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**INNOVATION CHANGE IN TECHNOLOGY AND JUVENILE  
DELINQUENCY AMONG SENIOR SECONDARY SCHOOL STUDENTS  
IN CALABAR  
EDUCATION ZONE, CROSS RIVER STATE, NIGERIA**

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**Abstract**

This study investigated socio-cultural practices and academic performance of student in Social Studies in Junior Secondary School III in Calabar Municipality, Cross River State, Nigeria. Two statements of hypothesis were formulated to guide the study. Literature review was carried out based on the variables under study. Survey research design was utilized. Simple random sampling technique was used in selecting the 150 respondents sampled for the study. A validated 10 items four point likert scale questionnaire and Social studies achievement test was the instrument used for data collection. The reliability estimate of the instrument was 0.79 using Cronbach Alpha reliability method. Data was analysed using the descriptive analysis. The result of the study revealed that there exists a significant negative relationship between female genital mutilation, early chld marriage and Junior Secondary School III Social Studies Students academic performance in Calabar municipality of Cross River State, Nigeria. Government

agencies at federal, state and local level should make possible steps to discourage these practices by setting watch up to the local traditional institution.

### **Introduction:**

One common phenomenon that is universal to life is change. Changes sharpen world's view and life generally. The changing world is filled with new exciting possibilities as well as challenges, because not every change is deduced to be positive. Some can generate negative aftermaths rather than gender development and progress. Given African society for example that is governed by much traditional norms and taboos, the value produced by innovation change in technology can create cultural flux and cultural ambivalent issues. Many technologies too can produce mixed behavioural pattern in the young ones who lack the control power to decipherer between the positive sides of their creation. Innovation change in technology can produce negative destructive consequences where the technology is diverted to obnoxious or ulterior use. Whereas, we live in a technologically driven world where science and technology has brought in new development on the way we do things and new equipment into our environment; and technology has been maximally dynamic to anticipate and respond to global challenges, yet technological change still pose ambiguity. However, one of the big things technology brings to us is change, which has put every human being into constant struggle for improvement. As put forward by Enu, (2011) development is now clearly defined by the issues of global concerns. Also, the big task that technology has assumed nowadays is the responsibility of addressing its abuse and those practical obstacles and the uncertainties surrounding innovation change in technology. Both producers and users find themselves in this dilemma.

What then is innovation change in technology? Innovation is doing something new or different. Unachukwu and Okorji, (2014) looked at innovations as a special kind of change which may involve renewing inputs, renewing processes and consequently renewing the products. Hence innovations can lead to gaining new knowledge, new idea, new behavior, and so on, but not everything new is innovation. Robbins, (2001) opined that not all innovations involves change, however not all changes are innovations. In other words, not all things that start and end with change, creativity, improvement or inventions are innovation. Meanwhile, change on one hand is the alterations that occur in persons, structures, technology and innovations; and on the other hand is any new thought, behavior or things that are qualitatively different from existing norms and practices. Innovation is producing emerging technologies in all areas of endeavors. Nevertheless, innovations are different from technology; however, innovations may arise from technology. This could be in our attitudes, our character, work ethics, or in the way we engage ourselves in the use of innovations in technology. Therefore innovation change is bringing in new ideas, behaviours and knowledge that could alter existing pattern. Innovation needs a strong technology to drive it forward. Hence, it is obvious that innovations change can take different forms, some planned while others unplanned, some taking a continuous status while others discontinues after a process, however, it must be strategic, goal oriented, and the impact must be felt, for example, when new curriculum are developed with complete deviation from the perception of society on how secondary education should be run or is known to be run, then there is a discontinuous innovation, but when secondary school are given preference according to the system in operation then that is a continuous innovation (Ukam, 2019).

Unequivocally, technology is the totality of way in which people provide for themselves material objects that will enable them to meet their needs. Technology has Greek origin from the word 'technologia' or 'techno' meaning the ways of doing art or craft work. According to Ejue,

(2016) technology is the systematic study of techniques for making and doing things. He added that while science has to do with a large body of accumulated knowledge, useful as a vehicle for interpreting various activities in nature, technology on the other hand, is the practical application of knowledge gained from science in a particular area to achieve some results. It is the processes people use to change various aspects of their world through human productive efforts. Since “necessity is the mother of invention” technology is one tool people have found useful to improve on the quality of their lives: medically, economically, educationally, and agriculturally. Technology actually has changed the world into what is called ‘a global village’. According to Peretomode and Ikoya (2010), technology through globalization has brought innovation change: the internet, satellite television, cellular telephones and other advancements in telecommunications, air travels, containerized shipments, and online business transactions and so on have really helped to make the world a global village and a fast changing place. Globalization is also gradually breaking down educational barriers, although local or national differences still remain (Ukam, 2019).

Agreeably, one noticeable limitation which innovation change in technology is making is peculiar to delinquent and deviant behaviours among youth. The behaviours of our youth today are characterized by continuous violations of laws, persistent mischievous act, anti-social, disobedience and intractable behaviours that thwart corrections by parents, senior ones in the society and constituted authority. Due to what youths watch on cable network, television, online videos and the interactions made with their friends on social medias, their actions have become questionable and a matters that could attract punishment by the juvenile courts. As defined by legal Match, (2019), juvenile delinquency is unlawful conduct by minors, meaning those under the age of 18 for which there are penalties. He added that some acts of delinquency are acts which would be criminal if committed by an adult, and punishable under criminal laws. Some acts could be less serious unlawful acts yet constitute misdemeanors or status offences, such as truancy, cheating in exams, fighting, vandalism, trespassing, petty theft, underage smoking, drinking and purchase of alcohol/cigarettes and lying in reoccurring instances, etc. However, felonious crimes are more serious acts like: sexual abuse, rapes, drug-related crimes and murder could be committed by juveniles too.

It is on records that the rate at which juveniles attract punishment meted for adult is high; youths experienced of incessant arrest could lead to stiffer aggressive justice and zero-tolerance policies by government. Accordingly, some scholars have given a lots of reasons as common predicators to these issues: according to Hirschi, (2013) broken homes, single parents families, lack of trust and confidence among the parents, frequent parents fight, criminal parents or psychological problems in parents can be the most important reason behind juvenile delinquency. Also legal Match (2019) opined that certain parenting factors or situation that can increase the likelihood of a minors’ delinquent behavior are: parent absenteeism in the training of their children, over disciplinarian parents, lack of monitoring children activities, peer group influence and other delinquent siblings. In as much have been said on the parents, environment and other related factors, little is been explore on the rate at which youths are engross with activities that take place within the advances we have in technology. It is my personal observation that on the aspect of social medias, cable television networks, internet, use of e-mails and mobile devices, youth have learnt delinquent behaviours that are endemic to them and the society. It is in view of this that the research work is based on innovation change in technology and juvenile bahviours among secondary school students in Cross River education zone.

Secondary education in Nigeria is that part of schooling which was formally six years programs divided into three (3) years of junior and three (3) years of senior secondary school. According to Enuokoha, Asuquo, Inaja and Petters, (2010), this was an education for those who are willing to have a complete six years secondary education. However, with the launch of the Universal Basic Education (UBE) program in 1999, which kicked-off properly in 2006, secondary school education became a program of three (3) years with students transiting from nine years of basic education into secondary school. Secondary school education is given to children who are basically from age 10-17, called juveniles or minors. Enuokoha, Asuquo, Inaja and Petters, (2010), opined that during secondary school period student's start with a specialty and after going through a national examination - University Matriculation Examination (UME), they could enter universities, polytechnics or go to work. Secondary schools in Cross River comprise three type: private owned schools, mission own and public secondary schools, however, this study is based on public secondary schools own and controlled by government.

It is my observation that secondary school students no longer take their studies seriously instead, they spend much of their time and energy in watching cable network programs, chatting with friends for long hours, watching pornographic pictures, films and sending illicit text messages, and other social media unbeneficial activities. Much of what they indulge in is part what they exhibit consciously or unconsciously as part of their behaviours. Parents who are expected to salvage the situation by putting some restriction on their uses rather promise these products or devices (like mobile phones) to their wards as motivation and encouragement for exams success.

The problem of delinquent behavior has eaten deep into society and has become the culture of children to the point parents find excuses called 'love' to ensure their children are not tact deviant even when they acts on regular basis as such. Isangedighi, (2007)<sup>2</sup> opined that:

“deviant behavior that are associated with social traits amongst youth are generally violating morals or honesty as opposed to upholding acceptable standard of behavior, rarely speaking to extreme talkativeness as opposed to being moderate, being anti social in any social activities, display of unimpressive and unpleasant or repulsive personality, rudeness, insulting, uncultured and discourteous as opposed being cultured. Also they express shyness and timidity in relationship or overtly bold which is a complex problem, unwilling to accept authority, disobeying orders and generally being stubborn, always being critic and picking fault”.

Government too is not helping matters but rather reward excellence to those who perform well in arts, music and entertainment than those who perform well technological when they display ingenious inventions. Thus they discourage youth who would have been good entrepreneurs and inventors, hence the need for this study on innovation change in technology and delinquent behaviors in senior secondary school students in Calabar Education Zone.

### **Theoretical clarification of innovation change and technology:**

Innovation is the way theorists study, adopt and develop new ideas. In line with the psychological and sociological perspective that explains that a system or every system is susceptible to change: not only the social system, but also the material and individual system, many question have been postulated about change, one of such is whether “all individuals must need adapt to changes and be active in that process; and, or if everybody must carry out some kind of role with respect to change or not”. After all, it was Jon Sundbo that said “If society is constantly moving and everything is changing, which many observers acclaim, change is not an

exception rather a norm”. Obviously, this statement was made in respect to the changing nature of innovation theory; a lot of challenges has been pinpointed on if the foundation of the theory in relation to recent developments still carry weight. However, this could be address by the practice of innovation change that is restricted to technological renewal or the discussion of socio-psychological issues by defining different roles in change process as reflected in what innovation theory originally seeks to explain (Sundbo, J. 2015).

Accordingly, one theory that challenges innovation change on the area of sustainability and resilience on the larger ecosystem is the social innovation theory. Nicholls and Gregory, (2015) opined that the overall resilience of a system encompasses four phases: release, reorganization, exploitation and observation. The exploitation and conservation phases deals with period of growth and accumulation, where change could be routine and always adaptive at the same time, while, the release and organization phase are periods of introduction of novelty in either a transformational (radical) manner or through adaptive change processes. However, there exist another theory that map out factors associated with the adoption of innovations and that which offer a potential to understanding change – diffusion of innovation theory.

Diffusion innovation theory states that it is a general consensus that “the adoption of technology is a more complex process than the technical superiority of a product” (Abrahamson & Rosenkopf, 1997; Rogers, 1995; Ryan& Gross, 1943; Valente, 1995 in Couros, 2003). This theory was propounded by Everett M. Rogers in 1962; however, the first time diffusion research was carried out was in 1903 by Gabriel Tarde a French sociologist, then came Ryan and Gross (1943), and decades after Everett M. Rogers (1962). The basic form of diffusion innovation theory is based on the process by which an innovation is adopted and gain acceptance by individuals or members of a community. It is a theory of how new ideas are spread and adopted in a community. So innovation disseminates through a societal group and focuses upon decision-making processes that lead to adoption of the product, service or ideas. Rogers work was very important to light up the definition ‘diffusion of innovation’. So far the theory identifies four elements which are influential to adoption of a technology to include:

1. The innovation: an idea practice(s), or objects that is perceived as new by individuals or a group of adopters.
2. Communication channels: the means by which innovation move from individual to individual, or group to group.
3. Time: the non-spatial interval through which the diffusion events occur.
4. A Social System: a set of interrelated units that are engaged in joint problem solving activities to accomplish a goal or goals.

According to Otosi, (2016) the dispersion of development speculation by Rogers, (1962) was propounded to take a gander at how modern considerations are distributed amongst persons via media. Thus, a speculation which hopes to illuminates how, why and at what speed modern contemplations and development distributed via social order. His five steps model include: awareness, interest, evaluation, trial and adoption. This connect the value of technology use and to what extend could be adjudge negative or positive to the individual; the dominant facts or implication here being that the study will give an understanding on the threats of incredible arrangement of media technology use which is really chronic and unselective.

Another theory that supports the study is the social learning theory by Albert Bandura in 1977. The theory posits that people learn from one another, via observation, imitation, and

modeling. According to Otsi, (2016), it emphasized a huge part of what a man realizes happens through discovering that happens with regards to social conduct as a consequence of how others in the gathering reacts or behave. That is why it has been called a bridge used by behaviourist and cognitive learning theories; because it encompasses attention, memory, and motivation. Bundura and Walters, (1977) believes that some identify contrasts have innate premise, mostly as a result of individual learning encounter of which observation is one, and to them this makes observational learning an important contributor to personality differences among individuals (muzar, 1989 in Otsi, 2016). Hence, those who do wrong things in the society must have copied them from wrong models, association and environment.

Also that, some behaviours could be learnt and stored mentally and reproduced when need arise, because to them it is fact that if an individual does not actively perform certain behavior does not mean he or she had not learnt them; one can adjust appropriately or otherwise depending on the consequences learn from others' behavior. Take for instance, what happens to a juvenile who involves in rape: he/she may acquire HIV/AIDS which could lead to his/her being sick or having unwanted pregnancy and withdraws from school. Other juvenile could take this as lesson and learn to caution themselves by putting a check on their delinquent behaviour like truancy. The theory identifies four governing interactive mediational mechanism which are

1. Attention processes: This mechanism implies that modeling will not occur unless the subject attends to the model.
2. Retention: Here it requires the subject to be retain and remember all significant aspects in imitating the model's behavior
3. Motor reproduction processes: this involves translating of symbols representations into overt behaviour
4. Incentive and Motivational Processes: where adequate incentive or motivation to retain the behavior is needed.

Social learning theory stressed the fact that the parts played by vicarious, typical and self administrative procedures in the procurement of conduct; complementary assurance or constant common collaboration between self- produced and ecological determinants in explaining technologies are very significant. The implication of the theory to this study is well articulated on the attitude of secondary school students on the use of technological device such as: laptops, palmtops and mobile phones for chatting, e-mailing, watching videos and pictures; and also use of cable network and television programs. According to Otsi, (2016) Bundura's social learning theory is one which is worried with imitative or displaying forms which are helpful in comprehending the procedures included in the imitation of posting of pictures and videos on facebook, Youtube, Twitter and Whatsapp via mobile phones and the browsing of internet for information and the retention of same. Therefore students should under that modeling role in this process and over indulgence could lead to imitation of delinquent behaviours.

### **Objectives of the study:**

The main objective to achieve in this study is to examine whether innovation change in technology can influence delinquent behaviours in secondary school students in Calabar education zone in Cross River state Nigeria. Specifically the study will:

- i. Determine the influence of cable television on delinquent behavior of senior secondary school student in calabar education zone.

- ii. Examine the influence of mobile device on delinquent behaviours of senior secondary school students in calabar education zone

### **Research questions:**

For the purpose of the study, the following research questions are set forth as a guide to the study

- i. Is there any way cable television networking influence delinquent behaviours amongst senior secondary school students in calabar education zone
- ii. To what extent does the use of mobile device influence delinquent behaviours amongst senior secondary school students in calabar education zone

### **Research Hypotheses:**

The null hypothesis raised in the study that were formulated and tested at 0.05 significance ratio are:

- Ho<sub>1</sub>: There is no significant way cable television networking influence delinquent behaviours amongst senior secondary school students in calabar education zone
- Ho<sub>2</sub>: The use of mobile device does not significantly influence delinquent behaviours amongst senior secondary school students in calabar education zone

### **Statement of the problem:**

When the use of computer device came it was some ward innovative, however the continuous alteration of things by renewing its technology has vitalized computers to sizeable device as mobile phone, palm tops and laptops. Also recording device have been reduce to as little as pen, shirt buttons, and even wrist watch nozzles can be used as detecting device. It is the manipulations in technology and flux in it that calls for concern here. In as much as the world is reduced to our palms, there are lots of social vices that comes with such innovations; the drivers and users, are also empowered today, for instance, we don't need big cinemas houses these days to enjoy shows, dramas and theatres but only a single mobile device.

Statistic shows a high prevalent rate in the use of social media technology today by students to the detriment of other important thing like education and health. Students give much time informal community available in the television, social media and youtube instead of spending their time and vitality to study their books or even take care of their health. Although government and their collaborators (curriculum planners, implementers and stakeholders) has come up with laudable educational reforms and programmes to make the educational system of standard, continues renewal of technology like these poses mirage to their efoort.

Nevertheless, the use mobile device is prohibited in secondary schools, however, the freedom to join or interact using social Medias like: facebook, instagram, whatapps, palmchat and others is accessed by all and sundry is still there. Also there is hardly in any home or neighborhood where mobile device, cable television network, laptops, palmtops and other technologies that have made easy accessibility to information, relaxation, games, videos, pictorials and other features are not found. And the availability of lots of indecent picture, videos, games and shows which expose youth to immorality is high using this medium.

Also, as much as government laws and regular are irregular in the penalization of these practices, and it is very difficult to checkmate what people do in private, these practice had

continue to corrupt our youth and teach them acts which when they indulge in thwart the peace, development and moral and ethical values imbibe by the nation. It is also my observation that since most parents do not take active part or monitor their children what they do with these technologies, it become imperative that most vices watch could be practice by the children in the present or absence of their parent. Hence the need for this study on: innovation change in technology and juvenile delinquency amongst senior secondary students in calabar education zone, Cross River, Nigeria.

### **Literature Review:**

This study examines literature from the following sub-headings:

- i. cable television networking and delinquent behaviours amongst senior secondary school students
- ii. use of mobile device and delinquent bahaviours amongst senior secondary school students
- iii. use of electronic mails and delinquent bahaviours amongst senior secondary school students
- iv. use of social medias and delinquent bahaviours amongst senior secondary school students

### **Cable Television Networking and Delinquent Behaviours :**

The behaviours of Nigerian secondary school children today is far fetch with the aims and objectives of the National Policy on Education. The goals of Nigerian secondary schools as enshrined in the National Policy on Education (2004) is to create and instill appropriate qualities for the sustenance of the person and society, grow the academic limit of persons to comprehend and welcome their nearby and outer situations, advance national and universal comprehension and cooperation. Yet the materialistic tendencies of most Nigerian students are fast reducing standards in education. An average Nigerian student spend most of his or her time in the company of television set or being entertained by other medium rather than reading. Notwithstanding the benefit of such technology, the consequences being over whelming, students are now being lead into corrupt practices shown on television thereby instilling anti psycho-social values endemic to society. A great amount of students who use obscene language to senior one and their parent, brutality, sexual immorality, alcoholism, drug addiction and others today are among the secondary school cadre. Cable television networking is a system of transmitting television signals through (RF) Radio Frequency or light pulses using coaxial or fiber-optic cables. Digital cable network came with James Van Damager's invention of CATV in 1948 to replace the one time standard analog system from early 21<sup>st</sup> century. With this invention, over-the-air TV signal where limited by distance. However, most programmes display on cable television creates materialism, stifles creativity, create conflict of values between the reality and what is advertised. Levine and Levine, (2008) in Otosi, (2016), opined that given the focal part online networking play in the lives of understudies, it is vital to have a comprehension of the impact TV seeing has on scholastic accomplishment of the understudies. That guardians and educators alike pose question "how much TV survey is excessively", few individual would contend that kid's TV seeing propensities could help guardians better to see how understudies posses and utilize their leisure time; which they confirmed that youngsters observe an excess of TV and read pretty much nothing. Television has the power to influence values system and



sharpen behavior. What's more, is the worries developed over the synergy that the media is rising brutality and other reserved behaviours betwixt students.

In a study on "The Psycho-Social Implication of Mobile Telecommunication (GSM), Television Advertisement on Youths in Calabar Municipality of Cross River State, Nigeria by David, (2005), it was observed that televisions are indispensable gadgets of contemporary communication for personal and mass use, yet there exert tremendous social and psychological influence on their user – the device portend some dangers to society. Although, initially there had created serious ban to some television package that exposes children to delinquent behaviours, yet innovation changes created in such technology have not allow for strict regulations of these laws. Technology has made cable television operation so versatile to children that there is no parental control technique they cannot bit. In television advertising, it has been observed that children constitute a large majority of those viewers that are vulnerably influenced by television activities. With the emergence of channels such as African magic, gaming, Telemondu, sports and music broadcasting on 24 hours a day basis, youth television viewing propensities have graduated.

The potential to influence behavior carried by cable television network is what Otsi, (2016) says television viewing posses. That television is a powerful tool because it has the ability to break or make any society due to the fact that it has the ability to make viewer to replicate actions they get exposed to; either in part or whole. It is the changes taking place to improve on cable network that have made TV viewing more interesting to the youths. The study done by Anderson in (2012) has connected adolescence hours before the TV with forceful conduct to prior sexual movement, smoking, weight, and poor school accomplishment. In the same vein, Otsi, (2016), opined that violence in Nigerian television programmes has become sought for on a regular basis, furthermore, it has kept on increasing more acknowledgments or energy by makers and executives. Most times when they are gotten some information about the unfavorable impacts of these on the group of onlookers and society, they basically say that 'they are depicting their messages in the least demanding and most persuading way since these stories are most times connected with genuine circumstances. But, whose task is it to check all these: could it be the controllers, makers, guardians or the youth themselves. This is the challenges researcher in the field of Education, Psychology, Sociology, Political Science and Mass Communication should address. Because it is agreed that the present financial situation in the country pose stress on parents who are engrossed with looking for cash to pay bills, thereby having little time to paying attention to what their children watch or do not watch.

The "Impact on Television Violence in Relation to Juvenile Delinquency", (2019) opined that it should be noted that television today is different than television of the past, violence is more prevalent in today's programming unlike the true family programming in the past; many reports since the 50s agreed to this fact. Using correlational, experimental and field studies, it was revealed that children start watching television at a very early age. The harmful effect of television violence is view on chances it leave children with to become violent. According to center for disease control and prevention (2012) average number of kids and young people who die, are arrested or victim of violence stands at: homicide - 4,828 young people ages 10 to 24; murder -784; and aggravated assault – 35,000 juveniles as at the year 2010 ([www.123helpme.com](http://www.123helpme.com)). In addition, they agreed that studies have shown that children expose to the horror of violence gradually accept violence as a way to solve problems; imitate the violence

they see on television and identify with certain characters whether they are victim or perpetrators.

In a study by El-Houfey and Elserogy, on the Effect of Television Watching habits on the Behaviours of primary School Children in Assiut City, Egypt, using a sample of 382 parents of children, a descriptive cross-sectional research design, a structured interview questionnaire was used to collect data related to socio-demographic characteristics, television watching habits, tendency for violence. The Parent Report Form of the Child Behaviour checklist (CBCL) was also used. As regards television viewing habits, the children were classified into three groups: the first did not watch television on a daily base or watched it less than 2 hours daily; the second group watched it from 2-4 hours daily and the third group watched it more than 4 hours daily. The mean age of the pupils was (9.1) years. Television viewing time had appositive correlation with externalizing subscales which combine the delinquent behavior and aggressive behavior of children. In contrast, a negative correlation as found in relation to children activities, social, school achievement, total level of competence and anxiety/ depression. The mean scores for the total competence for both boys and girls was explicitly lower among group III than group I. On the other hand, the score for somatic problems, thought problem, attention problems, delinquent behavior and aggressive behavior was higher among group III than groups II and I. 64.3% and 100.0% respectively, of the studied children who watched television more than 4 hours daily had mild, moderate and sever tendency for violence. A significant relation was found between tendency for violence and television viewing time as well as contents which are mainly violent and horror. It was recommended that parents should be advised and encouraged through an educational program to restrict the television viewing time of their children to less than two hours daily and exclude violent and horror materials. Therefore, technological changes made on cable networking aggravate television viewing habits, violence in television and can impact delinquent behavior on juveniles.

### **Use of Mobile Device and Delinquent Behaviours:**

Mobile device is a telecommunication gadgets or device that permits two or more users to conduct a conversation using electronic transmitting or cellular technology, hence it is otherwise refer to as cellular phone. The fixed telephone devices were the first earnest inventions made to some extend on mobile phone that followed Graham Bell's bell telephone of 1876. Also during this period it was held that telephones were built for business use, hence it was found in the commerce sphere only like those found in ships and moving vehicle rather than handheld. In the development of mobile phones, giants steps were taken and achieved by engineers working at AT&T who successfully developed a mobile station in 1940, then the first call was made on a car radiotelephone in Chicago in 1946. However, it was only until 1973 that Motorola Company began mass product of the first handheld mobile device; and in 1992 that the world's first ever SMS message was send to the UK (uSwitch.com).

The advancement of mobile phone technology is shown as number of user who are not found only in the business world own cell phones. In 1996/97, 16% of household users was recorded at the UK, which figure took skyrocketing dimension to 80% a decade after, and in 2002 it was recorded that the quantity of cell phone clients globally, were more than that of fixed telephone.

Although the pervading importance of mobile phones came lately to Nigerian during the president Olusegun Obasanjo regime, its prevalence had since being felt in other nations of the

world. But in the United States in 2000 about 500,000 main lines were used while today the figure is over 386 million main lines. In the reason played for the extensive use of mobile gadgets, advertisement of the product plays the major role. According to Otosi, (2016) mobile phones were not planned in light of the shopper's use toward the starting; as around then it was very costly to claim one as an individual and the accomplishment of the gadgets was not too great an achievement. However, in the 80s the upsides of mobile phones were felt as usage capability began to rise and there was also versatile successive records in the academic performance of youth in secondary schools. In 2009, Sanchez-Martinez and Otero, conducted survey research on the level of phone usage among secondary school students in U.S.A. The study utilized questionnaires and the findings revealed that cell phones have not just contributed boundlessly and decidedly in upgrading financial exercises of the country however have likely enhanced the nature of learning among students. Those who excessively utilized phones in academic course work are likely to achieve higher academically than those who averagely and lowly utilized the services in their academic work. The finding revealed this utilization level as result of the benefit individuals then benefited from the use of mobile device. However, nowadays, with coming in of innovational changes in the services and portability these devices offer like: installment payment to get a mobile phone, ease of web browsing, ease in the performance of downloads, free messaging options, connection to banking service (mobile banking), versatile TV and social networks availability, etc, all made more affordable, these kind of result will be far fetch.

Interactive web browsing are common with youth. Violence in society is agreed could found in every shade of social experience: family, school neighbourhood, church, mosques, market, banks etc. given the accumulated evidence of juveniles use of media technology and the contribution it make their unhealthy behaviour, it is a fact that juveniles delinquency is one of the outcomes resulting from this habit ( Abdullah et al (2016)

### **Methodology:**

The design adopted for the study is survey research design, which is usually employed where data are systematically collected from a group of individuals who have same characteristics, through the use of written or oral instruments: interviews, questionnaires, telephone interview, mails and internet, concerning participants responses on facts, opinions, attitudes, etc. (Isangedighi, 2012)<sup>1</sup>. While Salihu and Adamu, (2016) opined that a survey is employed by the collection of data and describing same in systematic manner the characteristic features or facts about a given population from a few people or items considered to be representative of the entire populations Therefore, a survey research design uses exploration, description and explanation of an investigative group or part of the group as a representation of the entire group, referred to as the population. A cross-sectional or longitudinal survey could be employed here, however, the type of survey used in this study is the cross-sectional which according to Salihu, Muhammed and Bayero, (2016) is a study where samples are selected from a definite population and contacted at a single point in time. It is more suitable, economical and efficient means of gathering information due to the largeness of the population under investigation.

The population of the study comprised all senior secondary school students in calabar education zone. Calabar education is made up of eighty one secondary schools (81), with a total number of eight hundred and thirty three (833) streams; forty two thousand twenty seven (42,027) students as at 2018 who where those that form the population of study. 0.05% of the

entire population was sampled for the study. The sample was 200 respondents drawn from the 42, 027 students using the stratified random sampling technique. According to Isangedighi (2012)<sup>1</sup> in sample selection, the researcher strives to select sample that is representative of the population being studied; which stratified random sampling technique identifies and addresses in this heterogeneous population more as well as help reduce more errors. Using stratified random sampling therefore enabled the researcher select a sizeable representative sample by first, dividing the entire population into four (4) strata to make it an homogenous one. Simple random sampling technique was use to randomly select 200 students used for the study.

The study used a structured questionnaire titled “Innovation change and delinquent behavior questionnaire (ICDBQ), as instrument to collect data. The questionnaire was dully validated and its reliability of threshold of 0.88 was achieved using the Alpha Cronbach reliability method. The scale was based on modified likert-type four point scales ranging from Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), with the a signed values of 4 to 1 in terms positively worded items and 1 to 4 for negatively worded items. The null hypothesis were validated at 0.05 level of significance. Data was analyzed using the Pearson product moment correlation at 0.05 level of significance (i.e. 95% confidence interval) with the help of Statistical package for Social Sciences (SPSS) version 20.

### **Results and discussion of findings:**

The results of the analysis are presented hypothesis by hypothesis. The hypotheses were tested at 0.05 level of significance.

#### **Hypothesis one**

There is no significant relationship between cable television networking and delinquent behaviours amongst senior secondary school students. The items used in measuring this hypothesis were derived from questionnaire items 1 to 5 and 10-20. Pearson Product Moment correlation coefficient was used for data analysis. The result of this analysis is presented in Table 1.

The result in Table 1 revealed that cable television networking is negatively related to delinquent behaviours amongst senior secondary school students. The calculated  $r$  – value of .389\*\* is greater than the critical  $r$ -value of .138 at 0.05 level of significance with 198 degrees of freedom. By this result, the null hypothesis which states that, there is no significant relationship between cable television networking on delinquent behaviours is rejected while the alternate hypothesis is accepted. This implies that, there is a significant relationship between cable television networking on delinquent behaviours. The correlation coefficient is a standardized measure of an observed effect, it is a commonly used measure of the size of an effect and that values of  $\pm .1$  represent a small effect,  $\pm .3$  is a medium effect and  $\pm .5$  is a large effect.

The squared correlation ( $R^2$ ) known as the coefficient of determination, which is used as a measure of effect size indicates the proportion of explained variance on the dependent variable. By this result, we can conclude that, the more students are exposed to cable television, the higher the delinquent behavior that will be manifested by them. Conversely, the less students are exposed to cable television, the lesser the delinquent behaviour that will be manifested by them in the study area. The result implies that, there is a significant relationship between cable television networking and delinquent behaviours among students in the study area.

**TABLE 1: Pearson product moment correlation of the relationship between cable television networking and delinquent behaviours**

Variable	N	Mean	SD	r-value	Sig.
Cable television networking	200	11.20	2.60	.389**	.000
Delinquent behaviour	200	32.12	5.68		

\*significant at 0.05 level; df = 198; critical r value = 0.138

#### Hypothesis two

There is no significant relationship between mobile devices networking and delinquent behaviours amongst senior secondary school students. The items used in measuring this hypothesis were derived from questionnaire items 6 to 10 and 10-20. Pearson Product Moment correlation coefficient was used for data analysis. The result of this analysis is presented in Table 2.

The result in Table 2 revealed that mobile devices is related to delinquent behaviours amongst senior secondary school students. The calculated r – value of .527\*\* is greater than the critical r-value of .138 at 0.05 level of significance with 198 degrees of freedom. By this result, the null hypothesis which states that, there is no significant relationship between mobile devices on delinquent behaviours is rejected while the alternate hypothesis is accepted. This implies that, there is a significant relationship between mobile devices on delinquent behaviours. The correlation coefficient is a standardized measure of an observed effect, it is a commonly used measure of the size of an effect and that values of  $\pm 1$  represent a small effect,  $\pm 3$  is a medium effect and  $\pm 5$  is a large effect.

The squared correlation ( $R^2$ ) known as the coefficient of determination, which is used as a measure of effect size indicates the proportion of explained variance on the dependent variable. By this result, we can conclude that, the more students are exposed to mobile devices, the higher the delinquent behaviours that will be manifested by them. Conversely, the less students are exposed to mobiles devices, the lesser the delinquent behaviour that will be manifested by them in the study area. The result implies that, there is a significant relationship between mobile device and delinquent behaviours among students in the study area.

**TABLE 2: Pearson product moment correlation of the relationship between mobile devices and delinquent behaviours**

Variable	N	Mean	SD	r-value	Sig.
Mobile devices	200	14.59	2.85	.527**	.000
Delinquent behaviours	200	32.12	5.68		

\*significant at 0.05 level; df = 198; critical r value = 0.138

#### Discussion of findings:

The findings of hypothesis one reveals that there is a significant relationship between cable television networking and delinquent behaviours among students in the study area. This result is so because some children are exposed to programmes they are not supposed to watch. The finding of the study is in line with

The findings of hypothesis two revealed that there is a significant relationship between cable television networking and delinquent behaviours among students in the study area. This result is also not surprising because the use of mobile devices by underage exposes them to habits that may not be good for them. The finding of the study supports

### **Conclusion:**

It was concluded from that analysis of results that there is a significant relationship between cable television networking and mobile devices and delinquent behaviours among students in the study area

### **Recommendations:**

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