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Diversion as a Gratification Factor Influencing Mobile Phone Technology Use by Public University Students in Nairobi, Kenya

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Abstract

This study investigated diversion as a gratification factor influencing mobile phone technology use by public university undergraduate students in Nairobi, Kenya. The objective of the study was to assess the influence of diversion on undergraduate university students' use of mobile phones. The study employed the uses and gratifications theory and media technological determinism theory. The target population was 246,871 undergraduate university students in public universities in Nairobi, Kenya. The study design used was quantitative design. The research used self-administered questionnaires as data collection tools. The sampling technique that was employed in this study was purposive sampling to get a sample size of 573 undergraduate students. The data was analyzed using both descriptive and inferential statistics and then processed using the Statistical Package for Social Sciences (SPSS) version 22. Findings revealed that mobile phone technology has become essential in diversion activities among undergraduate university students. The study concluded that the higher the need for diversion, the higher the need for mobile phone technology use among undergraduate university students. The study recommended, first to software developers that they could develop a specific mobile phone software for university students to use for diversion. Since this study focused on undergraduate university students in public universities in Nairobi, Kenya, the researcher

recommends that another study could be carried among post graduate students and also among private universities to find out the gratification factors influencing mobile phone technology use.

Keywords: Diversion, Mobile Phone, Technology, Use.

Introduction

Mobile phone technology as an interpersonal communication medium has been able to settle itself in the modern world as a tool that can be used for many functions besides communication. It is handy but its major strength lies in the fact that it is portable and has multiple uses, especially the smart phones (Jiantti, 2015). Smart phones can be used to download and upload files such and searching for information from the Internet among other uses. These many uses do also present problems when abused as is always the case with many other useful technologies, especially in a learning environment where learners from diverse backgrounds want to experiment with technologies. According to Gardiner (2015), the urge to use mobile phone is so strong that it is difficult to change adding that the mobile phone usage controls those students instead of them controlling it. In the United States of America, college students use mobile phones to maintain privacy and also use them (mobile phones) to keep in touch with their parents (Ishii, 2011). The writer further states that Scottish government has identified text bullying, filming violent incidents, downloading inappropriate materials, harassment, and data protection risks as some of the mobile phone abuses in their learning institutions, otherwise the device should only help a student to make calls, text, e-mail, connect with the Internet, take pictures and make videos among other uses (Kolb, 2011). It is also important to inquire and know the factors that influence the use of the mobile phone technology among undergraduate university students in Kenya so as to understand if the use is of any value.

Background

In the United Kingdom, lonely participants in a study preferred making voice calls and rated texting as a superior medium for expressive and intimate contact (Reid & Reid, 2007). In order to write a text or read one during class, it means the student's attention will be distracted and this will amount to misuse of the mobile phone. Ugur and Koc (2015), calls this habit – phubbing – which means phone snubbing, that is, attending to the mobile phone instead of the immediate surroundings. This could be influenced by the need for diversion from the task at hand. When this use persists, it may lead to addiction which then leads to the need to find out how diversion as a gratification factor influences such kind of mobile phone use. Tessa (2014) says that whenever a habit changes into an obligation, it can be considered an addiction (abuse) and that all entities capable of stimulating a person can be addictive. The mobile phone device has been found to be used by truant students to cheat in examinations which interfere with the measuring of learning outcomes, (Campbell, 2006). This is abuse of the device which should be used to enhance learning by referring to educational resources from the Internet. In a study that examined parents', teachers' and students' perception of the effects of students' access to mobile phones on students' performance found that students with mobile phones perform poorly and misbehave more often than students without mobile phones while in Nigeria, looking into the usage and perceived effect implications Internet enabled phones have on the academic performance of the tertiary students found that Internet enabled usage does not affect the academic performance of the students, Ezemenaka (2013). The mobile phone use habit has been aggravated by the mobile phone capability of being everywhere, every one, every time (Yan, Chen & Yu, 2013).

Individuals and organizations are adopting the mobile phone technology to their peculiar communication needs and wants. Due to the diverse uses to which the mobile phone technology can be put to, it is most likely to be influenced by various factors especially among university students. Undergraduate university students are not left behind in exploiting the advantages of the mobile phone technology which include calculator, clock, games, video function, calendar, FM radio, music player, picture identity, streaming multimedia, speaker phone, hard drive and camera among others. University undergraduate students being at that stage of life when they are transiting from being dependents to be their own persons, are likely to experiment as they seek what can satisfy their peculiar communication needs. The mobile phone seems to be handy in fulfilling or gratifying these needs. In a research titled "Mobile phone Usage at the Kenyan Base of Pyramid", the authors, Crandall, Otieno, Mutuku, Colaco, Grosskurth, and Otieno, (2012), found that of the mobile phone applications and services, 100 per cent of Kenyans use calling services, 85.3 per cent use SMS services, 84.4 per cent use M-Pesa services, 72.6 per cent use credit/airtime services, 12.1 per cent use mobile phones to track lost money while 18.9 per cent use it to monitor commodity prices. On the other hand while striving to get maximum gratification from the mobile phone, students invariably find themselves captivated by the many capabilities and the wide range of uses to choose from.

Research Problem

Mobile phones as interpersonal media have extraordinary technology that make them attractive and engaging, (Economides and Grousopolou, 2008), and these attributes have made them to attract every segment of the society. As a result of this, the mobile phone device has quickly spread among users. Researches have estimated that 100 percent of university students own and use mobile phones and that all of them bring these devices to class; (Ugur and Koc, 2015). Students use mobile phones for discussion, photographs and video, podcasting, video recording, calculators, polling, research, calendars, taking notes and scavenger hunts (Kolb, 2011). This study seeks to find out how diversion as a gratification factor influences university students to use their mobile phones. In Tanzania, a study by Kihwele and Bali (2013), found that students with mobile phones perform poorly and misbehave more often than those without.

With research capabilities, mobile phones can assist students to more quickly access information they need for the task they are working on which aids learning (cognition). In a study carried out by Economides and Grousopolou, (2008), it was revealed that students typically used their phones more than 10 hours per week mainly for calling, which could be influenced by factors such as the need for cognition, diversion, withdrawal or social utility. Educators can take advantage of the proliferation of the mobile phones and use it for instructional purposes (cognition), (Kolb, 2011). However despite the numerous advantages of mobile phones, university students exercising their freedom of expression by engaging in such practices as text bullying, filming violent incidents, downloading inappropriate materials, and harassment as ways of diversion, withdrawal and social utility. Texting can be very disruptive and distractive in many situations more so in a learning environment, (Kolb, 2011). It is a common occurrence to observe students who are physically present, yet mentally preoccupied by non-course related material on their mobile devices. As mobile devices have deeply saturated the university student population, this problem will likely continue to pose a significant obstacle for faculty. Tessa (2014) says that whenever a habit changes into an obligation, it can be considered an addiction (abuse) and that all entities capable of stimulating a person can be addictive. The mobile phone device has been found to be used by truant students to cheat in examinations

which interfere with the measuring of learning outcomes, (Campbell, 2006). This is abuse of the device which should be used to enhance learning (cognition) by referring to educational resources from the Internet.

This study had specific an objective as follow:

1. To assess the influence of diversion on undergraduate university students' use of mobile phones. While the question of the study was:
 1. What is the influence of diversion on mobile phone use among undergraduate university students?

Theories

The study applied the uses and gratifications theory and the media technological determinism theory as the overall research theoretical framework in trying to answer the questions of the study.

The uses and gratification theory, which was the main theoretical approach within which this study was done, postulates that people have needs and drives that are satisfied by using both media and non-media for communication. This theory was developed by among others, Katz, Blumler and Gurevitch in 1974 when they stated that people actively seek out specific media and specific content to generate specific gratifications (results), (West & Turner, 2000). Herta Herzog (1944) studied women's attraction to radio operas for emotional release, vicarious satisfaction and learning from the programs while Katz, Gurevitch, and Haas in 1973 found use of media as being for acquiring information, knowledge, pleasure, status, strengthening relationship and escape, (West & Turner, 2000). Perse (1995), says that people using computers for electronic communication satisfy the following needs: learning, entertainment, social interaction, escapism, passing the time and out of habit adding that use of computers hooked to networks or information services for reasons of passing time or out of habit suggests a ritualistic use. It is said that this ritualistic use of computers for connectivity might lead some users of computer networks or information services to misuse them (Severin & Tankard, 2001). Severin & Tankard, (2001), further list diversion, that is, escape from routine and problems, social utility, that is, personal relationships use of the information and surveillance, that is, information about things that might affect one or will help one do or accomplish something.

The gratification factors influencing mobile phone use singled out in this study were categorized into two as: 1. Cognition – acquiring information, knowledge, and understanding, 2. Diversion – emotional, pleasurable and aesthetic experience, tension release and escape, (Dominick, 2001).

The other theory that was used to guide this study was the media technological determinism theory which is the relation between technology and society and is a term that was coined by Thorstein Veblen (1857-1929). In media technological determinism theory, technology is seen as the prime mover in history where new technologies transform society at every level including institutions, social interactions and individuals (Chandler, 1995).

Technological determinists interpret technology in general and communications technology in particular as the basis of society in the past, present, and even in future, new technologies transform society at every level including institutions, social interactions and individuals, (Chandler, 1995). Pinch & Bijker (1984) argued that technology design is an open process which can produce different outcomes depending on the social circumstances of its development and is therefore subject to interpretative flexibility. This study by looking at gratification factors influencing mobile phone technology use by undergraduate university students, hoped to find out how the mobile phone as a

relatively new technology was transforming the use of communication technology by undergraduate university students for diversion while in the university learning environment.

Karl Marx had said that technological development determines the kind of society that will emerge while Marshall McLuhan who was another proponent of the media technological determinism posited that technological inventions lead to development of the modern world, (Chandler, 1995). Media is said to be a metaphor - a symbolic form - in which information is encoded. Different media have different intellectual and emotional biases, because of the accessibility and speed of their information, different media have different political biases, because of their physical form, different media have different sensory biases, because of the conditions in which we attend to them, different media have different social biases and because of their technical and economic structure, different media have different content biases, (Postman, quoted in Chandler, 1995).

Communication media technology is fundamental to society and that particular technology influences social change and communication revolutions lead to social revolutions. Chandler, (1995), says that a wide range of social and cultural phenomena are seen as shaped by technology. This study looked at how diversion influence mobile phone technology use by undergraduate university students in their learning institutions.

The mobile phone technology has relative advantage over fixed land line telephony. The mobile phones are essentially mobile computers with most featuring texting, digital photography, video capabilities, research capabilities and calculators among other features. These advantages have made the mobile phone technology to be easily accepted among university students as it is relatively advantageous, compatible, observable and easy for any new user but this study focused on what this technology has influenced students in their gratification seeking affairs. The major advantageous feature of mobile phone technology to university students is the 4E feature, that is, it is everywhere, every time, for everything and everyone (Yan, Chen & Yu 2013), so does being everywhere include in class, and how does that influence its use. Rogers (1995), says that relative advantage indicates the benefits and the costs resulting from adoption of an innovation. The sub-dimensions of relative advantage include the degree of economic profitability, low initial cost, a decrease in discomfort, social prestige, savings in time and effort, and the immediacy of the reward. Due to this, mobile phone has become the most widely spread technology and the most common electronic device in the world. So, this study tried to find out how diversion as a factor influenced mobile phone technology use by university students in Nairobi, Kenya.

Diversion Factors that Influence Mobile Phone Technology Use

Diversion can take many forms where some of the most common include stimulation, relaxation, emotional release of pent-up energy, (Dominick, 1993). The nature of mobile phone technology has shifted from being centered on communication, especially voice communication to be a medium. As a medium, the mobile phone technology has acquired many uses especially for those seeking diversion from the realities of life. With the advent of mobile internet and smart phones, mobile media have become increasingly intertwined with the internet and online technologies. In this mixture, mobile phone users now can access sex chat rooms, where they engage in sexual conversations using mobile phones, and access pornographic material whether intentionally or not. This can be diverting especially to the young people. This is said to encourage and normalize promiscuity in the society (De Gouveia, 2013).

The uses and gratifications theory that is the theoretical framework of this study, informs us that, the mobile phone when used as a communication medium can give the user the opportunity to divert from the realities of life. In this regard, there was need to know whether diversion was a gratification factor that influenced Kenyan undergraduate public university students to use the mobile phone. This could be both positive and negative depending on the circumstances under which it is used. Swamepoel (2012), informed us that mobile phone technology when used for diversion for long can lead to addiction which then can lead to disruption of normal life. Since university students – especially most undergraduates - were still impressionable, the risk of them being diverted by such sites as those dedicated to sex or other deviant sites such as pornographic areas may divert yes, but negatively. Since the mobile phone is personal allowing a lot of privacy in its usage, the resultant freedom from parental and other adult interference or interventions may be limited and in the process young university students may use the mobile phone to their detriment. Behavioral addiction such as Internet addiction is similar to drug addiction except that in the former, the individual is not addicted to a substance but the behavior or the feeling brought about by the relevant action (Tessa, 2014). A study found that a third of university students in the United States play video games on their mobile phones in class as a way of diversion (Campbell, 2012). Besides using the mobile phone technology as a form of diversion and social connection, some students use the technology for cheating in examinations. As a result another study done in the United States shows that 85 per cent of higher education instructors in that country advocate that mobile phones should be banned from being used in the university classrooms (Campbell, 2012). This again, calls for examination of whether diversion is a factor that influence the Kenyan university students regarding mobile phone use.

Research Methodology

This section include research design, sampling techniques, data collection, data analysis and presentation which help provide explanation of rules and procedures upon which claims of knowledge could be made. This was a study of diversion as a gratification factor influencing mobile phone use by undergraduate university students in public universities in Nairobi, Kenya. This section on methodology provided the roadmap on how to achieve the objective of the study.

Research Design

This study employed a quantitative research design. This involved gathering assessable data while performing statistical techniques. Thus the researcher gathered information from respondents through sampling techniques while using questionnaires. The quantitative approach also ensured that both the open and closed questions in the questionnaire were taken care of.

Target Population

The population for this study was 246, 871 undergraduates in six public universities with campuses within Nairobi City County (CUE, 2016). The study was confined to six public universities within Nairobi City County area as the focus of the study. Public universities are government sponsored. Nairobi is mostly an urban county with a higher concentration of public universities which makes it the only county with such a concentration of public universities.

Table 1 Student Enrolment in Six Public Universities by Gender

Name of University	Number of Males	Number of Females	Population	Total
1. University of Nairobi	49, 998	31, 591	81, 589	
2. Moi University	23, 452	20, 856	44, 308	
3. Kenyatta University	33, 755	25, 964	59, 719	
4. Jomo Kenyatta University of Agriculture and Technology	15, 180	9, 979	25, 159	
5. Egerton University	12,841	7,362	20, 203	
6. Maseno University	9,646	6, 249	15, 893	
Total	144, 872	101, 999	246, 871	

Source: Commission for University Education: State of University Education in Kenya (2017)

Sampling Frame

The sampling for the universities for inclusion in this study was purposively picked from six public universities with campuses in Nairobi County. These included the University of Nairobi, Kenyatta University, Egerton University, Maseno University, Moi University and Jomo Kenyatta University of Agriculture and Technology. Public universities were purposefully preferred because they are government sponsored, otherwise since the introduction of parallel programs or self-sponsored programs public universities operate more or less like private universities. The sample size was 573 respondents out of the 246, 871 students in the six public universities.

Table 2 Population and Sample Size per University

University	Population	Sample Size
1. University of Nairobi	81,588	148
2. Moi University	44, 308	113
3. Kenyatta University	59, 719	184
4. Jomo Kenyatta University of Agriculture and Technology	25, 159	28
5. Egerton University	20, 203	76
6. Maseno University	15, 893	24
Total	246, 871	573

Sample and Sampling Technique

Purposive sampling was done to get representative universities, which were a third (1/3) of public universities in Kenya. A total of six public university were picked to represent the third in Nairobi City County which were: The University of Nairobi, Kenyatta University, Egerton University, Moi University, Jomo Kenyatta University of Agriculture and Technology and Maseno University.

To get the right sample from the six universities, the study purposefully sampled the faculties to participate in the study then used simple random sampling to get the individual student participants. The participant students were stratified according to gender and year of study. The gender sampling was determined through proportionate sampling where the numbers in the groups selected reflect the relative numbers in the original group from the population as a whole (Robson, 2002).

Data Collection Methods

The study used quantitative data. Quantitative data involved the collection and analysis of numerical data gathered using the self-administered questionnaire. A self-administered questionnaire was used as the main method of data collection from the sampled students.

Questionnaire

The questionnaire had questions which were aimed at producing greater validity and reliability of the outcome of the study. The self-administered questionnaire was given to the respondents who were asked to fill and return to the researcher. This study had an objective which was addressed in the five main sections of the questionnaire, that is, to assess the influence of diversion on undergraduate university students' use levels of mobile phones.

Data Collection Procedure

Quantitative data was collected using a self-administered questionnaire among the sampled students. The questionnaires were administered directly to respondents who had to fill and hand them back. This study design was primarily a quantitative one. Closed questions are easy to analyze using the SPSS program and that was the main tool of analysis in this study. Since the same questionnaire with the same standard questions were administered to all student participants, the resultant data was expected to be reliable. The study targeted a sample of 573 undergraduate students.

Data quality was maintained by checking on validity and reliability. All data was inspected for mistakes and corrected where necessary. The data was sorted and selected in accordance with outlaid standard of the study. The data that did not meet the standard were rejected.

This study used internal consistency to test consistency of research instruments. This type of reliability estimate use of the coefficient of answers obtained from a single survey. This was based on the rating of research questions. The rating was categorized as positive or negative. If the rating of both questions were positive or negative among several respondents, the responses were said to be inconsistent and patternless. When no pattern was found among responses, the questions were declared so difficult or easy and therefore there was random selection of answers and so unreliable and invalid.

The data was cleaned, coded, and then entered. Entry was done twice to minimize the incident of error. Factor analysis was used to analyze factors that influence mobile phone technology use by public university students in Nairobi County, Kenya. The quantitative data in numeric form was reported as results (Creswell, 2011). Descriptive statistics of mean and standard deviation were used to answer the research question.

Results and Discussion

This section presents findings on diversion as a factor influencing mobile phone technology use by public university students in Nairobi, Kenya.

The section presents the response rate, the demographic data, findings and a discussion of research to achieve the specific objective. The first section of the questionnaire was about the respondent's bio-data. Here there were six items including: gender, year of study, age, area of study, access to a smart phone and the frequency of using a smart phone.

Reliability is the degree in which an assessment tool gives consistent results. This research used Cronbach's Alpha test for the reliability of the various constructs. Cronbach's Alpha coefficient is used to determine reliability of constructs extracted from both dichotomous and Likert formatted questionnaires or scales. The alpha coefficients ranges from 0 to 1 (Santos, 1999). The higher the score, the more reliable the generated scale is. Nunnally (1978) indicated that a coefficient of 0.7 and above is an acceptable reliability coefficient but lower thresholds are sometimes used in the literature. The results are presented in Table 4.

Table 4 Reliability Analysis

Variable	N of Items	Cronbach's Alpha Coefficient
Cognition	8	0.823
Diversion	9	0.755
Social Utility	5	0.746
Frequency of Mobile Phone Use	9	0.796

The results indicated that, diversion had a reliability of 0.755. According to Mugenda and Mugenda (2003), a coefficient of 0.70 and above implies high degree of reliability of the data. Constructs of diversion were found to be reliable.

In this section descriptive and inferential statistics were used to present and analyze quantitative data collected with regard to the purpose of interpretation of study results and findings on diversion. The sample size for the study was 573 but 416 questionnaires were filled and returned and those who answered the item on uses of mobile phone technology for deviation related work were 16.

Table 5 Uses of Mobile Phone Technology for Deviation Related Work

	Responses		Percent of Cases
	N	Percent	
Research	3	18.8%	21.4%
Photos	3	18.8%	21.4%
Transfer data	1	6.3%	7.1%
Coming up with new programs and applications	1	6.3%	7.1%
Listening to music	1	6.3%	7.1%
Games	2	12.5%	14.3%
Social media	1	6.3%	7.1%
Online courses	1	6.3%	7.1%
Hard work and committed	1	6.3%	7.1%
I frequently share class assignments	1	6.3%	7.1%
I frequently download movies	1	6.3%	7.1%
Total	16	100.0%	114.3%

From the results, majority of the students, 18.8%, used mobile phones in carrying out their research work and an equal number also indicate that they use mobile phones in taking photos for their academic requirements. Other uses where the students put their mobile phones were: games (12.5%), listening to music (6.3%), transferring data (6.3%), coming up with new programs and

applications (6.3%), social media (6.3%), pursuing online courses (6.3%), sharing assignments (6.3%) and downloading movies (6.3%).

Descriptive Analysis for Diversion

The objective of the study was to assess the influence of diversion on mobile phone technology use by undergraduate university students. This section seeks to descriptively analyze the variable. The variable had nine items on a Likert scale. The results were presented in Table 6.

Table 6 Descriptive Analysis for Diversion

	SD %	D %	N %	A %	SA %	Mean	S.Dev
I often want to know what others are doing	6.2	10.4	21.8	31.0	30.5	3.69	1.186
I frequently communicate with family/friends	1.2	3.4	10.1	36.2	49.0	4.28	.873
Most of the time relaxation motivates me to use devices	2.0	5.4	17.5	40.6	34.5	4.00	.957
I frequently contact friends who are far off	3.0	9.6	26.1	36.2	25.1	3.71	1.040
I usually share feelings	11.9	17.5	29.4	25.9	15.3	3.15	1.225
I regularly consult about difficulties or problems	4.0	8.0	19.2	41.9	26.9	3.80	1.050
I frequently distract my mind from loneliness	5.0	8.7	19.9	41.0	25.4	3.73	1.086
I usually find solace in playing games	11.3	11.3	24.8	30.5	22.1	3.41	1.262
Most often, I keep my hands and mind busy	2.5	4.5	17.6	37.9	37.6	4.04	.977

Key: SD=Strongly Disagree, D=Disagree, N= Neutral, A=Agree, SA=Strongly Agree

The first item sought to find out whether the students use mobile phones to know what others were doing and how they were fairing on. The results proved that most students, 31.0% and 30.5% who agreed and strongly agreed respectively, used mobile phones to know how others were fairing on or doing. On average the students seemed to agree as their mean value was high, at 3.69 and a low standard deviation of 1.186. The results also indicated that undergraduate students were motivated to use the mobile devices for relaxation with 40.6% agreeing and 34.5% strongly agreeing. On average the students agreed as indicated by a high mean value of 4.00 and a standard deviation of 0.957. As Dominick, (1993), observed, diversion can take many forms where some of the most common include stimulation, relaxation, and emotional release of pent-up energy. Cumulatively, the studied university students agree and strongly agree totaling to a value of 75.1%, that is, 40.6% plus 34.5%. This was a very high value suggesting that the mobile phone use for diversion and especially relaxation, was really significant among the students. This is an indication that diversion significantly influences mobile phone use among university students. The students after being asked whether they used the mobile phone technology frequently to communicate with family members and relatives, majority of them, 49% strongly agreed while 36.2% agreed. On average the students agreed to use

the devices to communicate with family and relatives as indicated by a high mean value of 4.28 and a standard deviation of 0.873. Majority of the respondents who were undergraduate students, 36.2%, when asked whether they used mobile phones to frequently contact friends who are far off agreed while 25.1% of them strongly agreed. This implied that the students used the devices to share and talk to friends. This was again indicated by a mean value of 3.71 and a standard deviation of 1.040. The students were neutral on whether they used mobile phones to share feelings as indicated by a mean value of 3.15 and a standard deviation of 1.225. On whether the students regularly consults about difficulties or problems, majority, 41.9% agreed and 26.9% strongly agreed. On average they agreed as indicated by a mean value of 3.80 and a standard deviation of 1.050. The respondents again agreed on average that they frequently distract their mind from loneliness as indicated by a mean value of 3.73 and a standard deviation of 1.086 but they were neutral on whether they usually find solace in playing games as indicated by a mean value of 3.41 and a standard deviation of 1.262. Finally, the last item asked to the undergraduate students was whether most often, they keep their hands and mind busy when using mobile devices. Majority of the respondents, 37.9% responded to the affirmative and 37.6% strongly agreed. On average they agreed as indicated by a mean value of 4.04 and a standard deviation of 0.977.

Summary of the Findings

This part is divided in segments guided by the objective of the study to facilitate a closer summarized look at the findings.

Demographic Characteristics of Undergraduate University Students

Out of the sampled respondents, slightly more than half were male while the rest were female. This was considered a favorable comparison between the genders.

The majority were in the fourth year of study, followed by those in their first year of study, followed by second years, then by third years and finally the least were in their fifth year of study.

In terms of age, majority of the respondents were aged 23-25 years, followed by those who were aged 20-22 years then followed by those who were aged 17-19 years, while those aged 29 years and above followed and finally, those who were the least were aged 26-28 years.

Influence of Diversion on Undergraduate University Students' Use Levels of Mobile Phone Technology

The objective of the study was to assess the influence of diversion on undergraduate university students' use levels of mobile phone technology. The study found out that statements on diversion on the Likert scale were also agreed upon by the students to have an influence on mobile phone technology use. This was indicated by a high mean value. Equally, the use of mobile phone was found to be highly correlated with diversion activities. This implied that the higher the usage of mobile phone technology the more likely the user was to be in diversion activities. In essence this meant that mobile phones have become very essential in the diversion activities among undergraduate university students in Kenya. The hypothesis was tested and the result was that there was no influence of diversion on undergraduate university students' use levels of mobile phones. The null hypothesis was rejected. These results implied that diversion greatly influences mobile phone use among university students in Nairobi, Kenya. Mobile phone technology use has become essential in the diversion activities among undergraduate university students in Nairobi, Kenya.

Conclusions

This study examined diversion as a gratification factor influencing mobile phone technology use among public university undergraduate students. That gratification factor was found to explain variation in mobile phone technology use. It is worth concluding that diversion as a gratification factor influences mobile phone technology use among university students.

The high percentage of university students using mobile phone technology for diversion shows the significance of mobile phone technology in higher learning institutions of the education system in Kenya such that the technology cannot just be wished away but adjustments should be made to accommodate the technology as an aid in diversion activities.

The fact that diversion as a gratification factor has an influence in mobile phone technology use is an indication that students who need some way of relaxation after rigorous academic work find that relaxation in mobile phone technology. This goes to underscore the importance of mobile phone technology among university students.

However, this gratification factor is affected by factors such as age, gender and area of study. Area of study did not seem to affect use of mobile phone technology hence it could be concluded that what is important in mobile phone technology use is the fact of being a university student irrespective of field of study.

Therefore from the foregoing it can be concluded that the higher the need for diversion, the higher the need for mobile phone technology use. This could be taken to mean that gratification factors drive the mobile phone technology use among university undergraduate students. Diversion is a significant gratification factor in mobile phone technology use among undergraduate university students in Nairobi, Kenya.

Recommendations

This study has established that undergraduate university students in public universities do use mobile phone technology to gratify their need for diversion. Behavior change advocates could latch on to this technology to provide and / or avail platforms and messages directed at university students using this kind of technology. The advocates would be sure that their messages would be well received as their targets are only too eager to use mobile phone technology for diversion and in the process consume the advocator's message.

The study dealt with undergraduate university students who were aged between ages 17 and 29 years. The policy makers who target the youth in this age group who are in learning institutions could design their policies to regulate mobile phone technology use by the youth in learning institutions. The policy could help in the recognition of mobile phone technology as legitimate learning/teaching aid or tool that should be used by students in learning institutions.

This study found that university students use mobile phone technology for diversion. Following this understanding, software developers could develop some software that is targeted at university students for their use for diversion.

This researcher's work targeted undergraduate university students in public universities in Nairobi. Further research could be done among undergraduate university students in private universities in the same locality to see if there is any difference. Equally, another research could be done among post-graduate university students to see if there are other gratification factors that influence their use of mobile phone technology.

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