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ICT GADGETS: ITS NEGATIVE EFFECT ON PRESENT DAY ACADEMIC ACHIEVEMENT IN NIGERIA TERTIARY INSTITUTIONS

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Abstract

This study was conducted to investigate the use of ICT gadgets in classroom by students and its negative effect on their academic achievement in tertiary institutions. To do so, the researcher developed three specific objectives, three research questions, and two hypotheses, while observations result compared the researcher adopted the survey research design for the study. The population of the study is 700 students from three (3) departments, out of this, 320 students were served with copies of the questionnaire. The departments were divided into two units, the largest department was observed while the other two were used for comparison. Interviews were also conducted. It was revealed that most students hate lecturers who try to stop them from entering the classroom with their cell phone which sometimes result to conflict and lack of concentration during lectures hence failure in exam. The following were some negative activities listed by students; accessing social websites like Facebook, twitter etc. during class work, playing games, playing music, answering and returning calls and downloading and using copyrighted material. Ii was also found that the use of cell phone in doing the above in classroom adversely affects the academic achievement of student in tertiary institutions. It was therefore recommended that the use of cell phones should be completely banned in educational institutions in Nigeria to allow for concentration and excellent performance by students also teachers/lecturers should be giving full authority to discipline students who use cell phones in class but they must apply wisdom in doing so.

Introduction

Presently, global digitalization is the order of the day. Information and Communication Technology (ICT), is seriously inundating the entire world. The rate at which Information and Communication Technology gadgets are developing is alarming, especially as the vast versions of cell phones are becoming too scientific to comprehend. ICT gadgets are electronically simplified applications that aid communication, it is a broad term that covers all available communication gadgets such as television, cell phone, personal computers, tablet etc. either internet connected or wireless technology. New ICT gadgets are being invented on daily bases. The list of ICT's continued to expand with each and every year. The latest ICT gadgets and their uses include the introduction of smart phones, tablets, digital TV's and other robotic based technology. The incorporation of ICT into our daily lives has changed almost everything about how we interact both on the personal and professional levels. Students no more study like they used to, don't work like they used to

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and nothing is the same anymore. Our main concern in this work is on the use of cell phones in classroom by students during lectures which appear as disruptive behaviour.

Though, cell phones have become a necessity, more than just a luxury. Some authorities feel that even if that the use of mobile phones in the classroom may be a prima facie bad idea, but mobile devices can also be beneficial to humanity when used at the right time. Obviously, the followings are true.

- Cell phones make students connected. With mobile phones, parents will be less worried since they can easily check on their children, and students can easily call for their parents in times of emergency.
- Cell phones encourage collaborative learning. Students can share notes and reminders faster and easier with mobile devices.
- Cell phones can be used as memory aids. Students can document their lessons by taking
 pictures and/or videos to enhance retention. With smart phones, learning can also be more
 interactive and fun.
- Cell phones can be used as paper and pencil. Students can use their phones for taking down notes and even for saving reminders.
- Cell phones give access to a pool of information. Students can also use their phones to browse the internet to find the information they need. They can also utilize their dictionary or translator to facilitate their learning.

But the question is, are students supposed to use cell phones while lectures are going on in the classroom, knowing the level of distraction it might cause? Again, does phones actually cause distraction?.

Obviously, it is clear that since the introduction of ICT gadget in Nigeria, there Have been drastic reduction in the level of academics standard in Nigeria's tertiary institution. This study therefore, will look at the use of ICT gadgets and its negative effect on present day academic achievement in tertiary institutions.

The result of this study will be of immense benefits to different stakeholders in different ways. It will help administrators/proprietors of institutions of learning to appreciate and adopt practices and strategies that can efficaciously curb challenges /problems occasioned by such disruptive behaviors in tertiary institutions.

This study will also help government and other policy makers in drafting implementable policies bordering on how to manage/solve problems related to classroom disruptive behaviors in tertiary institutions. Furthermore, the rigorous analyses, tests; findings, and empirical evidences in this research report will serve as good templates for potential researchers/students who may be interested in carrying out studies on similar subject matter.

Statement of the Problems

In a situation where students involve themselves in such disruptive behaviour as making and receiving calls, ping, face book, snap-chat, what Sapp, game playing, watch video, twit etc. when lectures are going on is obvious to cause distractions, yet, students enjoy this practice; Hence the recent degradation in academic level in Nigeria might be attributed to such practice. This study therefore, looks at the use of cell phones in classroom by students and its effects on present day academic achievement.

Objective of the Study

- 1. To investigate the relationship between use of cell phones in classroom and academic achievement by the students
- 2. To determine if lecturers trying to stop the students from coming into the classroom with cell phones leads to conflict between students and teachers.

3. To determine if such inter-personal conflict significantly affects student's academic achievement.

Research Question

- 1. How does student's use of cell phone in the classroom affect their academic achievement?
- 2. Does (lecturers) stopping students from coming into the classroom with cell phones lead to conflict between them and lecturer?
- 3. Does such conflict significantly affect students' academic achievement?

Hypothesis

 H_{01} : There is no significant relationship between the use of cell phones in the classroom and academic achievement by the students.

H₀₂: Lecturer- student's interpersonal conflict does not affect the students' academic achievement.

Scope of the Study

The researcher concentrated on three departments in the faculty of business administration, Imo state university, Owerri. The three departments are Economics, Banking and Finance and Insurance in their second semester of hundred levels. They were divided and monitored. The above explains the geographical scope while for the content scope, the researcher concentrated on the relationship between such indexes as;- (i) use of cell phones by students in the classroom, (ii)inter-personal conflict between teachers and their students, when trying to stop them from using cell phones in classroom.

Conceptual Framework

Meaning and Concept of Disruptive Behavior

Many authorities have defined disruptive behaviors in various ways. According to Gordon and Browne (2004) disruptive behavior is merely inappropriate behavior. According to Mabebba and Prinsloo (2000), disruptive behavior is attributable to disciplinary problems in schools that affect the fundamental rights of the leaner to feel safe and be treated with respect in the learning environment. For the purpose of this research, the use of cell phones by students while lectures are going on is treated under the rubric of disruptive behaviour. (See fig 1)

The researcher used the following model for representing the variables covered in the study.

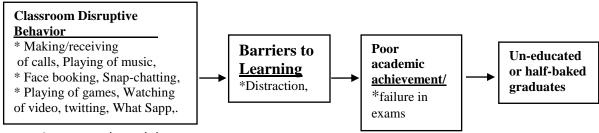


Figure 1 Conceptual Model

Theoretical Framework

The researcher used the following theoretical models to represent the theoretical framework. Looking at the system theory approach;

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System Theory Approach

This research is predicated on a general systems theory approach. A system is a group of interrelated, interdependent and interacting elements that forms a coherent whole. General systems theory emphasizes that a system can only be understood as an integrated whole and not as a set of discrete elements since elements do not necessarily behave individually as they would in a specific context.

Therefore the complex of relationship between elements in a system is key to understanding the system. Families, schools and society are regarded as social systems that interact with each other are dependent on and influenced by each other. Systems associate integrally with other systems. A pattern of mutual dependency exists.

Furthermore, context is a key concept within general systems theory. The focus is on the interactive processes of which the individual is a part. Often the causes of disruptive behavior are attributed entirely to the learner. However this kind of assessment which presumes a linear relationship between cause and effect is simplistic, unlike systems theory which provides an alternative theoretical framework for understanding and dealing with behavior in a broader context (consisting of the individual, family, school and society).

Empirical Reviews

The researcher used the following work of some authority's empirical reviews to beef up the work;

- 1. In a study on the causes of disruptive behavior in classrooms, Kehle and Bray (2009) used the survey approach to research and committed data analysis to factor analysis. According to them, the causes of classroom disruptive behaviors included among others, negative influences from peers and poor parenting.
- 2. In a study on the role of school heads in reducing high incidences of disruptive behaviors in schools, Rhode and Musser (2011) used multiple regressions to handle data analysis and found out that school heads dismissed very unrepentant and arrogant students who insisted on disruptive behaviors.
- 3. Ahmed and Us man (2013) surveyed students in four tertiary institutions in Nigeria. They found that when students were disciplined, they behaved so well in school and such reflected in their results after examinations; they avoided cultism and restiveness and they avoided all forms of distractions during classes.

Research Methodology

This segment showed the design, the research procedure and sampling method. It also showed the methods of data collection and techniques that were used for analyzing data.

Research Design

The research design used for this study is a survey method which has to do with questionnaire administration, observations, and personal interview.

Population of the Study

The population of this study is made up of the undergraduate students of the department of Economics, Banking and Finance and Insurance in the faculty of business administration, Imo state university, Owerri. With the class population of 300, 210 and 190 students respectively, totaling 700 students in number.

Sampling Procedure

A sample of 320 students was randomly chosen for questionnaire administration, while the whole 700 were involved in the observation and monitoring classes. Therefore, 320 copies of questionnaire were administered to 320 students. For observation purposes,

Three departments where involved, one as a monitoring unit, the other two departments are used to compare observation. The two departments were secretly instructed not to enter classroom with their hands set through their course reps, while economic department was allowed to enter and do what they like with their phones in classroom. On three occasions, Prof. Valin Obinna of the faculty of humanities, observed them from outside through the window and made seizure of hand sets of some students without knowing that they were under observation. As the students were seen engaged in different activities with their phones while lecture was going on. During the time of exam, they were all given the same questions which was later evaluated. Also, about 20 students and 10 lecturers were physically interviewed orally.

Validity and Reliability of Instruments Validity of the Instrument

Content validity is the scientific utility of a measure, that is, the accuracy of the content and language of the instrument. In actual fact, validity has a twofold purpose, firstly that the instrument (questionnaire) should essentially measure the concept in question and secondly, that it should do so accurately. To validate the instrument therefore, the researcher has to build a section-by-section simplified item, written to cover all areas for each of the identified construct variables.

The researcher also, after drafting the questionnaire conducted a pilot study on two sets of 10 participants each. The questionnaires were given to each set at a time. When collected, the responses were compared and deviations discarded while critical corrections were affected. Equally, four professors in the area of management were given the copies each to validate.

Reliability of Instrument

The reliability of the instrument was determined by a test -re-test study where 10 students were issued with a copy of the questionnaire each to be filled. After the filling, the researcher collected and scored the responses. Two weeks after, the act was repeated without their knowing. At the end the researcher computed a Spearman's product moment correlation coefficient (r). The value of r_1 was 0.89 and the value of r_2 was 0.86. The average ratio was 0.88 i.e. (88%) consistency, which shows that the instrument is reliable.

Method of Data Analysis

The percentage method of analysis was used to analyze the data while the hypotheses stated earlier were tested using co-relation analysis. The formula is:

$$r = \frac{n\Sigma xy - \Sigma x \Sigma y}{\left[n\Sigma x^2 - \Sigma(x)^2\right] - n\Sigma y^2 - \Sigma(y)]^2, \text{ (Obasi 2002)}.}$$

The test statistic is

t cal = r
$$\frac{n-2}{1-1^2}$$

The level of significance is 5% (Obasi 2002)

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The use of the t-test is informed by the fact that the t-test measures the relationship between x and y. in each of the hypothesis, there is a dependent variable, y and an independent variable, x. since that is the case, t-test becomes appropriate.

Again, the research involves the use of a five-point structured Likert instrument. In other words, the n in the t-test equals 5, which is less than and of course not equal to 30 (n< 30; n = 30). Whenever n is less than 30, t-test is used and so since n = 5 given the use of a five-point structured questionnaire; since the n is less than 30 and not more than 30 to attract the use of z-test and since the research is not a comparative study to attract the use of f-ratio (ANOVA), the researcher used the t-test statistic.

Decision Rule

Should t calculated be more than t tabulated, the alternative hypothesis is accepted and the null hypothesis is rejected? Also, if t tabulated is more than t calculated, the null hypothesis is accepted and alternative hypothesis is rejected.

Data presentation and Analysis

In this part of the work, the data collected with the use of questionnaire were presented and analyzed in tables and hypotheses tested. The findings also discuss.

Question 1. How does the use of cell phones in the classroom affect academic achievement of students?

Table 1: The use of Cell Phones in the Classroom and its Effect on Students Academic Achievements.

Options	No of responses	% of responses
Strongly agree	167	52.2
Agree	101	31.6
Disagree	21	6.6
Strongly disagree	17	5.3
Undecided	14	4.4
Total	320	100

Source: Field survey (2018).

Table 1 above indicates that 52.2% of the respondents strongly agree that the use of cell phones in the classroom distract students from concentrating on their lectures hence failure in examinations whereas 31.6% of the respondents agreed (ie 83.8% agreed). Also, 6.6% of the respondents disagreed while 5.3% of the respondents strongly disagreed. However, 4.4% of the respondents were undecided.

Question 2. Does (lecturers) stopping students from coming into the classroom with cell phones lead to conflict between them and lecturers?

Table 2: The Existence of Conflict between Students and Lecturers

Options	No of responses	% of responses
Strongly agree	162	50.6
Agree	94	29.3
Disagree	30	9.4
Strongly disagree	22	6.9
Undecided	12	3.8
Total	320	100

Source: Field survey (2018).

Table 2 above shows that 50.6% of the respondents strongly agreed that interpersonal conflicts between students and lecturers in tertiary institutions whereas 29.3% of the respondents agreed while 9.4% of the respondents disagreed while 6.9% of the respondents strongly disagreed. However, 3.8% of the respondents were undecided.

Question 3. Do students/lecturers conflicts significantly affect students' academic achievement?

Table 3: Effect of lecturer/students conflict in achieving exam success

Options	No of responses	% of responses
Strongly agree	140	43.8
Agree	80	25
Disagree	52	16.2
Strongly disagree	28	8.8
Undecided	20	6.3
Total	320	100

Source: Field survey (2018).

Table 3 above shows that 43.8% of the respondents strongly agreed that interpersonal conflicts that exist between students and lecturers lead to difficulties in achieving exam successes whereas 25% of the respondents agreed while 16.2% of the respondents disagreed. Also, 8.8% of the respondents strongly disagreed while 6.3% of the respondents were undecided.

Test of Hypotheses

The hypotheses tested in this research work are;

 H_{01} : There is no significant relationship between the uses of cell phones in

The classroom and academic achievement of students.

To test this hypothesis, responses to tables 1 and 2 were used.

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Correlation Table 1

Х	у	x ²	y ²	ху
167	143	27889	20449	23881
101	83	10201	6889	8383
21	47	441	2209	987
17	23	289	529	391
14	24	196	576	336
320	320	39016	30652	33978

$$\Sigma x = 320$$
; $\Sigma y 320$; $\Sigma x^2 = 39016$; $\Sigma y^2 30652$; $\Sigma xy = 33978$; $n = 5$.

$$r = \underbrace{n\Sigma xy - (\Sigma x) \Sigma y)}_{\sqrt{[n\Sigma x^2 - (\Sigma x)^2] [n\Sigma y^2 - (\Sigma y)^2]}}$$

$$r = \underbrace{\frac{5(33978) - (320) (320)}{[5(39016) - (320)^{2}] 5 (30652) - (320)^{2}}}$$

$$r = \frac{169890 - 102400}{\sqrt{(195080) - (102400)(153260) - (102400)}}$$

$$r = \frac{67490}{\sqrt{92680 \times 50860}}$$

$$r = \frac{67490}{\sqrt{4713704800}}$$

$$r = 67490$$

$$r = \frac{67490}{68656.4}$$

$$r = 0.98$$

$$t \text{ cal} = r \qquad \sqrt{\frac{n-2}{2}}$$

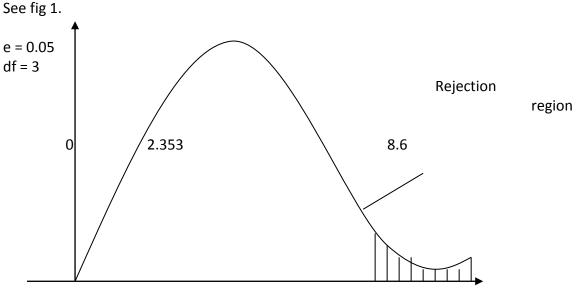
t cal = 0.98
$$\frac{5-2}{\sqrt{1-(0.98^2)}}$$

$$r = 0.98 \sqrt{76.9}$$

 $t \text{ cal} = 0.98 \times 8.77$

t calculated = 8.6

But at 0.05, 3 = 2.353



H₀₁: There is no significant relationship between the uses of cell phones in The classroom and academic achievement of students.

To test the hypothesis, responses to table 1 and 2 were used.

Decision

Since the calculated value of t, 8.6 is more than the tabulated values 2.353, we accept the alternative hypothesis and reject the null hypothesis and so we accept that, there is a significant relationship between the use of cell phones in the classroom and academic achievement of students.

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Correlation table 2

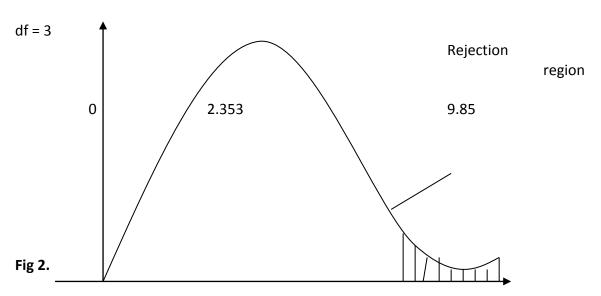
х	у	x ²	y ²	ху
162	140	26244	19600	22680
94	80	8836	6400	7520
30	52	900	2704	1560
22	28	484	784	616
12	20	144	400	240
320	320	36608	29888	32616

 $\Sigma x = 320$, $\Sigma y 320$, $\Sigma x^2 = 36608$, $\Sigma y^2 29888$, $\Sigma xy = 366038$

But t 0.053 = 2.353

See fig. 2

e = 0.05



 H_{02} : There is no significant relationship between inter-personal conflicts and academic achievement of students.

To test the hypothesis, responses to table 2 and 3 were used.

Decision

Since the calculated value of t, 9.85 is more than the tabulated value, 2.353, the alternative hypothesis was accepted and the null hypothesis rejected. And so, there is a significant relationship between lecturers and students inter-personal conflicts and the students' academic achievement. This is obvious because any students that hate his or her lecturer are always not attracted to his teachings, therefore leading to poor result.

Observation

For observation purposes, three departments where involved, one as a monitoring unit, the other two departments are used to compare observation. The two departments (bank fin and Insurance) were secretly instructed not to enter classroom with their hands set through their course reps which they highly obeyed while economic department was allowed to enter and do what they like with their phones in classroom. On three occasions. A Professor. from faculty of humanities observed them from outside through the window and made seizure of hand sets of some students without knowing that they were under observation, as the students were seen engaged in different activities with their phones while lecture was going on. During the time of exam, they were all given the same questions and when scored, the other two department that were restricted from using mobile phones made 85% and 92% passes respectively while the other department under observation had

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only 38% passes and 62% failure. Reflecting the level of distraction which the use of phones in class can cause.

Result of the interview

A summary of oral interview conducted on 20 students and 10 lecturers shows the following;

- Cell phones cause distraction. Students can easily be distracted when their phones ring
 or vibrate and the learning process will be totally disrupted when the students start to
 send and read messages or make and receive calls. Moreover, with the advent of smart
 phones, it is now easy for students to access the internet and engage in activities like
 pinging, what's aping, Twitting, Snap-chatting, or video watching and playing or
 shopping online while lectures are going on. This will seriously distract their attention
 from the lectures.
- Cell phones can be used in cheating in exam. Text messaging is the new note passing.
 Students can exchange text messages with test answers on them without the teacher's knowledge.
- Cell phones can be used in bullying. Students can take a video or a picture of their teachers and/or classmates that can be dehumanizing.
- Cell phones can be a health hazard. Constant exposure to the radiation emitted by mobile phones may be bad for the students.
- Most students hate lecturers who discipline them for using cell phones in the classroom during lectures. This usually leads to truancy when the particular lecturer comes in.

Summary of Findings

From the analysis above, the following findings were made;

- 1. That the use of cell phones in the classroom highly affects the student's listening skills as it distracts students from concentrating on their lectures, this leads to high failures in examinations. This was also confirmed through interview where the researcher was made to understand that in the western world, from where cell phone was introduced to us here in Nigeria, cell phones are not allowed in school and even offices unless during break time. A lecturer in U.K Dr. Collins IK Ozuruonye, when contacted, confirmed that it is a taboo to make use of cell phone during school hour unless during break time. Even in the U.S.A workers were known not to carry their cell phone while working.
- 2. In tertiary institutions, Teachers / Lecturers who try to discipline students that used cell phones in the class attract inter-personal conflicts between the teachers and students hence; it affects the students' academic performances.

Discussion of Findings

The researcher discussed the findings as follows:

1. The fact that the use of cell phones in the classroom distracts students from concentrating on their lectures hence failure in examinations as shown on Table 1 indicates that cell phones which are principally designed for communication can be used to destroy one's academic efforts if not properly utilized. It is however interesting that management lectures often discipline students who used cell phones in class. In a study on the effect of discipline on the academic conduct of students in Nigerian tertiary in and such reflected in their results after examinations; they avoided cultism and restiveness and they avoided all forms of distractions during classes. This is in

agreement with the findings in this study hence one of the distractions in the classroom is the use of cell phones during classes.

Recommendations

Based on the findings made in this study, the researcher made the following recommendations:

- 1. The use of cell phones should be completely banned in educational institutions in Nigeria to allow for concentration and excellent performance.
- 2. Teachers/ Lecturers should often discipline students who use cell phones in class.
- 3. A law should be put in place to protect teachers and uphold their integrity to attract students respect and avoid Inter-personal conflicts. In tertiary institutions.

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