Utilization of Cell Phone for Research among Postgraduate Students in the University of Nigeria Nsukka: The Study

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Abstract
This study examined the utilization of cell phone for research among postgraduate students of the University of Nigerian Nsukka. In carrying out this study five research questions were posed. The study sample population comprised 231 postgraduate students of the university. The instrument used for data collection in this study was questionnaire. Research question were answered using frequency, bar chart and percentage to analyzing the data. Findings of the study reveal that majority of the postgraduate students in the University of Nigeria Nsukka made use of their mobile phones for research. The study also reveals that they made use of it all the time as shown in figure 4. Majority of the respondents agreed that cell phone helped them to solve /meet their information needs.
Keywords: Utilization; Cell Phone; Postgraduate Students; University of Nigeria Nsukka.

1. Introduction

In 2001, Global System of Mobile (GSM) was introduced into Nigeria. The Nigerian Communications Commission (NCC) issued four wireless licenses to MTN Nigeria Communication, Econet Wireless Nigeria Limited (now Vmobile), Communications Investment Limited (CIL) and state-owned NITEL at the fee that was determined by NCC. CIL, however, had its license withdrawn because of inability to meet with the deadline for payment (Nigerian Tribune, 2003). The fourth GSM provider Glomobile (Globalcom) though won its multiple licenses in September 2002 for the provision of telecommunications services but did not commence provision of mobile phone services until August 2003. It should however be added that mobile phone services are also being offered by 2 or 3 Wireless Local Loop (WLL) operators in Lagos State, but the services appear strictly limited to the Lagos area; the government also revalidated MTS mobile operating license recently, but the company now appear to have lost frequency with which to operate analogue services (Oki et al, http://www.geplaw.com/competepricemts.htm).

However, the utilization of cell/mobile phones for research among postgraduate's students in the University of Nigeria, Nsukka (UNN) cannot be over-emphasized. In UNN, the number of mobile subscriber have increased by over 1,000 per cent between 1998 and 2014 reaching up to 5 thousand subscribers ; mobile user numbers have long exceeded those of fixed wired line users which stood at 25.1 million at the end of 2003; mobile telephony has been critical in boosting access to telecommunications in UNN and has substantially helped lift telecommunications users; mobile penetration had reached 6.2 per cent at the end of 2013, in contrast to 3 per cent for fixed line, the rise of cell/mobile phone usage has been driven by a combination of factors, such as demand, sector reforms, licensing of new competitors and the emergence of major strategic investors, such as Vodacom, MTN, Orascom and Celtel (Blake, 2004 & Moholi, 2005).

The assertion by Okoruwa (2004). Lamented that Africa still lags far behind the more industrialized parts of the world in telephone penetration and internet access, no longer hold sway as Postgraduate Students in UNN have made tremendous progress in the last few years in telecommunications especially in the Global System of Mobile Communication. A mobile phone (also known as a cellular phone, cell phone, and a hand phone**)** is phone that can make and receive call, text messages and access the internet over a radio link while moving around a wide geographic area. It does so by connecting to a cellular network provided by a mobile phone operator allowing access to the public telephone network. By contrast, a cordless telephone is used only within the short range of a single, private base station.

In addition to telephony, modern cell/mobile phones also support a wide variety of other services such as, MMS, email, Internet access, short-range wireless communications (infrared Bluetooth), business applications, gaming and photography. Mobile phones that offer these and more general computing capabilities are referred to as smart phones.

1. Statement of the Problem

Though increasing portion of the postgraduate students   in UNN are making use of mobile phones in the past three years, no attempt has been made so far to investigate utilization of mobile phones for research among postgraduate students in the University of Nigeria Nsukka. Researchers have shown that mobile phone has the capability of enhancing research. Therefore, this survey tends to ascertain the effect which is on the impact of cell phones for research among postgraduate students in University of Nigeria Nsukka.

1.2 **Objectives of the Study**

This study tends to achieve the following objectives

- To determine the level of utilization of cell phone for research among the postgraduate students in Nsukka.
- To identify the frequency of use of their mobile phone for research.
- To identify specific reasons that account for the use of mobile phone for research among postgraduate students.
- To identify whether the information resources accessed via mobile among postgraduate students meet their information needs as it relates to their academic challenges.

1.3 **Research Questions**

The following research questions guided the study

- What is the level of utilization of cell phone for research among the postgraduate students in Nsukka?
- At what frequency do postgraduate students makes use of their mobile phones for research?
- What are the specific reasons that account for the use of mobile phones for research by postgraduate students?
- What are the challenges to effective utilization of mobile phones in research process?

1.4 **Research Methods**

 Survey method was adopted for the study. This was because the survey method was the most suitable for this research. It has advantage of gathering data about the target population from a sample and generalizing the findings to the entire population. It completely save time, money and ensures efficiency. The target population was postgraduate students of the University of Nigeria Nsukka; they are PGD, Master and Ph.D. Students. There were 450 postgraduate students of 2012 to 2013 sessions. Stratified random sampling technique was used to select respondents across the target population. A total of 250 respondents were selected out of the total population. The instrument used for data collection was questionnaire. Questionnaire was used for collecting data for this research because (Ali, 2006) are of the view that questionnaire is widely used and it is a useful instrument for collecting survey information providing structured, often numerical data, being able to be administered without the presence of the researchers and often comparatively straight forward to analyze.

Before the instrument was used, it went through face validation which was done by three senior colleagues in the field of Library and Information Science. These experts were requested to examine the clarity of expression used as well as the appropriateness of language. The researcher administered and collected the questionnaire from the respondents. Thus there was 89% rate of return from the questionnaire. The data that were collected through questionnaires were analyzed using frequency, bar chart and simple percentages for easy analysis and interpretation.

2. Literature Review

Since the commercialization of cellular phone technology by Motorola in the early 1980s, the utilization of the communication device has rapidly increased. Studies on the impact of using a cell phone while driving or simultaneously engaging in other motor activities of a similar nature are common (Strayer, Drews, & Johnston, 2003; Drews, Pasupathi, &Strayer, 2008; Charlton, 2009; Hyman, Boss, Wise, McKenzie, &Caggiano, 2010), but research investigating the influence of cell phone use in other domains is surprisingly sparse. One area of particular interest which seems underrepresented in the literature regarding cell phone use is the impact of this communication device in academic settings. Because teens aged 13-17 and young adults aged 18-45 are overwhelmingly the most prolific groups of cell phone users (Scotts, 2010), it is plausible that their level of cell phone utilization may have a significant effect on their academic performance.

The world is fast becoming a global village and a very important tool for this process is communication of which telecommunication is a key player; the quantum developments in the telecommunications industry all over the world is very rapid as one innovation replaces another in a matter of weeks; a major breakthrough is the wireless telephone which comes in either fixed wireless telephone lines or the Global System of Mobile (GSM) communication; communication is undoubtedly a major driver of any economy, emerging trends in socio-economic growth shows a high premium being placed on information and communication technology (ICT) by people, organizations and nations (NigeriaBusinessinfo.com, 2003).

 Scotts (2004) reports a research carried out by Gamos Limited. on some characteristics of the use of telephones amongst rural and low income communities in some African countries - Botswana, Ghana and Uganda. The study reveals that rural inhabitants and poorer urban users value phone services but do not use them very often compared to relatively more affluent users; over 40% of respondents in Uganda used mobile phones through friends and family and individuals; although a further 24% of people used mobile phone through

teleshops; the results from all three countries were quite striking and consistent, demonstrating a strong preference for mobile phones rather than fixed line phones, and a preference for private phones rather than public access points. In an earlier report of the research, Scotts (2003) reveals that better educated people use phones more, have a strong intention to use phone in the future, and have a more positive attitude toward phones.Ajari (2010) has similar opinion when he asserted that male postgraduate students takes up academic challenges because they have all the time to do that, than their female counterparts who looks after the home especially the married ones.

According to Adomi (2006).Mobile phone subscribers by 2002 in Nigeria stood at 1.5 million (Nigerian Tribune, 2003) but by the end of 2003, MTN alone had 1,650,000 active subscribers on its network, Econet Nigeria (Vmobile) had subscriber base of over one million, new entrants Globalcom and M-Tel (owned by NITEL - Nigerian Telecommunications Limited) have not less than one million subscribers (The Guardian, 2004). This shows that there is rapid growth in cell/mobile phone subscription and usage in the country. The pervasive growth of GSM in Nigeria is a bold pointer to how much it impacts on life itself. The growth in telephone penetration in Nigeria and the future potential for even more growth and pervasiveness tends to shift the paradigm of thought and maximize the fears of what was once morbidly referred to as the digital divide (Okoruwa, 2004).

Adomi (2006) in Watt (2003) reports that a group of researchers in UK has spent some time investigating how people use mobile phones; it appears that people use mobile phones to decide when and how to communicate with people; children use them to ask each other for advice whilst older women use them to keep track of their husbands; students enjoy sending text messages to each other and young women find them a comfort while walking home late at night; the mobile phone is the single most important device to let people control their relationship with others and to self-author their image and lives.

3. Data Analysis and Discussion

Out of 250 copies of the questionnaire that were administered to the postgraduate students, 231(92.4%) were retrieved. The data from the retrieved questionnaire are hereby analyzed using simple statistic like frequencies, bar chart and percentages.

Figure 1: Distribution of Academic Qualifications of Respondents
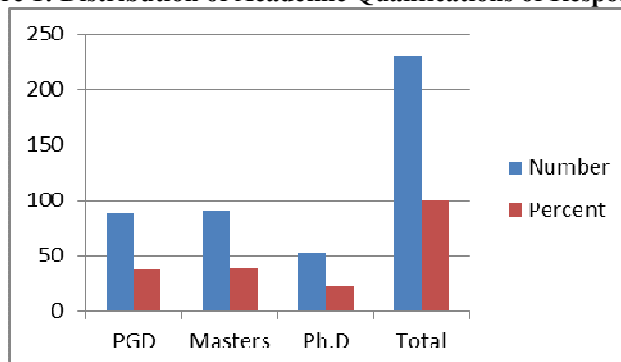
From the data in figure 1, it shows the number of postgraduate students who responded to the questionnaires, they are PGD 88(38.1%), Master 91(39.3%), and Ph.D.52 (22.6%) respectively.
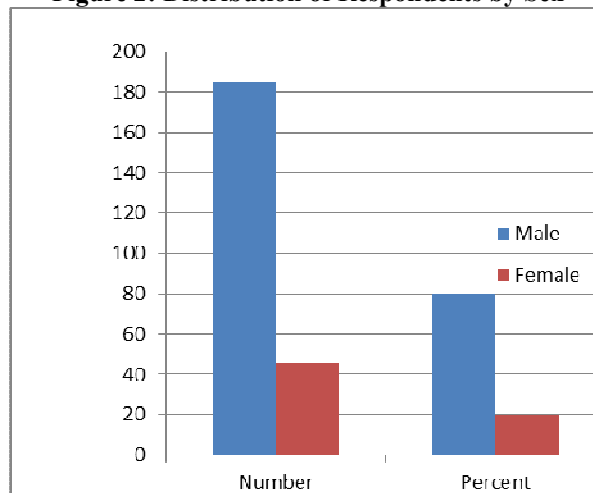
Figure 2: Distribution of Respondents by Sex

Figure 2 showed that (80.1%) of the respondents are male while (19.9%) are female. This represents the gender distribution of respondents involved in the survey. This is in line with Ajari (2010) when he asserted that male postgraduate students takes up academic challenges because they have all the time to do that, than their female counterparts who looks after the home especially the married ones.

**Figure 3: Utilization of Cell Phones for Research**
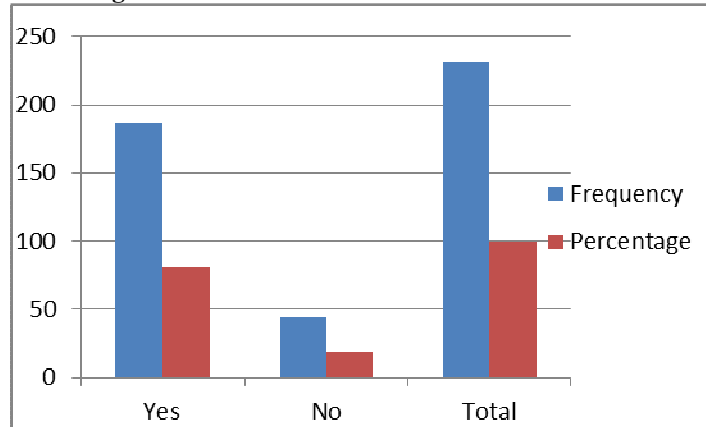
A question was asked in order to find out if the respondents make use of their cell phones for research as an alternative. The number of those who answered in the affirmative (80.9%) are more than those in the negative who are (19.1%) in all. It could therefore be inferred that most of the students are regular users of mobile phones. This was supported by Ajeri (2010) when he opined that due to poor collections of library materials, and lack of internet facilities, the mobile/cell phones could serve as an alternative.

Figure 4: Frequent Use of Cell Phones by Postgraduate Students
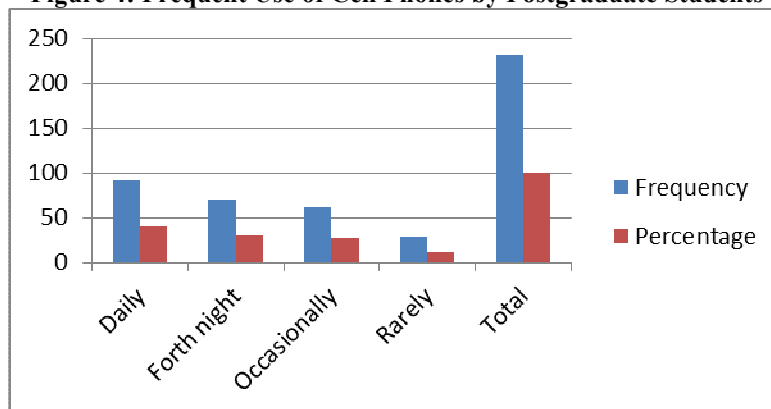
As observed from figure 4, majority (39.8%) make use of their mobile phones on a daily basis for research and academic performance, this is due to the fact that the internet facilities is not too strong in UNN library, and also lack of books materials to satisfy their information needs. (30.3%) uses their cell phones at forth night for research and academic pursuits.(26.8%) uses it occasionally especially when they are less busy while (12 %) rarely make use of their mobile/cell phones for research.

Figure 5: Reasons for Utilizing Mobile Phones for Research
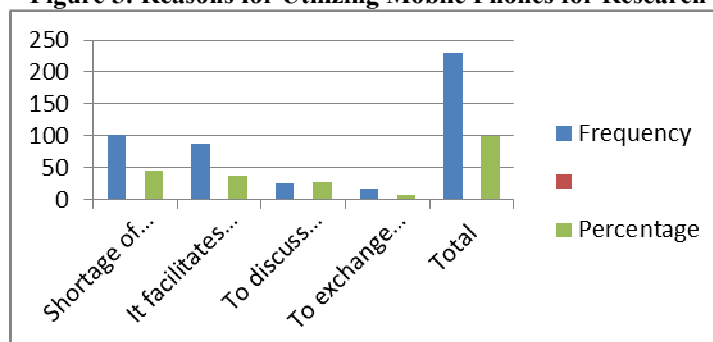
The data in figure 5 reveal how frequently the respondents use cell phones for different purposes. While (44.1%) of them use cell phones due to shortage of current materials in the library, (38.0%) of them do so in other to facilitate information delivery. While (38.0%) of the respondents uses their cell phones for research and

academic achievement to discuss with/pass information about class assignments to course mate, then (6.9%) uses it to exchange information about their lectures time table respectively. This is in line with Watt (2003). In an earlier study by Eldridge and Grinter (2001) on text messaging in adults, it was discovered that the adults use text messaging to arrange times to chat and to remind each other of arrangement already made, to coordinate with both friends and family as well as to chat or gossip.

Figure 6: Challenges to the Effective Use of Cell Phones for Research Among Postgraduate Students in UNN.
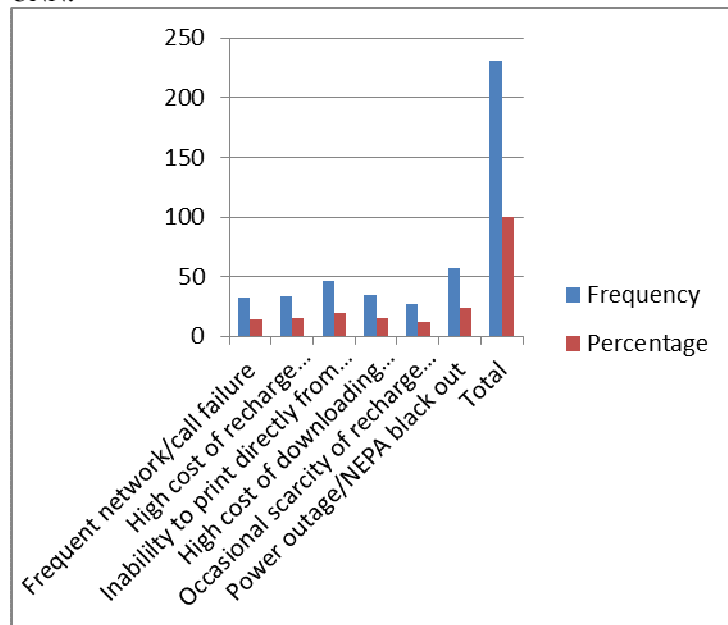
A numbers of challenges were identified, these includes frequent network failure (14.2%); High cost of recharge card (14.8%); Inability to print directly from mobile phones (19.9%); High cost of downloading online resources (15.1%); Occasional scarcity of recharge cards (11.7%); Power outage (24.2%). However, respondents argued that occasional scarcity of recharge cards prohibit their academic achievements power outage/NEPA black outs which it difficult to charge phone at times attracted the highest response of (24.2%). This is supported by Nwachukwu (2009) that the major barrier to the use of cell phones is power outage

4. Discussion of Findings
The result of this study indicates that cell phone is being used by postgraduate students. (UNN), to carry out their research work, Ako (2009) asserted that the use of Mobile/cell phones has really improved academic challenges in recent time. Also supported by Basi (2008) emphasized that the academic environment is moving into a paperless society, he went further to say that any students who does not uses the internet often should use their cell phones to generate information to meet their academic pursuit, or such students will be left behind, because ICT is a moving train.

This is due to the fact that the University library or any other types of library cannot satisfy the information needs of students, and again the internet network is not too strong, so therefore the use of cell phones serves as an alternative for students to carry out their academic works. It can also be deduce from the study that majority of the respondents to this study rely on their cell phones on daily basis to generate information to suit their academic work, others uses it at forth nightly, occasionally, and a few responded indicated that they rarely make use of their cell phones for research. And again, majority of the respondents gave reasons for making use of their cell phones as: Lack of current materials in the library, that it facilitates information delivery, to discuss with/ pass information about class assignments to course mates and to exchange information about lecture time table.

Despite the benefits of cell phones to research among postgraduate students, there are still challenges that inhibit the use of cell phones for research. Fig 7 outline some of the challenges as: Frequent network/call failure, high cost of recharge cards/airtime, inability to print directly from mobile phones, high cost of downloading online resources, occasional scarcity of recharge cards and power outage,/NEPA blackouts which make it difficult to charge cell phones at times.

5. Recommendations
The following are recommended in the light of the result of this study.

- Network operators should make frantic efforts to extend mobile coverage to all parts of the country. This will enable people from every part of Nigeria to enjoy the benefits of mobile phone technology.
- The cost of recharge cards/airtime should be reduced to enable people spend more time in browsing and downloading of materials from their cell phones.
- Researchers should make use of cell phones that are user friendly, and the one that has the capacity to print online resources directly from their phones.
- The cost of downloading materials from the net should be subsidized so that it will be easier for researchers to have their work downloaded with ease.
- GSM operators should increase the capacity of their cards to avoid scarcity to researchers.
- The Federal Government of Nigeria, through the Ministry of Mines and Power, should work towards stabilization of power supply to enable subscribers and network operators overcome problems caused by power outages, and researchers should also ensure that they have alternative such as generator when the need arise.

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