

The usage and impact of Internet enabled phones on academic concentration among students of tertiary institutions: A study at the University of Ibadan, Nigeria

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ABSTRACT

The usage of Internet enabled phones has been a 21st century phenomenon that spreads for different purposes and functions. This study looks into the usage and perceived effect implications internet enabled phones have on the academic performance of the tertiary students using University of Ibadan students in Nigeria as a case study. The study was carried out in order to understand and bring to fore if the students' academic performance is affected due to the time channelled to the phone during class hours which has a general perception as a medium of distractions to students. The retrieval of the information gotten from this study was done with structured questionnaires administered to 200 students to obtain their personal opinions, while 15 in-depth interviews were conducted to have a grounded knowledge opinions of the students simultaneously with the data gathered during the course of this study. The analysis of the students' perception showed that the internet enabled phone usage does not affect the academic performance of the students but distractions by the usage of phone were notably admitted.

Keywords: *Internet enabled phones, Usage, Effect, University students*

INTRODUCTION

The use of technology is a global imperative due to its contributions to human existence and has enhanced the socio economic relations globally. Wireless communication has emerged as one of the fastest diffusing media on the planet, fuelling an emergent "mobile youth culture" (Castells, Fernandez-Ardevol, Qiu, and Sey, 2007). Thus, increased popularity of cell and smart phones in recent years has attracted research attention. Cell phones are seen as a mixed blessing. Teens say phones make their lives safer and more convenient. Yet they also cite new tensions connected to cell phone use (Pew Research Center, 2010).

As cell phones have become more available, they are increasingly owned and used by teens. Further, as handsets become more loaded with capabilities ranging from video recording and sharing, to music playing and internet access, teens and young adults have an ever-increasing repertoire of use. Indeed, we are moving into an era when mobile devices are not just for talking and texting, but can also access the internet and all it has to offer (Pew Research Center, 2010).

The cell phone is one of the most rapidly growing new technologies in the world (Rebello, 2010). In 2001, cell phone users were less than a billion worldwide with the majority of the users from the developed countries. By the end of 2010, however, cell phone subscriptions had reached five billion worldwide with subscriptions from developing countries outnumbering that of the developed countries (Kelly, 2009; Rebello 2010). Obviously, this increase includes a sharp increase in the number of cell phones used by the younger generations.

This area of interest was chosen because of the unregulated usage and over dependent attitude on these devices. Interestingly, this is obviously imperative as Geser, (2006) and Junco, Merson

and Salter (2010) had observed that the youth have consistently displayed higher level of attachment to their cell phones which could serve as distractions to them because of the time channelled to the phones.

This study is using both theoretical and empirical knowledge to supply the reader with information to issues in the academic performance of students, using the undergraduate students' area of concentration. This study was carried out in order to make available the problems associated with students' usage of cell phones during academic period, and how it can serve as precautionary measures towards achieving good academic result for student. Other objectives of this study are identifying and reducing prejudices through awareness and mobilisation for positive change in the approaches towards the usage of internet enabled phones. In an attempt to discuss about the issue of this topic on phones and its usage via the internet, personal observations has been seen among student using the phones for visiting social platform, such as the Facebook, Twitter, 2go, Myspace and instant messengers (yahoo messengers, msn messengers and blackberry pinging instant messengers) during academic periods and off academic periods indicating that the internet phones have a strong effect on the students.

Calling to mind the judicious gap which has been mended by technology, it should be noted that the usage of phones are not intended for negative purpose and influence; however, the attitude and time channelled towards these devices has enslaved the student, also making them addicts, such as a study by the University of Navarra affirms that young people between 15 and 19 admit being addicted to their cell phones (Naval et al., 2004). Also, British scientists noted that more and more people are getting addicted to their cell phones, causing stress and irritability (BBC, 2006). While specialists indicate that the abuse of the use of cell phones could be typified as 'a disorder of addiction that has to be stopped as soon as possible' (Paniagua, 2005). Reawakening, to the recalcitrant mode of the student academic prowess in the academic 'world' there is a need to address the students prerogative in the society which serves as issues in empowering them towards helping to the development of the society which also address the issue of gender equality, if we are looking towards positive changes in the society and development. Thus, without bringing the issues of mis-channelled time and energy towards things that hinder the development of the students in the society, their picture seen as "half baked" in most parts of the world will continue to thrive unabated, thus creating more chasm between taking up roles and jobs left by the aged and making the world a sustainable and a global village.

However, the role of students in the society cannot be over emphasised towards development through peace. For the sake of this paper, peace here is relative and attached to the arms of development in society. In this regards, peace emphasised according to Ibeanu, as cited in Best (2006:9) defines peace as not a condition but as a process. In other words, it is a dynamic socio economic process, rather than a condition; peace is a process involving activities that are directly or indirectly linked to increasing development and reducing conflict, both within specific and in the wider international community. To this assertion which students are seen as future leaders to pilot the affair of community and nations when they graduate and take up post in different works of life, the need to set their priorities right is fundamental.

RESEARCH SETTING AND STUDY AREA

The study was conducted among the undergraduate students of the University of Ibadan. University of Ibadan is the oldest Nigerian University and located five miles (8 kilometres) from the centre of the major city of Ibadan in Western Nigeria (en.wikipedia.org, 2012). The University was founded in 1948 as a College of the University of London with 104 students spread among three Faculties: Arts, Science and Medicine. It became an autonomous, degree-granting institution in 1962. As of today, the University has a total enrolment of over 20,000 students

shared among 13 different faculties: Arts, Sciences, Basic Medical sciences, Clinical Sciences, Dentistry, Public Health, Pharmacy, Agriculture and Forestry, the Social Sciences, Education, Veterinary Medicine, Technology, Law, as well as Institute of African Studies, Institute of Education, Institute of Child Health, Africa Regional Centre for Information Science, Centre for Literacy Training and the Centre for Peace and Conflict Studies. About 35% of their enrolments are postgraduate students. (The postgraduate school Abridged Prospect, 2009/2010.)

STATEMENT OF THE PROBLEM

The invention of technology such as mobile phones has, no doubt, brought about immense positive progress to human societies, but this invention equally brought in its wake some observed attitudinal problems among university students. This mainly manifests among the undergraduate university students, who use internet enabled phones. However, this is not to say that these problems are solely caused by the usage of these phones as there are other causes, but that the attitudes of the users and the modes of the usages are significantly the contributing factors especially in the 21st century. Scholars have identified the problems associated with phone usage and time (Junco, Merson and Salter, 2010; Wei and Lo, 2006), the attachment to phones (Gaser, 2006), in the face of this, therefore, there is the need to establish the link between these observations and academic performance. In analysing the problem of these internet phones, and in order to synchronize and have a clearer understanding of the problem as it is related to this study, it must be borne in mind that other varying platforms of distractions towards the academic performance of the undergraduate students in the university are also implicated, such as the computer usages, which generate internet social sites, and the visual display devices for relaxation such as televisions. An area where this problem can be seen is in the aspect of non-verbal communication in the students' writings often fraught with acronyms developed for chatting purposes, and the use of abbreviations to shorten the length of the write-ups.

In addition to this, there is high tendency and/or temptation of the students to interact with their phone in the class in the course of lectures, either to respond to received messages, or to browse the internet. These, no doubt, take heavy toll on the level of concentration devoted to the lectures. Even while outside the class room environment, most students who use internet enabled phones devote much time interacting with their phones by chatting on the Twitter, 2go, Facebook, instant messages (Bbm, Yahoo messenger). Consequently, the time that ought to have been devoted to study and other useful academic endeavours are thus frittered away.

In the light of this problem and in locating the root cause of the problems posed by the relationship between the students use of internet phones on their academic performance, it is pertinent and imperative to carry out a study of this kind, in which a sizeable number of students were engaged.

AIM AND OBJECTIVES

Aim

The aim of the study is to understand the effects of the relationship between internet enabled phone usage and academic performance among Undergraduate university students. To achieve this, the following sets of specific objectives and indicators were defined:

- Description of the phone usage habit of the undergraduate in U.I based on:
 - Browsing frequency;

- Information sourced;
- Sites visited.
- Examine the effect of internet Enabled phones on students' Academic Performance, based on hours spent on the phones compared to focus on studies:

JUSTIFICATION OF STUDY

During graduation periods every year in University of Ibadan, results are shown and it is evidently seen that majority of graduates come out with lower grades when compared to the graduates with higher grades. The implication of this is as a result of redundancy of graduates at home when searching for jobs to fit into the society and lack of will to pursue further carrier in the academia. More so, it reduces their chances to apply for good positions made available by organizations at various forms. Therefore in understanding some of the factors which cause poor academic performance among students, there is the need to take into cognisance the usage of internet enabled phones due to the observed trends and euphoria among student in using internet phones.

The significance of this study is among university undergraduate students ability to address the problems associated with phone usage and academic performance. This is mainly so in the face of the increasing proliferation of different kinds of sophisticated internet enabled phones that could do much that is better left to be imagined. The abuse of phones among the youth especially the students in the higher institutions of learning is growing almost at geometrical level. Many users of the internet enabled phones seem to be engrossed in the euphoria of the social connectivity enabled by the phones with little or no awareness of the implications. This looming ignorance, no doubt, negatively pounds on the academic performances of these university students. Regrettably, this is happening in the era of the clamour for youth empowerment, which incidentally cannot be actualized without a landmark of academic attainment towards human and societal development. Therefore, this informed the imperativeness to carry out a study of this nature in order to create awareness on the damaging effects of the abuse of the internet enabled phones. In line with this, we are of the intent that this awareness will enormously enable the university students to achieve the necessary balance between phone usages in the social fields and academic fields, thereby impeding the former from encroaching into the sphere of the latter.

LITERATURE REVIEW

On previous research on phones and teens, the first studies to examine the social consequences of the mobile phone came in the early 1990s when researchers examined its impact on residential markets (Jarrat and Coates 1990). Thus, attachment to the internet enabled phones is an area of conflict and regulation that should be looked into because, adolescents seems to become extremely self-conscious and pay significant attention to what peers think of them. Therefore, the students are being thrilled by current happenings and trends of fashions which are found in social structures of the societal settings. Apart from the negative effect through the usage of these phones by the students, it also have some other effects; which maybe psychological. The addictive nature of cell phones has concerned psychologists for years. Recently, psychologists have warned that smartphone users are especially at risk of becoming addicted to their devices. In a recent study, by John Wargo, et. al. (2012), the subjects checked their phones 34 times a day. People may check their phones out of habit or compulsion, but habitually checking can be a way to avoid interacting with people. Some people can experience withdrawal symptoms typically associated with substance abuse, such as anxiety, insomnia, and depression, when they are without their smartphones and all these are embedded to the course

of academic relapse of students who fall into this category. Surprisingly, these addictions take strong toll on the student without them noticing it and some of them find it hard to believe that they are addicted to their phones. Thus, giving more credence to the amount of time meted out to these phones than academics. Chóliz, (2010) pointed out that excessive use of and dependency on the cell phone may be considered an addictive disorder. In order to address some of the issues attached to cell phones researchers chose different area of interest and teasing them out.

Some of the common cell phone related research topics include cell phone use while driving (Caird, Willness, Steel, and Scialfa, 2008; Horrey and Wickens, 2006; McCartt, Hellinga, and Braitman, 2006), cell phone etiquette (Lipscomb, Totten, Cook, and Lesch, 2007), cell phone cultures and behaviors (Campbell and Park, 2008; Bakke, 2010; Ling, 2004), text messaging (Pettigrew, 2009), health risks from cell phone radiation. Some other studies reported that the presence of cell phones provide a higher sense of security in potentially harmful situations. This has contributed to an increase in cell phone value, leading cell phone users to perceive cell phones as a must-have tool (Nasar, Hecht, and Wener, 2007; Walsh et al., 2008). The use of Mobile Phones has also been addressed with other focuses, such as enhancing Academic performance in Distance Education. Jean-Marie, Viljoen and Carl, Du Preez (2009). on Semen Analysis in men attending infertility Clinic: an observational study. During the study, their objective was to investigate the effect of cell phone use on various markers of semen quality, and in their conclusion stated that "Use of cell phones decrease the semen quality in men by decreasing the sperm count, motility, viability, and normal morphology. The decrease in sperm parameters was dependent on the duration of daily exposure to cell phones and independent of the initial semen quality" (Ashok Agarwal, Et. al 2008). Costly Cell Phones: The Impact of Cell Phone Rings on Academic Performance. During the study, "Findings indicated that cell phone rings during a video presentation impaired academic performance" (End, Worthman, Mathews, and Katharina 2010).

THEORETICAL FRAMEWORK

(Elkind, 1967), theory on adolescent egocentrism, pointed out heightened self-consciousness during adolescence. The theory adolescent egocentrism stated that it is a stage of self-absorption where the world is seen only from one's own perspective. Thus adolescents are highly critical of authority figures, unwilling to accept criticism, and quick to find fault with others. Adolescent egocentrism helps explain why teens often think they are the focus of everyone attention. Also, adolescence is a time of considerable physical and psychological growth and change, which falls in line with the study of the student of the University of Ibadan, on cell phone usage and acquisition among other. Most students like to keep track ahead of their peers or to have an ontological balance in their peer group which they find themselves. At the expense of their notions, they try to live the life which is expected of them in the social settings which they find themselves instead of the ideal life; thereby pushing them to the limit. It was observed that most of the students using the Internet enabled phones get to pay some bills at the end of the month, which is however paid with the little monthly allowance money given to them by their sponsors or parent for upkeep during the course of their studies. Some go as long as to upgrade their phone, by buying the current ones and selling of the old ones at a giveaway price or "trunking" as the word is widely used, just to meet up with the current trend.

These ostentatious mode of using and disposing of the internet enabled phones at will, in order to be abreast of current trends may inhibits the student from focusing on their academics and allowing them to do better in their studies which is their primary target as students in the University. Their academic performance is a fulcrum for their future roles and the roles that will be vested upon them by their predecessors as the new generations.

METHODOLOGY

The study is based on theoretical and empirical methodology, while secondary data was obtained through the review of textbooks and journals. Primary data was collected during the period (August-September 2012). Survey questionnaire and interviews were triangulated for the purpose of data collection. A set of 200 semi-structured questionnaires was administered with a purposive sampling technique for students that have internet enabled phones and all questionnaires were returned by the respondents. 15 in-depth interviews with students were also conducted. Questionnaires were un-numbered and there was no field provided to indicate the identity of respondents in terms of name and/ or identification number. To guarantee the recovery of all the administered questionnaires, they were collected immediately. Simple random technique was adopted for the selection of the 4 selected halls of residence in the University. Simple random sampling technique was adopted for chosen four faculties each at the University of Ibadan. At the faculty level, stratified sampling technique was adopted for choosing undergraduate students from different academic levels of study. The stratification involves the 100 Level to 400 Level undergraduate students and above. The mixture of respondents with regard to their sex, level of study and religious faith (Christianity, Islam and Traditional) was also adopted. The questionnaires were administered in the chosen hall of residence at the evening period between the hours of 5pm to 8pm. This pattern was adopted so as to have easy access to student in their rooms after academic periods, and have more time to focus on the question in the questionnaire rather than filling the forms in haste during academic periods.

During the analysis stage, data collected through the administered questionnaires were analysed with the aid of SPSS version 17.0 descriptive statistics involving frequency distributions and cross tabulation analysis were done.

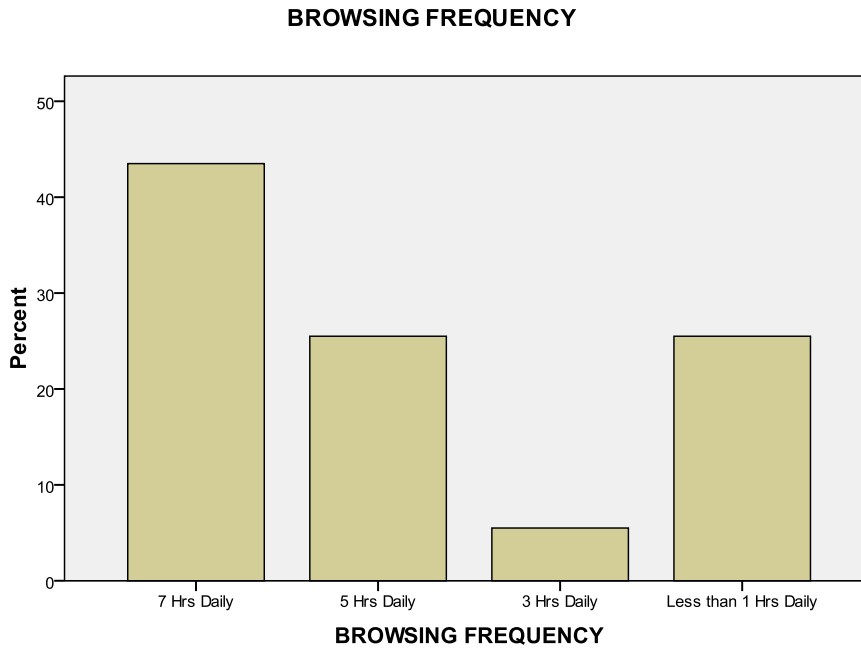
RESULTS AND DISCUSSIONS

More than 50% of the students reported that they have more than 1 phone. Of those who have the internet enabled phones about 97% of them were actively used with internet mobile services to enable them to surf and browse the net. The analysis of those who browse with their phone is and hours is shown in the figure charts below.

The frequency and percentages of the respondents from Figure 1. for those that browse 7hrs Daily was 87 and the percentage is 43.5, those that fall in between 5hrs Daily were 51 and the percentage is 25.5, the 3hrs Daily were 11 respondent and the percentage is 5.5, less than 1hr daily were 51 respondents and the percentage is 21.5.

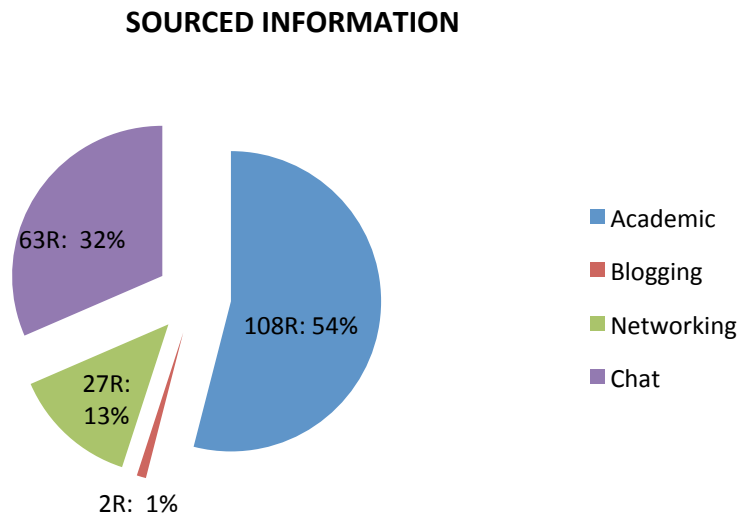
Among the interviewed students on browsing frequency, the respondents indicated that they browse more on social site than academic purpose, in substantiating the reason for their preference, they indicated that it helps them to cool off during their stay and study in the institution otherwise schooling will be boring for them without connecting to their friends and loved ones. However, most of the respondents browse a minimum of 6hrs intensive daily while some browse and chat at every single available opportunity.

Figure 1: The browsing frequency and percentage of undergraduate students



During the course of the information gathered through the questionnaire, what the student sourced with their phones while browsing was also administered and the result shown at Figure 2 gives the accurate data of what was obtained from the field.

Figure 2. The information sourced for by students with their internet enabled phones

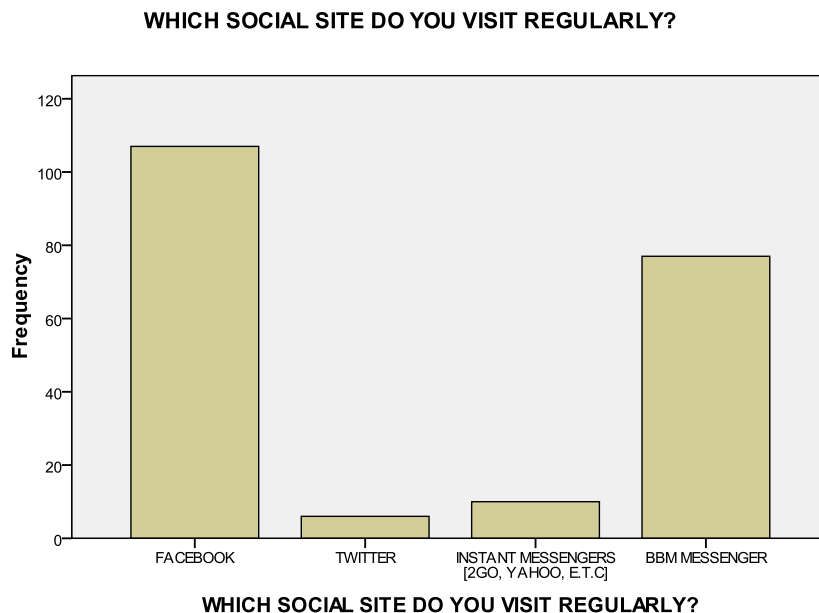


From the analysis, those that browse with their phone for academic sites and information were 108 respondents and 54.0% of the overall data, those who browse for pleasure and chat amounted to 63 respondents and 31.5%, for blogging only 2 respondents were gotten and 1.0% and Networking respondents is 27 with 13.5%, (the networking here indicates those that run business such as multi level marketing platform on net). Total valid respondent were 200 with 100% value.

From the pie chart shown in figure 2, it signifies that majority of the respondents indicated that they browse and source for academic information as students and chatting came second, while Networking was the third on the chat in the terms of numeric number and blogging was the least out of the chat. From findings and analysis, this is to say in a nutshell that the students browse more with their phone on academic information.

Also, Facebook, Twitter, Instant messengers (2go, yahoo messengers, and etcetera) and Bbm messenger was listed out during the course of this study to see which of the sites visited most in relation to the question asked during the questionnaire on “if they browse more on social sites than any other purposes” A detailed bar chart about the information gotten and analyzed is shown in Figure 3.

Figure 3: Social websites undergraduate students visit



The frequency for Facebook users is 107 and 53.5%, Twitter respondents are 6 and 3.0%, Instant Messengers such as 2go, Yahoo messengers, etc. were 10 and 5.0% and Bbm messenger users were 77 and 38.5% and total respondent were 200 with 100% value.

Furthermore, teasing out the data gathered from the respondent to see if the phone usage was of help or distraction towards the student in preparation for exams as students another analysis was done with detailed information given based on the data gathered through the questionnaire. Thus, the question asked was, “I believe my phone Aids me in preparation for exams”.

This frequency chart displays mainly four types of social site and networking platform students browse on their phone. The student interviewed indicated even distributions to the site they visit most, both at the off class period and while in class. The choice of site is based on individual interest, though 13 out of 14 respondent visit more than a site but have strong attainment to facebook, and that most of their friends and social messages are gotten from the site.

The valid information gathered from the data on field and been analyzed was attributed to 140 respondent with 70.0% indicating that their phone aid them towards examination preparation while 60 respondent with 30.0% indicated that it does not, but distract them and do not aid them . Seven (7) of the respondent from the interview believe their phones have aided and made their academic performance better than when they were not using internet enable phones because the internet is readily available to search for academic materials on net with their phones.

At the fore of this study, on the usage of internet enabled phones and its effect on academic concentration among the students in the University of Ibadan. An hypothesis was formulated that the phone has effects on the academic performance of the students. The chi-square was adopted to verify this hypothesis from the data gathered from the field. During the analysis of the data, the Chi-Square tests and the findings indicated that the students' perception of the effect of the usage of phone on their academic performance is not significant, in order words: the usage of phones does not affect student's performance. The details of the analysis are shown in the tables below.

Table 1: chi square test for hypothesis on the academic performance of undergraduate students

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.580 ^a	1	.209		
Continuity Correction ^b	1.192	1	.275		
Likelihood Ratio	1.554	1	.213		
Fisher's Exact Test				.247	.138
Linear-by-Linear Association	1.572	1	.210		
N of Valid Cases	200				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.20.

b. Computed only for a 2x2 table

CONCLUSION

From this study, the chi square test indicated that there is no significant relationship affecting the academic performance of students in using internet enabled phones. However it should be borne in mind that there may be cases of such affecting students. Thus, the demographic structured questionnaire and interviews did not exceed the scope of the study in looking at the addictive aspect of internet enabled phones on student through intense participant observation with longer time frame. Many uncontrolled variables that collectively may impact on the performance of the students abound. Examples of such impacts could be the commitment of the students, their personal circumstances and their attendance during class hours. Also the study addressed the perception of the students during data gathering on field about the observed attitude and time channelled towards the usage of their phones. The study made them to understand that such actions are viewed by people both within and outside the University environment with the notion of how student concentrate fully on their academics with the way they use their phones. These perceptions were indicated on the result of the findings showing different variables on what individuals noted about usage of their phones and their academic performance.

The study showed that most of the students use their phones when listening to lectures. It also showed that it is possible for students to enhance and broaden their academic horizon by browsing for academic materials and equipped themselves better toward preparation or examination during studies. In the opinion of my study it has been observed that the usage of the internet enabled phones cannot solve the lacuna of students' academic performance in the University but will go a long way to bridge so many gap to access of academic material for the students and will be better equipped if appropriate time is meted out while harnessing its potentials.

RECOMMENDATIONS

From the foregoing, the following recommendations are put forward:

1. University students need to be re-orientated on the need to set their priorities right. This drive towards reorientation must be championed by the university management in conjunction with the parents/guardians of the students. While the usage of internet enabled phones by students cannot be outlawed, they need to be continuously informed on the positive and negative effects of their usage and of the problems deriving from the over-dependency and unregulated use of their mobile phones.
2. Similarly, the university management must be more alive to their responsibilities by ensuring conformity to the university laid down rules and regulations on student's use of mobile phone device during class session.
3. Due to radiation effects associated to internet enabled phones, students should be encouraged to read instructions properly on the type of phones they use so as to mitigate health problems.
4. For better policies and rules adopted for the use of internet enabled phones among undergraduate students, there is the need to conduct a participatory study in order to witness and observe the lacuna that need to be addressed for better academic performance.
5. To ensure performance and concentrations during academic periods, Tertiary institutions should liaise with the Telecommunication service providers to cut of Internet connection on phones for students during academic and exam period so as to avoid malpractice.

These recommendations can be implemented through programmes such as public lecture for students on how to set their priorities right during the course of their programme years. For example, there should be lectures to educate them to strive hard and concentrate well on their

lectures without giving credence to things that will disturb them; this can be done at the beginning of each semester or session of their programme. Secondly, the university management should implement fundamental rules for students to respect the presence of the lecturers by concentrating on lectures without distractions of phones and any other related issue as regards to phones. However, there is the need to explore, educate and locate scholarly links for student in terms of internships, scholarships and fellowship programmes applications through their phones which will equip them more for their future professions in the society.

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