



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research
Vol.3, Issue, 4, pp.157-164, April, 2011

RESEARCH ARTICLE

SOCIO-ECONOMIC IMPLICATIONS OF MOBILE PHONE OWNING AND USAGE AMONG THE STUDENTS OF VALCO HALL, UNIVERSITY OF CAPE COAST

Godwin Ramous Kwame Egbenya

Department of Sociology and Anthropology University of Cape Coast, Cape Coast, Ghana

ARTICLE INFO

Article History:

Received 22nd January, 2011
Received in revised form
27th February, 2011
Accepted 21st March, 2011
Published online 17th April, 2011

Key word:

Sustainable development,
Social changes, personal
Communication,
Intrinsic motivation,
Technology,
Social networking.

ABSTRACT

It was the intention of the study to find out the intrinsic motivation for the adoption of mobile phone technology by Ghanaian university students. As well the study was aimed at assessing the behavioral characteristics in the use of phones by the Ghanaian students. A total of 103 out of 344 respondents were purposively selected as it involved only those who owned and used phones in 2009. The data collection instrument was the questionnaire, which was self-administered. The description survey design was adopted for the study. The study came out with findings that most respondents used Nokia phones because of its quality. The most widely used service provider was MTN. Most respondents also bought their phones between GH¢40 – GH¢60 and most of the phones were bought by parents for their children (students). The most common billing system used by study participants was the prepaid system with participants recharging weekly and spending less than GH¢10 per month. The most important reason for purchasing a mobile phone was for the students to remain in easy contact with family and friends. Regarding attitudes most students considered information on their phones to be private. Most of the time the respondents put their phones on silent when they were at lectures and most could not do without a mobile phone for a day. It is advisable among other things to cut down on the number of times one recharges units to save money and also cut down on the length of time talking on phone in order to have more time for studies as students.

© Copy Right, IJCR, 2011 Academic Journals. All rights reserved.

INTRODUCTION

Human well-being is multidimensional and so requires access to resources to live a good healthy life. Improved human well-being is a crucial objective of sustainable development. Sustainable development requires that the needs of the present are met without compromising the ability of future generations to meet their own needs. This type of development takes the impact on the environment into account and tries to minimize environmental damage. Food, income, clean water and energy as well as personal security, good social relations and the opportunity to make a choice among the lot are factors worth taken into consideration. Thus people are not only physically well but have choices and so live in dignity.

The well-being of people affects their ability to effectively and sustainably manage resources. In this respect we cannot ignore the ownership and usage of mobile phones as improvement on communication with others in the society. Mobile phone technologies are now in the hands of almost 31% or 2 billion people of the 6.47 billion people on earth (Sayan, 2006). The widespread diffusion and use of mobile phones is a shift towards a new personal communication society where there are social changes which include new forms of technology and social networking and personalization of public spaces.

Statement of the Problem

Aokis and Downes (2002) worked on the intrinsic motivations for the adoption of mobile phones and behavioral characteristics of their usage. Their subjects of study were students in the U.S.A. Sayan (2006) also did her study considering a cross-cultural comparison of university students in United States and India on mobile phone usage patterns among university students. This study on the other hand considered the situation among some university students in Ghana who have a different socio-cultural background as compared to those studied by Aokis and Downes (2002), and Sayan (2006). By using almost similar research questions used by these previous studies but with different socio-cultural background it was assumed therefore that this study would come out with findings which are similar or different in several ways from those of Aokis and Downes, and Sayan. It is primarily for this reason that this study was done. The study would find out the motivation behind the adoption of mobile phone technology by Ghanaian students and the behavioral characteristics of the students relative to the use of mobile phones.

Significance of the study

This study investigated mobile phone ownership patterns, motivations for mobile phone usage, common usage patterns and the attitudes toward mobile phones among university students of Valco Hall of the University of Cape Coast in Ghana in West Africa. It is believed that the study will

*Corresponding author: godwinegbenya2000@yahoo.com

contribute valuable knowledge to the literature that focuses on the increased use of mobile communication and its wider implications. This research may serve as useful input to telecommunication companies, researchers (information science, social communication, etc) and those in the media. The findings of this study may help information architects in designing mobile phones to meet the unique needs of the Ghanaian university student

Literature review Historical Background of phones

The widespread use of mobile phones was made possible by the introduction of hexagonal cells for mobile phones base stations, invented in 1947 by Bell Labs Engineers and was further developed by laboratories during the 1960s. Due to their low establishment costs and rapid development, mobile phone networks have since spread rapidly throughout the world. In 1970, Amos Joel of Bell Laboratories invented the "call hand off" feature and Martin Copper of Motorola, the handle used in a non-vehicle setting. Fully automatic cellular networks were first introduced in the 1980s and the first fully automatic mobile phone was the Nordiz Mobile Jele (NMT) system (1981). So, the first mobile phones (first generation) were introduced to the public market in 1983 by the Motorola Company. They were the size of large briefcase and very inconvenient. Until the early 1990s mobile phones were too large that they were permanently installed in vehicles as car phones. The mobile phone technology has evolved through second generation stage in the 1990s, third generation and fourth generation stages in the 2000s with respect to its improvement in quality and performance. So within twenty years, manufacturers have created an abundance of new technologies that mobile phone users keep coming back for more (Shahid and Wasin, 2003).

Manufacturers of Mobile Phones

Nokia Corporation is currently the world's largest manufacturer of mobile telephones with a global market share of approximately 36% in the first quarter of 2007. Others include Audivox, Benfun, BenQ-Siemens, High tech Computer Corporation (HTC), Fujitsu, Kyocera, 36, LG mobile, Motorola, NEC, Panasonic, Pantech Curital, Phillips, Sagem, Samsung, Sanyo, Sharp, Siemens, Sierra Wireless, Skteletech, Sony Ericson, T& A, Alcatel Toshiba, and Apple Incorporated (Globalsources, 2008)

Subscriptions of Mobile Phones

The total number of mobile phone subscribers in the world is estimated at 2.14 billion in 2005. This rose to 3.3 billion subscriptions in 2007 that is about half the world's population (Darren, 2007). The availability of prepaid or pay as you go services, where the subscriber does not have to commit to a long term contract in Africa has helped to increase the number of subscribers in Africa twice as fast as the Asian markets. On numerical basis, India is the biggest growth adding about 6 million cell phones every month (Apsidalkat, 2007). Teledensity refers to the number of landline telephones in use for every 100 individuals living within an area. A teledensity greater than 100 means there are more telephones than people. Third-world countries may have a teledensity of less than 10. With 15631 million cell phones, teledensity in India is still low at 17.45% and the country expects to reach 500 million subscribers by the end of 2010 (Darren, 2007).

Culture and Customs connected with the use of Mobile Phones

Over the years, mobile phones have gone from being expensive equipment used by business elites to a low cost personal item. Most adults and children now own mobile phones. This has made it uncommon to own fixed land lines. With high levels of mobile telephone penetrating, a mobile culture has evolved, where the phone becomes a key social tool and people rely on their mobile phones address book to keep in touch with their friends. Many people keep in touch using SMS and a whole culture of 'texting' has developed from this. The commercial market in SMS is growing. The mobile phone itself has become a totemic and fashion object with users decorating, customizing and accessing their mobile phone to reflect their personality. This has emerged as its own industry (On line opinion, 2003).

Symbolic meaning of the mobile phones

The widespread diffusion and use of mobile telephony is iconic of a shift toward a new personal communication society evidenced by several key areas of social change including symbolic meaning of the technology, new forms of coordination and social networking, personalization of public spaces, and the mobile youth culture. Like the television in the 1950s and the internet in the 1990s, mobile telephony has emerged as one of the defining communication technologies of our time. Mobile subscriptions are well into the billions worldwide and growing. Not surprisingly, the rapidly increasing adoption and use of mobile communication technology contributes to a host of social consequences, including new representation of the self, new forms of social connection and private use of public space. Some key areas of social change resulting from the widespread adoption and use of mobile telephony and society are considered. It has been argued that the social changes that come out of mobile communication mark a distinctive step in progression from the use of traditional mass media to a new personal communication society (Scott, W. C. & Yong Jin Park, 2008).

Technology and mobile phone society

Mobile phone may be categorized as common communication medium as almost 31% of the global population uses them (Motorola, 2006). Townsend (2002) points out that the diffusion of the mobile phone was among the fastest of any technology in history. Such a rapidly evolving and wide spread communication technology and medium has important social context and implications. Aoki and Downes (2004) noted that mobile phone usage in social contexts has been a less studied area when compared to the research on the engineering and policy aspects of mobile technologies. McGuigan (2005) pointed out that it is quite difficult to find critical research which looks into the cultural value and social purpose of mobile phones. Only recently, research has been published on how people use mobile phones in their daily life. However, a majority of these studies have focused on studying populations within a relatively homogenous culture. For example, Weilenmann and Larsson (2001) conducted field studies of public use of mobile phones among teenagers in Sweden. Their study shed light on how the mobile phone has come to be used as tool for local social interaction, rather than merely as a device for communication with dislocated others.

Their observations pointed towards the collaborative nature of mobile phone use. The researchers examined how phones were shared and how their field data could be used when designing new mobile technology and services for the youth. Katz (1997) explored the possible effects of wireless communication on people's lives. He identified several levels of effects of such a technology. The first-order effects are direct effects that are immediately perceived by users; they include uncertainty reduction of personal security and personal efficiency. The second-order effects are indirect effects which represent the experiences or feelings that people have or may observe in others. They include tighter coupling of domestic production, information immediacy and contractibility. The third-order effects are the least direct effects that are observed not by users of the technology but by outside observers who study the effects of the technology on the society in general. They include social interaction, social and innovative uses or unanticipated usage.

New forms of coordination and social networking

Mobile phones are redefining and blurring the line between public and private spaces. Cooper (2002) mentioned that public space may be unexpectedly exposed to one side of a two party private interaction, which can be frustrating with speculation about the missing side of the interaction. Fortunati (2002) noted that mobile phones favoured the progressive encroachment of intimacy in the public sphere. Palen, Sallzman and Youngs (2000) have looked into this issue and the perception of mobile usage in the public. They studied the behaviour of new mobile users over a period of six weeks after acquisition of phones. Using interviews and voice mail, their study noted that patterns of mobile phone usage varied over time and there was significant deviation between the user-predicted usage to their actual usage. The researchers also studied how the perception of mobile phone usage in public contexts varied over the duration of the study as initially the perception of mobile phone was overwhelmingly negative. However, they noted that new users over a period of time became more accepting of the use of mobile phones in public places. Their study found people initially adopted call phones for safety, security and business or job-related reasons instead of social reasons. However, nearly all subjects in their study reported that the use of their cell phones for social interactions had grown over a period of time.

These interactions may not even be the traditional voice based interaction Puro (2002) noted that Finland had one of the highest mobile phones densities in the world during the early part of this decade, reaching over 90% of the people under 30 years of age. Taylor and Harper (2001) noted that young people use text messaging on mobile phones as forms of gifts to cement social relationships. Aoki and Downes (2004) focused on the behavioral and psychological aspects of cell phones usage among college students. They tried to find the reasons behind why a technology is adopted in a particular way. They identified several attitudinal factors based on the exploratory study including necessity in modern times, cost efficiency when compared to landline phone, safety or security and dependency. The study also endeavored to look at the motivational and behavioral characteristics of mobile phone usage. The authors tried to use their results along with those from previous research to ascertain the trends in mobile phone ownership, usage patterns and underlying rationales for usage

among the youth including college students. The motivational themes identified by the study include personal safety, financial incentive, information access, social interaction, parent contacts, time management, coordination, dependency, image, and privacy management (Aoki and Downes, 2004).

Phone safety

With respect to the safety of using mobile phone, the Independent Expert Group on Mobile Phone (IEGMP) found out that there was no general risk to the health of people living near base stations because radiation exposure is a fraction of what current guidelines allow. There is evidence now that microwave radiation from mobile phones and cordless phones causes brain tumors, disturbed brain function and other health disturbances. It is therefore advisable that people should be very restrictive with using mobile phones (PSRAST, 2008).

Mobile Phones in Ghana

The telephone system in Ghana is modest and it is internet accessible. Although many rural communities are not yet connected, expansion of the services is underway. There were 200,000 main lines in use in 1998 and an estimated 30,000 cellular phones in use. Domestically the telephone system comprises a microwave radio relay, and a local wireless loop has also been installed. International communication is through 4 Intelsat satellite earth stations, and a micro-wave radio relay which links to the Panaftel system connecting Ghana to its neighbours. The telephone system is run mainly by Ghana Telecom and it is relatively reliable. Since the privatization of Ghana Telecom (GT) in 1996, it has increased phone lines from 78,900 to 130,000 as at December 1997. GT now accounts for over 73% of telephone lines in the country. Telephone users in the country increased from 218,000 in 2000 to 3,000,000 as at the end of 2005. Mobile usage is popular in the cities (Hartviksen and Akrelsen, 2002).

Ghana's mobile phone industry is growing fast. Records available from the National Communications Authority (NCA) show that mobile telephony in Ghana has exceeded 7,604,053 subscribers. There are six mobile phone operators licensed to do business in Ghana but only five are in operation. These are MTN, which is the largest, Tigo, the oldest mobile phone provider, Vodafone, Zain and Kasapa. The sixth provider, Globacom is yet to start operations (Nonor, 2010). Mobitel introduced mobile phone service to Ghana in 1992. In that year alone, 19,000 Ghanaians owned mobile phones. In 1998 the number of mobile phone users in the country increased to 43,000 and by the middle of 1999 the number increased to 68,000 (Telephones and Communication, 2008). Cell or mobile phones in Ghana are rapidly overtaking land phones as many cellular phones now provide internet access. Individuals in Ghana use their mobile phones to access the internet, monitor elections store music, receive SMS alerts on international and sports news and even watch mobile TV. It has been established that fishermen and traders use mobile phones to communicate with their agents and customers from various parts of the country to find out where the prices of their goods were more competitive.

The use of mobile phones has become part of our way of life and become embedded into the Ghanaian culture. One

hears chorus of ring tones and one-sided conversations echoing around him/her in the community. In addition mobile phone credit vendors line the streets giving us the opportunity to top up the units on our phones. People constantly check their screens to see if they have any text messages. We almost always find citizens with one arm raised to the ear and the head tilted slightly to one side. These days, one is not complete without the phone as an essential item in the hand. The phone has incorporated itself into society making people reliant on it (Sims, 2006).

Research Questions

The study found answers to the following research questions:

1. What types of phones are used by students in the Hall with respect to cost and quality?
2. What are the means by which students acquire their phones?
3. What are the purposes for which they own and use their phones?
4. How useful are their phones to them in academic life?
5. What problems do they encounter with the owning and usage of phones?

MATERIALS AND METHODS

The study collected information from both primary and secondary sources. Related literature from books and the internet were used to collect secondary data. The primary data were obtained through questionnaires administered among a sample of students chosen for the research.

Brief Information on Valco Hall

Valco Hall, the primary location for this study, is located on the northern half (new site) of the University of Cape Coast campus. The Hall is made up of six blocks with a total of 344 rooms. In addition to these are ten flats, well stocked state-of-the-art library, a reading room, and a restaurant. It is a mixed hall with population of about 3600 students. Of these, over two thousand are residents and the female – male ratio stands at 1: 3. The name of the Hall may suggest to many that it was built by Valco Aluminum Company. This guess, though possible, is false. The project was financed by the government of Ghana. It had its present name when it was commissioned by the then chairman of the University Council, Dr. Harold Philips. The use of Valco Hall as a name of the hall was a decision arrived at by the university authorities in recognition of the immense contribution of Valco Aluminum Company towards education. Over the years, the company has expressed appreciation to the Hall by way of donations, in recognition of the honour done it. The entire building was completed during the 1995/6 academic year (Valco Hall, 2000).

Participants

The participants for the study were purposively selected as it involved only those who owned and used phones in 2009. It was found out that there was one male student each in two hundred and thirteen (213) rooms and one female student each in one hundred and thirty-one rooms (131) who owned and used mobile phones. According to the Neuman's format for selecting samples (Neuman, 1994), "for small populations under 1,000 a sampling ratio of 30 percent is needed to be

equally accurate in the selection of samples for study" In determining the sample for the study, therefore, 30% of the 213 rooms which is equal to 64 rooms with 64 male students and 30% of the 131 rooms which is equal to 39 rooms with 39 female students were selected. The selection of the respondents was done by simple random sampling of the rooms. Using this technique, the 344 rooms were arranged in an order and serial numbers assigned to each unit. Lists of random numbers taken from a random number table were used to select the sample size of 103 rooms or respondents made up of 64 males and 39 females.

Instrument used

A questionnaire made up of two main sections was used. The first section asked for biographic data such as age of respondents and current educational level at UCC. The second section contained questions on types of phones used by respondents, purpose of owning and usage of phones, problems and solutions associated with phone usage. To ensure content validity, the questionnaire was presented to experts in the Faculty of Social Sciences. They were to determine whether the questionnaire items would adequately assist in obtaining information for answering the research questions as well as detect any ambiguities. Their comments showed the absence of serious ambiguities in the questionnaire items. In addition, the questionnaires were pre-tested before used for the main study. The questionnaire was therefore seen as valid after minor revision. The internal consistency of the instrument was measured using Cronbach's coefficient alpha, which gave a higher value of 0.8, an indication that the instrument was highly reliable. It provided the impression that there was a high average correlation among all the items that make up the scale. All the activities connected with the data collection were done in the first semester (i.e. between September and December 2008) of the 2008/2009 academic year.

Research design

The descriptive survey research design was adopted for this study. The rationale for this was the fact that no experimentation or quasi experimentation was involved. Subjects were only made to respond to situations as they felt them and how much they experienced the issues considered.

Procedure

The questionnaires were self-administered with assistance from the researcher. The students after some briefing were asked to complete their questionnaires and return them to the researcher the next day. They were also assured of the confidentiality of the views they expressed.

RESULTS AND DISCUSSION

Bio-data of respondents

Respondents for the study included 65 (63.1%) males and 38 (36.9%) females for a total number of 103. The researcher wanted to find out the age distribution of the respondents involved in the study. As many as 65 (63.1%) of the respondents were between 21-25 years while 31 (30.1%) were between 16-20 years and 5 (4.9%) respondents were between 31-35 years. This is an indication that most of the students in the Valco Hall who owned mobile phones were young adults between the ages of 16 and 25 years. The data collected

indicates that the largest proportion of these respondents, 45 (43.7%), were in level 100. Twenty three (22.3%), 20 (19.4%), 14 (13.6%) and 1 (1.0) respondents were in levels 200, 400, 300 and 500 respectively. This distribution of the respondents supports the IN- OUT- OUT-OUT policy of the University to allow all first year students to reside in the Halls of the University. Majority of the respondents, 93 (90.3%) claimed they were not married and only a handful of them, 8 (7.8%) were involved in courtship as many of them were still young.

Research Question 1

What types of phones are used by students in the Hall with respect to cost and quality?

The researcher wanted to know the different types of phones used by the respondents since there were various models of phones in the country today. According to the literature mobile phone technology which evolved through the second generation stage in the 1990s, third generation and fourth generation stages in the 2000s with respect to its improvement in quality and performance has enabled manufacturers to create more market for many types of phones (Overview of Cell Phone Technology, 2008). The respondents identified the different kinds of phones they used. Table 1 indicates that 45.0% (49) used Nokia phones, 14.7% (16) used Samsung phones, 11.0% (12) used Sony Ericsson phones, and 8.3% (9) used Motorola phones. Other phones such as LG, Siemens, Rose, J- Max, iPhones were not found among the respondents.

Table 1. Brands of phones used by respondents

	Frequency	Percent
1. Nokia	49	45.0
2. Sonny Ericsson	12	11.0
3. Motorola	9	8.3
4. Samsung	16	14.7
5. LG	5	4.6
6. NEC	1	0.9
7. Siemens	3	2.8
8. Chelsea	1	0.9
9. Vodafone	1	0.9
10. Amgoo	1	0.9
11. Na5	1	0.9
12. Kyocera	1	0.9
13. Rose	3	2.8
14. J-Max	1	0.9
15. Hp (iPAQ)	3	2.8
16. Sagem	1	0.9
17. Iphone	1	0.9
Total	109 ***	100.0

*** Multiple Responses Source: Field data

Table 2. Reason for owning a particular brand of phone

	Frequency	Percent
1. It was a gift, so I had no option	9	8.1
2. The price was reasonable	14	12.6
3. Because of the functions	14	12.6
4. Because of the quality	41	36.9
5. Because I like Nokia products	2	1.8
6. That is what I happen to have	4	3.6
7. Because of the model	4	3.6
8. Because it is nice	5	4.5
9. Majority of people use that brand	1	0.9
10. For easy communication	3	2.7
11. No reason	5	4.5
12. It is portable	1	0.9
13. Sagem has the best battery system	1	0.9
14. I'm used to such brand of phones	7	6.3
Total	111***	100.0

*** Multiple Responses Source: Field data

According to the literature, Nokia Corporation was the world's largest manufacturer of mobile telephones with a global market share of approximately 36% in the first quarter of 2007. Other leading mobile phone companies include NEC, LG, and Motorola (Mobile Phone Manufacturers, 2008). It implies that many of the students owned Nokia phones probably because Nokia Corporation is the world's largest manufacturer of mobile phones. The researcher wanted to know why respondents chose to own a particular brand of mobile phones since there were varieties at their disposal. From Table 2, 36.9% (41) said they owned a particular brand of phone because of its quality. 12.6% (14) respondents each said because the price was reasonable and because of the functions on the phone, 8.1% (9) respondents said it was a gift, so they had no option. Many of the respondents owned the phones because of the good quality of the phones. Respondents were also asked to state their Mobile Service Provider. This was to enable the researcher know the various types of Mobile Service Providers that were available to the respondents. Fifty-eight (49.6%) respondents said MTN was their Mobile Service Provider. This is shown in Table 3.

Table 3. Mobile Service Providers

	Frequency	Percent
1. MTN	58	49.6
2. Tigo	17	14.5
3. Ghana Telecom/ One Touch	27	23.1
4. Kasapa	6	5.1
5. Zain	9	7.7
Total	117***	100.0

*** Multiple Responses Source: Field data

Table 4. Prices at which phone were bought

	Frequency	Percent
1. GH¢10-GH¢ 30	9	8.7
2. GH¢ 40-GH¢ 60	43	41.3
3. GH¢ 70-GH¢ 90	36	34.6
4. GH¢ 100-GH¢ 300	6	5.8
5. GH¢ 400-GH¢ 600	5	4.8
Total	104***	100.0

*** Multiple Responses Source: Field data

Table 5. Person(s) responsible for the purchase of the phones for the respondent

	Frequency	Percent
1. Self	38	36.2
2. Parents	46	43.8
3. Elder brother/ sister	13	12.4
4. Fiancé /fiancée	3	2.9
5. Cousin	1	1.0
6. Grand mum	1	1.0
7. Auntie	1	1.0
8. Uncle	1	1.0
9. Husband	1	1.0
Total	105***	100.0

*** Multiple Responses Source: Field data

Twenty seven (23.1%) respondents said Ghana Telecom/ One touch were their Mobile Service Provider. Seventeen (14.5%) respondents said Tigo was their Mobile Service Provider. From the data gathered, it is realized that more of the respondents used MTN than any of the other Mobile Service Provider. This is situation of high patronage of MTN could be due to the fact that MTN is the largest service provider in the country. It must also be pointed out that though the telephone system in Ghana is run by Ghana Telecom and now accounts

for over 73% of telephone lines in the country to the students in the Valco hall of the University of Cape Coast, MTN is the most widely used mobile service provider rather than Ghana Telecom (Telephones and Communication, 2008). The respondents were again asked the price at which they bought their phones. This was to enable the researcher know the various prices at which the different kinds of phones were sold. From Table 4, forty-three (41.3%) said they bought their phones between the prices of GH¢ 40-GH¢ 60. Thirty-six (34.6%) respondents said they bought their phones between the prices of GH¢ 70-GH¢ 90, and only nine (8.7%) respondents said they bought their phones between the prices of GH¢10-GH¢ 30. It is noted that the prices of phones varied from one respondent to the other. According to the respondents, the price of a mobile phone depended on the brand and some other functions such as TV, radio, internet, the number of SIM cards that can be used in the phone and many others. Many of the respondents owned phones that were not too costly (i.e. between GH¢10 and GH¢ 60).

Research Question 2

What are the means by which students acquire their phones?

The researcher wanted to know the means by which students acquired their phones. This is because sometimes people can go to any extent if they want something and there are various means by which students can acquire their phones. From Table 5, forty-six (43.8%) respondents said their parents bought the phones for them. Thirty-eight (36.2%) respondents said they bought the phones themselves, thirteen (12.4%) respondents said their elder brother/sister bought the phones for them and three (2.9%) respondents said their fiancé /fiancée bought the phones for them. From the data gathered, it was realized that parents encouraged and helped the students/respondents to own mobile phones. In Ghana, there are two different kinds of billing systems that are used by mobile phone owners. The researcher asked respondents about the type of billing system they used. The vast majority of respondents, that is, ninety-six (93.2%) said that they used prepaid.

Table 6. The different periods respondents recharged their phones as prepaid users

	Frequency	Percent
1. Daily	31	30.1
2. Weekly	43	41.7
3. Fortnightly	5	4.9
4. Monthly	11	10.7
5. When the credit gets finished	5	4.9
6. Every 3 days	2	1.9
7. Every 2 days	1	1.0
8. Undetermined	1	1.0
9. When I want to make an important call	4	3.9
Total	103	100.0

Only five (4.9%) respondents said they used the post-paid. This was as a result of vendors lining up on the street giving opportunity to people to top up the units on their phones. Respondents were also asked how often they recharged their phones as prepaid users. From Table 6, forty-three (41.7%) said they recharged their phones weekly as prepaid users.

Thirty-one (30.1%) respondents said they recharged their phones daily as prepaid users and eleven (10.7%) respondents said they recharged their phones monthly. It can be said that respondents recharged their phones at various durations as and when they want. The study also found out that most respondents (i.e., 73 or 67.6%) bore the cost of their phone usage themselves. On the other hand twenty-four (22.2%) of the respondents said their parents paid the cost for their phone usage while six (5.6%) of respondents said their fiancés/fiancées bore the cost of their phone usage.

Research Question 3

What are the purposes for which they own and use their phones?

The study also wanted to find out why respondents chose to own mobile phones in the first place. In Table 7, sixty-three (57.3%) of the respondents said it was to enable them contact friends and family members. Eleven (10.0%) said they own mobile phones for communication with colleagues and six (5.5%) said for easy dissemination of information. These views of the respondents support what was stated earlier that mobile telephony has emerged as one of the defining communication technologies of our time (Scott, W. C. & Yong Jin Park, 2008). Respondents were asked if their mobile phones were always on, even at night. This was to enable the researcher know if respondents always had their phones on all the time of the day in expectation of calls always thereby paying attention all time as to when calls would come. Majority of the respondents, ninety-two (89.3%) said their phones were always on even at night. The study was interested in finding out if respondents always answered their mobile phones even if doing so will be inconvenient to them. Majority of the respondents (69 or 66.3%) said they answered all calls. Many of the respondents, 74 (42.3%) indicated that they used their phone for calling friends while fifty-four (30.9%) used it to call home and thirty-two (18.3%) used it to listen to music.

Table 7. Reasons for owning a phone

	Frequency	Percent
1. To enable me contact friends and family	63	57.3
2. To get close to my love ones	1	0.9
3. Get information anytime you need to	4	3.6
4. For easy dissemination of information	6	5.5
5. Because like its functions	1	0.9
6. Fashion	4	3.6
7. It makes life easier	5	4.5
8. For communication with colleagues	11	10.0
9. To record	1	0.9
10. For academic purpose	1	0.9
11. Keep up with time	2	1.8
12. To be abreast with news and other information both local and foreign	2	1.8
13. Listening to music	1	0.9
14. No reason	8	7.3
Total	110***	100.0

*** Multiple Responses Source: Field data

Various responses were given by respondents as to the most common place they used their phones. Eighty-nine (84.8%) said the common place they use their phones was in their rooms. This is shown in Table 8. Eight (7.6%) said they used their phones everywhere and four (3.8%) said at any

Table 8. The most common place at which the phone was used

	Frequency	Percent
1. In my room	89	84.8
2. Everywhere	8	7.6
3. Around lecture theaters	1	1.0
4. Town	2	1.9
5. Any place except lecture halls	4	3.8
6. Public	1	1.0
Total	105***	100.0

*** Multiple Responses Source: Field data

place except lecture halls. It can be said that respondents used their phones at any place available to them. According to the literature more people have accepted the use of mobile phones in public places since people adopted mobile phones for safety, security and business or job related reasons instead of social reasons (Palen, Sallzman and Youngs, 2000). The data also indicated that many of the respondents roam about: fifty-two (50.0%) or stand at one place: forty-eight (46.2%) to talk on their phones. So people behave any how they feel comfortable with while talking on the phone which can also be influenced by the mood (whether happy, depressed, sad, or sleepy) in which they are. It is noticed from the data that most respondents considered information on their phones private sixty-two (60.2%) Sixty-four (62.1%) respondents stated that the presence of others sometimes bothered them while they were on phone.

On the other hand fifteen (14.6%) were not bothered, while fourteen (13.6%) said the presence of others seldom/rarely bothered them while they were on their phones. It is apparent that most respondents will prefer engaging in communication with the phones without other people eavesdropping on their conversation but unfortunately mobile phones as remarked by Fortunati (2002) favour the progressive encroachment of intimacy in the public sphere. The study was also interested in finding out from the respondents how frequently they used their phones for the following functions; sending text messages, sending picture messages, downloading/forwarding ringing tones, playing games, getting news and updates, local calls and international calls. With respect to sending text messages forty (38.8%) of respondents said they "sometimes" and thirty-three (32.0%) said they "often" used their phones to send text messages. Regarding the playing of games on mobile phones eighteen (17.5%) respondents said they "always" did, while twenty-four (23.3%) said they "often" did. Similarly seventy-three (70.9%) of respondents used their phones "always" "to make local calls and fourteen (13.6%) did so "often".

Sending of picture messages and downloading/forwarding of ringing tones were not frequently done by study participants. Seventy-two (69.9%) of respondents never used their phone for send picture messages and; nineteen (18.4%) did so on rare occasions. The majority either never (44 or 42.7%) or rarely (18 or 17.5%) downloaded/ forwarded ring tones. International calls were also made by them sometimes; forty-three (41.7%) and rarely; twenty-five (24.3%). Fifty (48.5%) said they totally agreed that mobile phones have become a "necessity" because one cannot do without it in this modern world and as many as thirty-six (35.0%) said they somehow agreed that mobile phones have become a "necessity". So mobile phones are apparently deemed as a

"necessity" by most. The literature indicates that mobile phone has become part of our Ghanaian way of life and these days one is not complete without the phone as an essential item in the hand (Sims, 2006).

Research Question 4

How useful are the phones to them in academic life?

The results of the study show that relatively more students (39 or 37.1%) use their phones for family calls than academic work (36 or 35.0%) at the rate of one call in every two calls. At lectures, most of the respondents put their phones on either the vibration mode; fifty-five (52.9%) on silent; forty-six (44.2%) in order to avert the phones ringing and thus disturbing the class. It can be realized that most respondents put their phones on vibration mode when they were at lectures. It can be noticed that most respondents could do without mobile phone for a day as they might miss important calls and the phones had become part of their life. Again according to the literature reviewed, the use of mobile phones has become part of our way of life in Ghana and these days, one is not complete without a phone as an essential item in the hand (Sims, 2006). According to most of the respondents; seventy (66.0%) owning a mobile phone helped them to have easy access to information relating to lectures and assignments. Some (9.4%) also used their phones to call group members to meet and study.

The seriousness attached to academic work is also expressed in the fact that most respondents; seventy-six (73.8%) never went to the examination halls with their mobile phones even though it may be of much use to them at that moment with respect to important missed calls. This is in line with the University of Cape Coast regulations that students should not go to the Examination Halls with their mobile phones. It was the intention of the study to find out how often respondents engaged in free night calls despite the adverse effect it might have on them. Thirty-six (35.0%) each said they "seldom/rarely" or "sometimes" engaged in free night calls offered by the network. Ten (9.7%) said they very often engaged in free night calls with their network. Almost all the mobile phone networks offer free night call services in Ghana, therefore customers try as much as possible to utilize it in order to save money. Though sixty-three (61.2%) said the free night calls never had any effect on their academic life some respondents admitted that the free calls made them to sleep at lectures (13 or 12.6%), or made them not to have enough sleep in order to wake up early (11 or 10.7), and wasted time at night to talk on phones instead of learning (8 or 7.8%).

Research Question 5

What problems do they encounter with the owning and usage of phones?

Though some respondents said they did have problems with their roommates concerning the usage of phones, a sizeable number, seventy-one (68.9%) said they had no problems. Seventeen (16.2%) said their roommates made free night calls which tend to disturb those who might be sleeping by then. Four (3.8%) said the problems they encountered was that their roommates swapped chips anyhow which might erase some important contacts. Other respondents (3 or 2.9%) also reported that roommates tried to read others 'text messages.

Seventy (68.0%) said that loading or recharging their phones does not exert financial pressure on them while twenty-seven (26.2%) said they doing so placed them under some financial pressure. It is noted that respondents were not pressured to recharge their phones but did so on their own volition. However, few of them (20 or 19.4%) felt financial pressurized because much of their pocket money went into making calls. Three (2.9%) respondents stated if they were "flashed" they felt the need to call back immediately and two (1.9%) indicated they needed to disseminate and receive important and vital calls.

Conclusion

The study ascertained what motivates Ghanaian university students in adopting the mobile phone technology. It also accessed the behavioral characteristics of respondents in the use of the mobile phone which has become an essential item in contemporary society. For several users mobile phones are becoming indispensable. People no longer have to travel long distances to transact business and seek information but can just take their phones and then solve their entire business problems. Some can even access the internet on their phones and also watch television programmes on it. The common types of mobile phones used by the students of the were Nokia, Samsung, Sonny Ericson and Motorola with Nokia being the most common. The students were interested in the owning the phone by virtue of its good quality. The respondents used MTN more than any of the other Mobile Service Provider probably because it is the largest service provider in the country. Many of the respondents owned phones that were not too costly (i.e. between GH¢10 and GH¢60). Added to these findings is the fact that parents encouraged and helped the students/respondents to own mobile phones. The respondents recharged their phones at various durations as and when they want and bore the cost themselves. The phones were used for communication purposes and they did that at any place. According to the students the phones helped them to access information relating to lectures and assignments. Despite the usefulness of mobile phones to our world and society today, people must use it wisely to avoid any problem that it can cause.

Recommendations

Firstly, students must cut down on the number of times they buy or recharge their units. This will enable them save money for other things. Secondly, students must cut down on the length of time talking on phone in order to have more time for studies as students. They should avoid reading messages on the roommates' phones and also avoid making unnecessary night calls. Also, students must restrain themselves from unnecessary calls and switching off the phone occasionally. This study which is believed to be one of the preliminary studies on mobile phones in Ghana serves as baseline for other people to extend and study further.

A further study could cover not only university students in other universities but others in the Ghanaian society.

REFERENCES

- Aoki, K. and Downes, E.J. 2004. The consumption of mobile services by Australian students'. *International Journal of mobile marketing*, June 2006, Vol1 No
- Apsidalkat, 2007. *Mobile hone*.<http://apsidalkat.blogspot.com/> Retrieved on 20/07/2009
- Darren, M. 2007. *Mobile phones subscriptions*: <http://www.engadget.com/2007/11/29/mobile-phone-subscriptions-hit-3-3-billion/> Retrieved 17/03/09.
- Ghanaian Chronicle, 2007. *How Mobile Phones Become Part of Culture?* <http://www.tmcnet.com/scripts/print-page.aspx?PagePrint=http%3a%2f%2fwww.tmcnet.com/scripts/print-page.aspx> Retrieved on 22/03/09).
- Global sources, 2008. *Mobile Phone Manufacturers*: www.globalsources.com/manufacturers/mobile-phone.html Retrieved 17/03/09).
- Hartviksen, G. and Akrelsen, S. 2002. *Information Technology in Ghana* http://facweb.cs.depaul.edu/yele/Course/IS540/Global-Project/20045/Ghana%0website/network_access.htm.
- Retrieved 21/03/09).
- Mobile Phone Manufacturers, 2008. www.globalsources.com/manufacturers/mobile-phone.html Retrieved 17/03/09).
- Mobile phone safety <http://www.nh.com/consumer> retrieved on 14/03/09).
- Nonor, D. 2010. *Ghana Phone users to reach 70%*. Accra: All Africa.com. On line opinion, (2003). Mobile phone culture. <http://www.onlineopinion.com.au/view.asp?article=3374> Retrieved on 23/02/2008.
- Overview of Cell Phone Technology, 2008. <http://www.mat.ucsb.edu/g.legrady/academic/courses/03w200a/proj...> Retrieved on 14/03/09).
- PSRAST, 2008. *Mobile phone safety*. <http://www.nh.com/consumer> retrieved on 14/03/09).
- Sayan, C. 2006. *Mobile Phone usage patterns amongst university students; A comparative study between India and USA*. A Master's Paper for the M.Sc degree. North Carolina.
- Shahid, B. and Wasin, M. 2003. *Overview of Cell Phone Technology*, <http://www.mat.ucsb.edu/g.legrady/academic/courses/03w200a/proj...> Retrieved 14/03/09).
- Scott, W. C. and Yong Jin Park, 2008. *Social Implications of Mobile Telephony: The rise of Personal Communication Society*: Blackwell Publishing Ltd.
- Michigan, Sims, D. 2006. *Parature signs up sharper Agent*. <http://www.tmcnet.com/scripts/print-page.aspx?PagePrint=http%3a%2f%2fwww.tmcnet.com/scripts/print-page.aspx> Retrieved 22/03/09).
- Telephones and Communication, (2008). <http://www.ghanaweb.com/GhanaHomePage/communication/> Retrieved 21/03/09).
- Valco Hall, 2000. <http://valcohallucc.com/index.php>, retrieved on 6th March 2009.
