Research*, 15(1), 134-145.
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-commerce and the importance of social presence: experiments in e-products and e-services. *Omega*, 32(6), 407-424.
- Gooch, D., & Watts, L. (2015). The impact of social presence on feelings of closeness in personal relationships. *Interacting with Computers*, 27(6), 661-674.

- Gunawardena, C. N. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International Journal of Educational Telecommunications*, 1(2/3), 147-166.
- Hanson, G., & Haridakis, P. (2008). YouTube users watching and sharing the news: A uses and gratifications approach. *Journal of Electronic Publishing*, 11(3).
- Hwang, H. S., & Lombard, M. (2006). Understanding instant messaging: Gratifications and social presence. *Proceedings of PRESENCE 2006*, 50-56.
- Jamie (2018, June 1) 60+ Social network Sites you need to know about in 2018. <https://makeawebsitehub.com/social-media-sites/>
- Kircaburun, K., Alhabash, S., Tosuntaş, Ş. B., & Griffiths, M. D. (2018). Uses and gratifications of problematic social media Use among university students: a simultaneous examination of the big five of personality traits, social media platforms, and Social Media use motives. *International Journal of Mental Health and Addiction*, 1- 23.
- Kabilan, M. K., Ahmad, N., & Abidin, M. J. Z. (2010). Facebook: An online environment for learning of English in institutions of higher education? *The Internet and Higher Education*, 13(4), 179-187.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37(4), 509-523.
- Kuss, D. J., & Griffiths, M. D. (2011). Online social network and addiction—a review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528-3552.
- Liu, I. L., Cheung, C. M., & Lee, M. K. (2010). Understanding Twitter usage: What drive people continue to tweet. *Pacis*, 92, 928-939.
- Lowenthal, P. R. (2009). The Evolution and influence of social presence theory on online learning. *Social computing: Concepts, Methodologies, tools, and applications*, 113.
- Manasijević, D., Živković, D., Arsić, S., & Milošević, I. (2016). Exploring students' purposes of usage and educational usage of Facebook. *Computers in Human Behavior*, 60, 441-450.
- Nyland, R. S. (2007). The gratification niches of Internet social network, e-mail, and face-to-face communication.
- Sampath, H., Kalyani, S., Soohinda, G., & Dutta, S. (2017). Patterns, attitudes, and dependence toward WhatsApp among college students. *Journal of Mental Health and Human Behaviour*, 22(2), 110.
- Sendurur, P., Sendurur, E., & Yilmaz, R. (2015). Examination of the social network sites usage patterns of pre-service teachers. *Computers in Human Behavior*, 51, 188-194.
- Short, J., Williams, E., & Christie, B. (1976). *The Social Psychology of Telecommunications*. London: John Wiley & Sons.
- Soko Directory. (2018, February 15). Number of Kenyans on social media platforms increases – <https://sokodirectory.com/2018/02/number-kenyans-social-media-platforms-increases-bake/>
- Xu, C., Ryan, S., Prybutok, V., & Wen, C. (2012). It is not for fun: An examination of social network site usage. *Information & Management*, 49(5), 210-217.
- Stafford, T. F., Stafford, M. R., & Schkade, L. L. (2004). Determining uses and gratifications for the Internet. *Decision sciences*, 35(2), 259-288.