

# ***THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES***

## **An Appraisal of the Implication of Mobile Telecommunication Revolutions on Nigeria's Young Population: A Study of Students of Higher Education Institutions in Edo State, Nigeria**

**Dr. Williams Akerejola**

Lecturer, Department of Business Administration, Wellspring University, Nigeria

**Okpara E. O**

Assoc. Professor, Department of Accounting, Wellspring University, Benin-City, Nigeria

**Dr. Patrick Ohikhena**

Senior Lecturer, Department of Business Administration, Wellspring University, Nigeria

**Emenike P. Anthony**

Managing Partner, Emenike & Co. Chartered Accountant, Benin-City, Nigeria

### **Abstract:**

*Telecommunications revolution is affecting every segment of the lives of Nigerians of all ages as it has unarguably become a device in use by almost all and sundry, especially young people at the secondary and higher education institutions. This study investigated the effect of continuous and excessive use of mobile phone technology among university undergraduates, on social interaction, academic performance and moral behaviour in Benin-City, Nigeria. Needless to say, the Nigerian communication has been changed in many ways through the use of mobile phone. Many changes have been noticed in socio-economic and health related area. Many types of views are there regarding the increased use of mobile phones among Nigerian young people especially students studying undergraduate degree. 120 respondents have been randomly selected from three universities: University of Benin, Benson Idahosa University and Wellspring University all located in Benin-City. Data were being collected from 120 samples through a structured data collection tool. Using Pearson Correlation coefficient on a two-tailed test with SPSS version 20, the study found that Mobile phone communication offers an effective means of bringing good interactive services to the users especially university undergraduates. However, the implications on the moral and academic lives of the students are overwhelming. Apart from distracting students from concentrating on their studies, the students are exposed to various internet sites that lower the expected moral rectitude. In general, it is recommended that the use of mobile phone be restricted and censor by the university so that they are not carried away by social and moral vices that could negatively affect their lives both now and in future.*

**Keywords:** Mobile phone, social interaction, telecommunication revolution, moral issues

### **1. Introduction**

The mobile telecommunication industry is undergoing tremendous revolution so much that even an illiterate handler of mobile phone is tutored to say "hello" upon access to it. The use of the mobile phone has become so ubiquitous that a mere three-year-old infant can lift up a GSM handset and speak into it. In some instances, the mobile phone has become a play toy that is at the reach of every member of the family. The mobile phone has made inroad into every segment of the Nigerian society including the rural areas.

The mobile phone revolution has brought a lot of changes and made lives a lot more comfortable and stress free by bringing people closer even when they are separated by distance. The mobile phone may have also reduced the frequency of travels by many people and by implication reduced danger and hazards associated with travels. It is reported that Nigeria has over 80 million mobile phone subscribers to the four dominant mobile phone service providers in Nigeria. It is a well-known fact that since the late 90s several countries of the world especially in Africa, Asia and Latin America have witnessed a phenomenal growth in this telecommunications sector of the economy of these nations, particular reference is made of the use of mobile cellular phones. As a matter of fact, organizations have become increasingly dependent on technologically based information to support operational, tactical and strategic business activities, thereby making information technology intrinsic in today business enterprise (Okpara and Mohammed, 2012).

Telecommunications revolution has transformed Nigerian society from its in diverse ways, to the illiterate, it makes communication easier and faster than it used to before the revolution. Similarly, it has become a tool for the young ones not only as a medium for communications but a play mate. As it has become an instrument for playing games, listening to music, chats among peers. It has become widely known that this revolution, which include the use of the

Internet, mobile phone, computers all of which have taken over the traditional way of communications such as cables, telegrams and postages. These new technologies enable messages in form sounds, and images to get to the recipients or target audience almost very quickly. With this, messages can be recorded and retrieved and release to third parties if needed. According to Keil and Johnson (2005), whole globe can be captured into a frame with telecommunication.

From the initialization of this century Information and Communication Technology (ICT) has able to catch huge attention (Offurum, 2009; Keil & Johnson, 2005; Trevino, Webster & Stein, 2006). Innovation in the area of technology is also imbedded into the word ICT. According to Nath (2000), this sector is responsible to create, transfer, exchange and flow of information through set of goods, processes and services. To provide knowledge in the society, it plays a vital role (Marcelle, 2000). Every year on 24<sup>th</sup> May, changes occur in terms of social communication, practices, education, health, entertainment in the occasion of World Communication Day (Offurum, 2009). It has become a topic of research about the mediating role of mobile phone for its nature of virtual connection between the sender and receiver. It allows to-way communication of graphics, voice, audio, images, texts etc. Call blocking and forwarding, packet and network data services are some of the additional services offered. As per Samuel (2008), SMS, calling, internet surfing, on-line shopping, banking is becoming so easy with this. Friedman (2006) in his study highlighted and acknowledged the importance of telecommunication. Quah (2006), found a side effect of ease in getting information, as it is affecting productivity. Both positive and negative way is there in the acquisition and use of information, knowledge obtained from mobile. Hence continuous check as well as awareness is being required among school going children. Reading habits of child are no doubt getting hampered through mobile. Culture also suffered a lot due to mobile usage (Lynn, 2008). For the young and the old some variations are there in case of usage. Great Britain based study has revealed that approx 36% people are addicted to mobile. Among them 7% had seen severe impact in their personal and social life for this (Steve, 2008). Talking over phone while driving is a common world-wide reason behind fatal accidents. Many countries have initiatives to frame laws to stop this (Hall, 2007). Security risks are also there due to wrong information flow. After September 11 attacks, Federal Officials in the United State of America plans to close mobile phone usage for official purpose among government officials (Blair, 2001).

Talking about positive side it helps to make connections with family friends in crisis and emergency situations. News can be obtained for child staying alone home or other members of family Cohen, 2009). But at the same time, it is badly responsible for brain cancer among children and teenagers in Great Britain (Lean, 2008). Many crimes of Nigeria are also occurring as a side effect of revolution of telecommunication. 419 or yahoo, crime business of Nigeria corrupting moral and social stands. Many victims are being forced to recharge mobile on the camouflage of being neighbour or relatives.

## 2. Literature Review

Learning performance, concentration is hugely affected by use of mobile among students (Kelly, 2017). Study conducted by Kuznekoff and Titsworth, observed that students who do not uses mobile can recall more, even can write 62 % more facts compared to those who use it regularly. There are many similar studies which mentioned that more concentration, at the same time mobile is creating virtual contact, becoming a powerful tool for society, advancing the socio-economic activities and health care services. The main thing is the usage purpose and time.

### 2.1. Telecommunications Revolution: Third World Experience

Both developed and developing nations have become connected with technological advancement especially in telecommunication (Mieczakowski, Goldhaber and Clarkson, 2011). As per facts of Stats, 2015, there are 3,366,261,156 billion internet users across the world. Everyone including school child, teenagers, and office goers is using mobile. Number has become almost doubled over the past few years. As per Stats (2016), it has reached to 4.61 billion. Telecommunication Regulatory Authority in Nigeria (NCC, 2018) mentioned Nigeria a country to use increased number of mobile. About 14m are using mobile which is almost half of Nigerian population. More and more child are now using gadgets including laptop, smart phone, tablet, etc and getting connected to WWW easily (Buzzi, 2012). United Kingdom based study revealed that almost one- third of the ages 3-4 goes online using a desktop PC, laptop or notebook, 6% go online via a tablet and 3% via a mobile phone. Many problems have been highlighted in this study for different age groups. According to Turkle (2012), relationships are suffering due to use of mobile phone. While discussing personally meaningful topics mobile can interfere and affect (Przybylski and Weinstein, 2013). Due to flexibility in time and place of use mobile device creates a drawback as parents can't monitor children how they are using mobile (Shuler, 2009; Campbell and Park, 2008). According to Przybylski and Weinstein (2013), mobile also affects worth of face-to-face interaction. Anxiety, strains, growth, mental development can be hampered due to mobile (Lee, Chang, Lin and Cheng, 2014; Boxer, Groves, and Docherty, 2015). Communication skills and behavior changed after using mobile for school going children. On the contradictory, Hourcade, Williams, Miller, huebner and Liang, (2013), find that visualizing storytelling activities improves social interaction among students by tablet compared to those who read books. Moreover, mobile applications enhanced writing skills (Kanala, Nousiainen, and Kankaanranta, 2013). Findings of Kirkorian, Wartella and Anderson (2008) are in the same line. Genc (2014), conducted a study on pre-school children on use of smart phones. The outcome indicates that improvement in cognitive thinking, visual memory, recall can be noticed along with technological amendment through use of mobile. Though parents take tension that mobile might make them introvert, mental blockage may occur, even health may be affected due to harmful radiation.

### 2.1.1. Statement of Problem

The introduction of the mobile telephone was meant to make life a lot easier by bridging the gap between individuals thereby eliminating the barriers created by distance. The introduction of the mobile phone meant less travel to reduce the hazards of land, air and sea travel but more interaction to keep in constant touch with loved ones. Regrettably however, the introduction of the mobile telephone has exposed a number of hazards and dangers associated with the continuous and wrong use of the telephone. Experts in various fields including psychologists, sociologists, role models, motivational speakers and telecommunication experts have all spoken against the continuous and wrong use of the telephone especially by young people in higher education institutions. The various professionals have pointed out at various for the danger inherent in the everlasting use of phone and ask for temperance. Social media has highlighted many incidents occur due to erroneous use of the telephone as well as mobile phone. Special focus has been placed on pupils from higher education institutions.

Students of higher education institutions have one common objective and that is to excel in their academic performance as well as being upright in their moral and social conduct. However, many have observed that many of the students are getting distracted by the excessive use of mobile phones and in the process jeopardize their academic pursuit and put themselves on harm's way. In view of the foregoing, this study is poised to contribute to the debate on the effect of continuous and excessive use of mobile telephone by undergraduates of higher education institutions in Benin city, Nigeria.

### 2.1.2. Objective of Study

The main objective of this study is to determine the effect of the continuous usage of mobile phone among undergraduate students. This main objective is broken down into three specific objectives namely: to assess the impact of the continuous use of mobile telecommunication on the academic performance of undergraduate students of higher education institutions in Edo State. The second specific objective is to ascertain the relationship between continuous use of mobile telecommunication and physical and social interaction/hazards. Similarly, the study is to determine if the continuous use of mobile phone has any effect on the moral behavior and attitude of undergraduate students of higher education institutions in Edo State.

### 2.1.3. Hypotheses

The study is premised on the following hypotheses:

## *2.2. Hypothesis Development*

In examining the effect of continuous use of mobile phone among university undergraduates, it is necessary to look into how social interaction, academic performance and moral behavior will be exaggerated by the utilization of this tool.

Different age groups are suffering a lot due to the usage of mobile phone. As per Turkle (2012), human relationships are also getting affected due to this. When meaningful important issues are being discussed among people, it can create many problems (Przybylski and Weinstein, 2013). It has become a severe problem for parents to monitor their children activity as mobile phone can be used irrespective of time and place (Shuler, 2009). This nature of mobile communication also creates side affect for parents (Campbell and Park, 2008).

According to Ravichandran (2009), mobile usage after certain limit causes conflicts in family relations. Because of incessant use it has undulation effect of disturbing the students from educational quality.

- H01: No significant association is there between use of mobile phone and interactions done at social level by students studying undergraduate degree in Benin-City, Nigeria;
- H02: No significant association is there between unremitting use of mobile by college undergraduates in Benin-City, Nigeria and their recital.
- H03: No significant association is there between moral value and unremitting use of mobile by university undergraduates in Benin-City, Nigeria.

## **3. Research Methodology**

This research started with a general literature review with an aim to define the research objectives and questions. Cross sectional design method was adopted in order to elicit data from respondents through the administration of a well-structured questionnaire which tries to gather data that aided in analyzing them in relations to the identified variables. In parallel, a more focused literature review was carried out to develop a survey instrument. Afterwards, the survey validity was conducted while the instrument shows a positive reliability and validity. The questionnaire templates were randomly distributed among university undergraduates from the selected universities in Benin-City, Edo state, Nigeria. The questionnaire was divided into two sections of demographic characteristics and variables being analyzed. Each variable elicited question that are related to capturing or measuring the said variable. The population of this study is 150 from which sample size of 120 was obtained using the popular Taro Yameni formula. A minimum of Cronbach alpha value of 0.7 was obtained from the pilot study conducted showing the reliability of the instrument, while the instrument was subjected to content validity, which is expert opinion validity as used in (Osuwagwu, 2004).

The analysis of the study was conducted using descriptive and inferential statistics done through correlation and regression analysis. Specifically; Pearson Product Moment Correlation was used to measure the relationship between the study variables.

#### 4. Analysis, Results and Discussion of Findings

The table below represents the responses from the respondents.

S/N	Variables	SA	A	FA	D	SD
1	Ability to interact with fellow young mates remotely and distance	28	84	8	0	0
2	Ability to air view easily especially if the respondents is an interested party	24	76	20	0	0
3	Gives a feeling of belonging with the society irrespective of social status of parents	48	48	20	0	4
4	Permits meeting with a wide range of age and interest group	52	56	4	8	0
5	Connect you with friends you may not otherwise see for life	48	44	16	12	0

Table 1: Respondents Responses to Social Interactions

Source: Field Survey, 2019

Table 1 shows responses by respondents in the questionnaire distributed and given as follows: Statement 1 to 5 shows that majority of the respondents representing over 100 (83%) agreed that the continuous use of mobile phone has positive social effect on the respondents. This means that the use of the mobile phone can improve the interaction among undergraduates as views can easily be expressed, permit ease of meeting wide range of people of different age groups and connect to friends that they may not have met in life.

	Mobile Phone Usage	Social Interaction
Pearson Correlation	1	.482
Sig. (2-tailed)		.000
N	120	120
Pearson Correlation	.482	1
Sig. (2-tailed)	.000	
N	120	120

Table 2: Pearson Product Correlation for Social Interaction

Source: Field Survey, 2019

Correlation Is Significant at the 0.01 Level (2-Tailed)

Table 2 shows the significant relationship between social interaction and mobile phone usage. The correlation coefficient ( $r$ ) of social interaction to mobile phone use is .482 and the significance level is 0.01 ( $p < .01$ ). The null hypothesis was therefore rejected concluding that there is a relationship between social interaction and the use of mobile phone among university undergraduates in Benin-City.

S/N	Variables	SA	A	FA	D	SD
1	More materials are available for additional knowledge for more serious students	60	44	12	4	0
2	Broadens the understanding of young populations including those of less privileged among the population	40	56	20	4	0
3	Experience of other brilliant school children may be downloaded for increase in knowledge	48	52	12	8	0
4	Wide range of available information widen the knowledge space and improves academic performance	80	32	8	0	0
5	Despite its numerous benefits, it is a source of distraction for students	28	56	32	4	0

Table 3: Responses to Academic Performance

Source: Field Survey, 2019

Table 3 shows responses by respondents in the questionnaire distributed and given as follows: Statement 1 to 5 shows that majority of the respondents representing over 110 (91.7%) agreed that the continuous use of mobile phone has significant effect on academic performance of undergraduates who are the respondents in this study. Meaning that the continuous mobile use by these groups of students could add to their academic knowledge other than classroom work, broaden their understanding of events all over the world.

		Mobile Phone Usage	Academic Performance
Pearson		1	.514
Mobile phone usage	Correlation		
Sig. (2-tailed)			.000
N		120	120
Pearson		.514	
Academic performance	Correlation		1
Sig. (2-tailed)		.000	
N		120	120

Table 4: Pearson Product Correlation for Academic Performance

Source: Field Survey, 2019

Correlation Is Significant at the 0.01 Level (2-Tailed)

Table 4 shows the significant relationship between social interaction and mobile phone usage. The correlation coefficient (r) of social interaction to mobile phone use is .514 and the significance level is 0.01 ( $p < .01$ ). The null hypothesis was therefore rejected concluding that there is a relationship between academic performance and the use of mobile phone among university undergraduates in Benin-City.

S/N	Variables	SA	A	FA	D	SD
1	Some sites that reveal pornography and such similar vices should be blocked	52	36	20	8	4
2	Peer group influence may negatively affect some feeble-minded youths	64	36	16	4	0
3	Discourage the use of mobile phone for fraudulent activities	52	40	12	4	12
4	School children should be discouraged from access to some unethical application involving financial transactions.	40	36	16	16	12
5	Procastination as a result of being too much engrossed on mobile phone	44	32	24	20	0
6	You may lose focus and damage vital things like while cooking	28	28	20	36	8

Table 5: Responses to Moral value

Source: Field Survey, 2019

Table 5 shows responses by respondents in the questionnaire distributed and given as follows:

Statement 1 to 6 shows that majority of the respondents representing on the average over 70 (60%) agreed that the continuous use of mobile phone could lead to moral decadence as they could be influenced negatively, some of the students who are adventurous could found themselves in sites such as pornography hence corrupting them, and that their unchecked concentration could lead to the lost of vital things and could also be involved in unethical use of applications such as financial transactions otherwise called yahoo yahoo or 419 to say the least.

		Mobile Phone Usage	Moral Value
Pearson		1	.398
Mobile phone usage	Correlation		
Sig. (2-tailed)			.000
N		120	120
Pearson		.398	
Moral value	Correlation		1
Sig. (2-tailed)		.000	
N		120	120

Table 6: Pearson Product Correlation for moral value

Correlation is significant at the 0.01 level (2-tailed)

Source: Field survey, 2019

Table 6 shows the significant relationship between social interaction and mobile phone usage. The correlation coefficient (r) of social interaction to mobile phone use is .398 and the significance level is 0.01 ( $p < .01$ ). The null hypothesis was therefore rejected concluding that there is a relationship between moral value and the use of mobile phone among university undergraduates in Benin-City.

## 5. Conclusion and Recommendation

### 5.1. Conclusion

Based on the research analysis, hypothesis testing and interpretation of results it was observed that social interaction, academic performance and moral value all have a place in the continuous use of mobile phone by university undergraduates in Benin, hence has positive relationship with the identified constructs. However, findings show that it has the capacity to corrupt the users unless sites that are visited by these students can be continuously censored as the moral decadence in our school systems affect some of them and therefore not take things for granted.

### 5.2. Recommendation

Given the importance attached to undergraduates as it relates to their moral, academic and social life, it is recommended that all undergraduate youths be properly monitored in what they are doing with the mobile phone which takes so much of their time at all time. For instance despite findings in this study that the use of mobile phone improves the social life of the young ones especially the undergraduate population, what they do with it must be monitored by both parents and university authorities to ensure it is only that which will be of benefits to them now and in the future are readily available to them.

It is recommended that some sites be blocked in order to discourage them of the access to it by the university authorities since most of the users have access to the internet via the institution Wi-Fi Hotspot which can be monitored and blocked by the administrator. Similarly, parents should also monitor what their wards or children are doing with their mobile phones by ensuring they are not involved in questionable activities at the net. The students should also be discouraged from taking so much of their valuable time accessing the mobile phone so that more time can be used for other productive purposes relating to their studies and knowledge expansion. To ensure proper use of mobile phone by students are joint responsibilities of parents when the students are at home and the institution authorities when the students are at school. As future leaders of this nation they must be seen to live above board at all times, so that they can imbibed the culture of good social and moralities.

## 6. References

- i. Allen, K. (2017). Mobile phones in the classroom: A helpful or harmful hindrance?
- ii. Blair, J. (2001). A nation challenged: Telecommunications U.S considers restricting cell phone use in disasters. The New York Times. [Online] Available: [Http://query.nytimes.com/gst/fullpage.html](http://query.nytimes.com/gst/fullpage.html) (August 25, 2009).
- iii. Braa, J, and Nermunkh, C, "Health Information System in Mongolia: a difficult process of change". In C. Avgeuru & G. Walsham (Eds.), *Information Technology in Context, perspectives from developing countries*, UK: Ashgate, 2000.
- iv. Callon, M. (1999). Some elements of sociology of translation: Domestication of the scallops and the fishermen of saint brieuc bay. Biagioli, M (Ed.), *The Science Study Reader* (pp.67-83). New York: Routledge.
- v. Carrier, J. (1990). Reconciling commodities and personal relations in industrial society. In R.
- vi. Silverstone E. Hirsch & D. Morley (Eds.), *Consuming technologies* (pp. 1-29). London: Routledge.
- Cohen, M. (2009). Cell phones at school: should they be allowed? [Online] Available: <http://life.familyeducation.com/cellular-telephones/school/51264.html> (August 25, 2009).
- Friedman, T. L. (2006, December -February). The exhausting race for ideas. *Newsweek (Special Edition.)* Pp. 11-12.
- vii. Genc, Z. 2014. Parents' Perception about Mobile Technology Use of Preschool Aged Children. *Social and Behavioral Sciences*.
- viii. Giddens, A. (2006). *Sociology* (5th ed.) Malden: Polity Press. Green, L. (2001). *Techno-culture*. Crows Nest: Allen and Unwin.
- ix. Hall, G. (2007). How to avoid the downsides of using cell phones. In L. Steve (Ed.), [Online] Available: <http://usacellsearch.com/tag/cell-phone-use> (August 25, 2009).
- x. Kanala, S., Nousiainen, T. & Kankaanranta, M. 2013. Using a mobile application to support children's writing motivation. *Interactive Technology and Smart Education*, 10, 4-14.
- xi. Keil, M., & Johnson, R.D. (2005). Feedback channels: Using social presence theory to compare voice mail to e-mail. *Journal of Information Systems Education*, 13 (4), 295-302. Vol. 3, No. 1 *Computer and Information Science*
- xii. Kirkorian, H. L., Wartella, E. A. & Anderson, D. R. 2008. Media and young children's learning. *The Future of Children*, 18, 39-61.
- xiii. Latour, B. (1992). Where are the missing masses? The sociology of a few mundane artifacts. In W. Bijiker & J. Law (Eds.), *Shaping Technology/Building Sociology*. Cambridge: MIT Press.
- Latour, B. (1997). On actor network theory: A few clarifications. [Online] Available: [http://en.wikipedia.org/wiki/actor\\_network\\_Theory](http://en.wikipedia.org/wiki/actor_network_Theory) (November 22, 2007).
- xiv. Lean, G. (2008). Mobile phone use raises children's risk of brain cancer fivefold. Independent News. [Online] Available: <http://www.independent.co.uk./news/science/mobile-phone-use-raises-children-risk-of-brain-cancer-fivefold-937007.html> (August 25, 2009).
- Lynn, K. (2008). In L. Steve (Ed.), *Cell phone etiquette*. <http://usacellsearch.com/tag/cell-phone-sue> (August 25, 2009).
- xv. Marcelle, G (2000). The economics of ICT: Challenges and practical strategies of ICT used for women's economic empowerment. Kuala Lumpur: VAM.

- xvi. Mieczakowski, A., Goldhaber, T. & Clarkson, P. 2011. Culture, Communication and Change: Summary of an investigation of the use and impact of modern media and technology in our lives.
- xvii. Murphie, A. & Potts, J. (2003). *"I", culture and technology*. London: Palgrave
- Nath, V. (2000). Empowerment and governance through information and communication technologies: Women's perspective. paper presented at the international conference on women in the new ict era: challenges and opportunities. kuala lumpur, malaysia, 22-24 october, 2000. [Online]
- xxviii. Available: [http://www.cddc.vt.edu/knownet/articles/women and ICT.htm](http://www.cddc.vt.edu/knownet/articles/women%20and%20ICT.htm) (August 25, 2009).
- xix. National Population Commission. (2006). *National census report*. Abuja: Government Printing Press.
- Nayak, S. K, Thorat, S.B and Kalyankar, N.V, "Reaching the unreached A Role of ICT in sustainable Rural development". *IJCSIS International Journal of Computer Science and Information Security, Vol. 7, No. 1, pp 220-224, 2010*.
- xx. Ndukwe, E. (2003). The role of telecommunications in national development. 19thomolayole annual management lecture at Chartered Institute of Banks' Auditorium, Victoria Island, Lagos, Nigeria.
- Ndukwe, E. (2005a). Three years of gsm revolution in nigeria. [Online] Available: [http://www.ncc.gov.ng/speeches\\_presentations/Evc's](http://www.ncc.gov.ng/speeches_presentations/Evc's) (August 20, 2005).
- xxi. Ndukwe, E. (2005b). Telecoms regulatory environment. [Online] Available: [http://www.ncc.gov.ng/speeches\\_presentations/Evc's](http://www.ncc.gov.ng/speeches_presentations/Evc's) (August 20, 2005).
- xxii. Ndukwe, E. (2005c). Developing telecommunications infrastructure. [Online] Available: [http://www.ncc.gov.ng/speeches\\_presentations Evc's](http://www.ncc.gov.ng/speeches_presentations%20Evc's) (August 20, 2005).
- xxiii. Offurum, S.C. (2009). Communication revolution. *The Leader*, 1, 19, p. 2.
- xxiv. Ogaboh, A. A. M; Ikoh, M, Ushie, E.M. and Basse, A. O, "Telecommunications Revolution: Implications on criminality and Family Crisis in the South-South States of Nigeria". *Computer and information Science Journal, Vol. 3, No. 1 pp. 42-51*
- xxvi. Okpara E. & Mohammed U. (2012). Behavioural Factors as Correlate of the Use of Information Communication Technology (ICT) in the Nigerian Army: The Case Study of Nigerian Army Signals Corps. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*. Volume 3 (6).
- xxviii. Osuagwu, (2004). Relationship marketing strategies in Nigerian companies, *The Marketing Management Journal*, 14(2), 114-128.
- xxix. Otite, O. & Ogionwo, W. (2006). *An introduction to sociological studies*. Ibadan: Heinemann Educational Books.
- xxx. Quah, D. (2006). Knowledge glut. *Newsweek* (Special edition). Pp. 43.
- Samuel, K. J. (2008). Can mobile telecommunication reduce intra-city work travel? Empirical evidence from a third world city. *Ibadan Journal of the Social Sciences*, 6(1), 45-54.
- Samuelson, R. J. (2006- December, -February). The stealth factor. *Newsweek* (Special edition). Pp. 74-75.
- xxxi. Silverstone, R., Hirsch, E., & Morley, D. (1992). *Consuming technologies*. London: Rodledge.
- Smith, M. R. & Marx, L. (1994). Does technology drive? *The dilemma of technological determinism*. Cambridge: MIT Press.
- xxxii. Short, J.A., Williams, E. & Christie, B. (1976). *The social psychology of telecommunications*. New York John Wiley and Sons.
- xxxiii. Stat, I. W. 2015. *Internet User on November 30, 2015* [Online]. Miniwatts Marketing Group. Available: <http://www.internetworldstats.com/stats.htm> [Accessed].
- xxxiv. Steve, L. (2008). The growing problem of cell phone addiction. [Online] Available: <http://usacellsearch.com/tag/cell-phoneuse>(August 20, 2009).
- xxxv. Toure, H, (2009, March). Mobile phone banking: View point. *Africa Global Perspective*. Pp. 56-57.
- Trevino, L.K, Webster, J., & Stein, E.W. (2006). Making connections; Complementary influence on communication media choice, attitude and use. *Organization Science*, 2 (2), 163-182.