

# Digital Technology Usage as a Correlate of In-School Adolescents' Risky Sexual Behaviour in Federal Capital Territory (FCT), Abuja

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## **Abstract**

*The study sought to determine the relationship between digital technology usage and risky sexual behaviour of in-school adolescents in Gwagwalada Area Council. The study adopted correlational survey design. The main purpose of the study was to find out the relationship between digital technology usage and in-school adolescent risky sexual behaviour. The population for the study is 1693 research elements from public schools. It consists of 873 females and 820 males. A total of 253 respondents were randomly selected from public secondary schools consisting 135 females and 118 males drawn from 5 public secondary schools in Gwagwalada Area Council using simple random sampling technique. Two research questions and two hypotheses guided the study. The instrument used for the collection of data was digital technology usage as correlate of in-school adolescent risky sexual behaviour questionnaire (DTUCIARSBQ). The reliability of the instrument was carried out using Cronbach alpha. The data was collected through the help of two research assistants. The research questions were answered using regression analysis at 0.05. The study reported that there is a high positive relationship between digital technology and in-school adolescent risky sexual behaviour. The study also discovered that digital technology was responsible for the in-school adolescent risky sexual behaviour. That there is a significant relationship between digital technology usage and in-school adolescents' risky sexual behaviour,  $F(1,448)=952.287$ ,  $p=0.000$ . That both in-school adolescent boys and girls are affected by the use of digital technology among others. It was recommended that parents and teachers should monitor the internet sites the in-school adolescents visit in order to reduce their risky sexual behaviours.*

**Key words:** Digital technology, Adolescent, Risky sexual behaviour, gender.

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## **I. Introduction**

Digital technology usage currently regulates every area of human activities. It regulates even the social activities of man in the society mostly in this 21<sup>st</sup> century when information about sexual activities is very easy to access through digital technology. Digital technology refers to websites and applications used for social networking. It is also the use of dedicated websites and applications to communicate with other users or to find people with similar interest to one's own (James & Bundekaana, 2017). According to Wang (2007), digital technology is a collective platform of electronic technologies for ease of communication and electronic interaction between humans and information. Expanding on this, Melby (2009) stated that digital technology is the use of digital tools and activities that enable communication and sharing across the net among all sectors of the society like business, politics, media, advertising, police, emergency services and education. Digital technology in the context of this study refers to the use of electronic technologies in order to improve learning and research.

The introduction of digital technology in education is geared towards enhancing learning, accessing and sharing relevant information that will facilitate growth and development of an individual and the society at large. Techterms (2010) stated that Information Communication Technology (ICT) is the ability to access information with ease in various forms by the use of electronic gadgets and computerized devices like desktops, palmtops, smart phones, tablets, mini pads and laptops among others. Besides, through digital technology, easy access to information and processing of data in various means of communications via the internet like emails, fax, telephone calls, charts, messages are carried out. Lindsay (2011) in line with the above assertion added that digital technology usage involves the use of devices like Facebook, twitter, linked in, instagram, blogs, YouTube, snapchat, and Myspace.

The use of these spaces in application exposes the users to the developments taking place in different parts of the world. It has literally reduced the world into a global village. Abudullahi and Abdulquadri (2018) equally observed that digital technology usage has improved man's economic ability as people can transact business with others globally due to the fact that the individual is not required to be physically present before such transactions can take place.

In the field of education, digital technology has helped to make information easily available and accessible during research, teaching and completing assignments by in-school adolescents. Besides digital technology usage has shifted the emphasis in learning from being teacher-centered to student-centered. Previous reports by Alio and Aneke (2015) showed that the students now learn through designed lessons programmed into the electronic system or finding out information themselves on any specified topic in the internet thereby reducing the burden on the teacher. Mathew, Joro and Manasseh (2015) pointed out that individualized learning has been enhanced through digital technology. Matthew et al further reported that in-school adolescents with limited attention span are given valuable and immediate academic feedback electronically for literacy enhancement. Undiyaundeye (2014) stated that digital technology helps the in-school adolescents to stay connected with friends and family, making new friends, sharing pictures and exchanging ideas with peers. The advent of WhatsApp groups has enabled course representatives to pass on academic information to their mates with ease.

Despite the usefulness of digital technology to in-school adolescents in research, learning and in the identification of individual peculiarities, some in-school adolescents have been lured into unwholesome acts and behaviours that abound in the internet. In Nigeria for example the in-school adolescents are into sexting (the act of sending sexually explicit messages or messages by cell phone), sexual orientation and this influences their sexual behaviour negatively (Ashiekpe&Ugande, 2017). However, Nwagwu (2017) stated that some in-school adolescents have been subjected to oral and anal sex, cyber-bullying, harassment and sexting which lure them into engaging in risky sexual behaviour. These risky sexual activities have also affected the reading culture among the in-school adolescents. Ofoefuna (2001) supported this assertion when he stated that the reading culture among the in-school adolescents have reduced drastically. The author further opines that a good number of students in secondary schools cannot write essays or copy notes because they use internet daily to watch pornographic pictures rather than reading their textbooks and notes. Most students in both post primary and tertiary institutions are unable to concentrate because of the social activities provided in the internet which is easily accessed through charts, texts and phone calls among others. These activities meet their developmental needs for social interaction and acceptance by their peers and exposes them to foreign cultures and models to imitate. It also meets their need for independence from their parents. Mmaduakonam (2006) opined that the in-school adolescents' need for independence predisposes them to experimenting or trying out what they access through the internet like sexual activities. Explaining in-school adolescent behaviours, Hall cited in Chukwurah (2006) stated that in-school adolescents are in a period of storm and stress resulting from many developmental challenges that they are faced with and find difficult to express. Consequently, they are enticed into risky sexual behaviours.

Research reports across nations show that adolescents are the most users of the internet (Consalvo&Ess 2011). Consequently most adolescents spend time chatting with friends and visiting pornographic sites that promote risky sexual behaviours among the in-school adolescents (Ihejirika, 2011). The activities of the secondary school adolescents in the social media have exposed them to drugs and alcohol usage which have led many into having multiple sex partners with the resultant spread of sexually transmitted diseases including Human Immune Virus (HIV) (Braun-Courville&Pogas, 2009). Carroll and Kirkpatrick (2011) attributed this to the fact that in-school adolescents in contemporary society depend on the internet for sexual information and advice which runs contrary to their societal norms and socially accepted sexual behaviours.

In secondary school institutions the incidence of rape, homosexuality and bestiality are high among the adolescents which is attributed to the exploration of pornographic sites in the internet (Abdullahi, Adekeye, Mahmoud &Akor, 2013). Abdullahi and Abdulquardri (2018) stated that digital technology has enabled online fraudsters to lure young teenage girls across the continent into deceitful relationships that can lead to their untimely death. The case of late Cynthia Osokogwu who met her friends on Facebook and was subsequently gang raped and killed in 2012 is still a reference point in Nigeria.

Risky sexual behaviour according to Copper (2002) is any behaviour that increases the probability of negative health consequences associated with sexual contact including Human Immune deficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS) and other sexually transmitted diseases (STDs), abortion and unplanned pregnancy among others. Centers for Disease Control and Prevention (CDC, 2010) defined risky sexual

behaviour as behaviours that increase one's risk of contracting sexually transmitted infections and experiencing unintended pregnancies. Odimegwu and Somefun (2017) defined risky sexual behaviour as the number and types of partnerships, sexual acts and sexual orientations an individual has. The authors went further to explain that most in-school adolescents are involved in early sexual intercourse and unprotected sexual practices. These risky sexual behaviours have exposed the in-school adolescents to venereal diseases like sexually transmitted diseases (STDS) human immune deficiency virus and acquired immune deficiency syndrome (HIV AIDS) among others. Risky sexual behaviour in the context of this study are those unacceptable sexual relationships which in-school adolescents engage in without protecting themselves against the risk of venereal diseases that may destroy their reproductive organs if such diseases are not well treated.

In-school adolescent risky sexual behaviours have been attributed to many factors which include inadequate access to correct information, limited availability of access to youth friendly health services, peer pressure and the erosion of the role of family as the source of information and advice on sex related matters (Nwankwo&Nwoke, 2009). The in-school adolescents' inability to access this information pushes them into engaging in risky sexual behaviour that may be detrimental to their health.

In terms of age, Njoku (2006) stated that by the age of 18 years, individuals apparently answer for themselves indicating that they are now legally mature and free to engage in all activities including sexual relationships without parental consent. Sometimes, in-school adolescents and even under aged children are lured into risky sexual behaviour. Owens, Behun, Manning and Reid (2012) reported that there are individuals who attempt to sexually exploit children through the use of online services and the internet. Supporting this assertion, Okwuchukwu (2014) stated that some individuals gradually seduce their targets through the use of attention, affection, kindness and even gifts. The author went further to report that these individuals are often willing to devote considerable amounts of time, money and energy to this process. Markey and Markey (2010) however opined that children who have access to internet have the chances to be exposed to pornographic materials which may predispose them to risky sexual behaviours.

Another factor that affects the in-school adolescent risky sexual behaviour is gender. American Psychological Association (APA, 2015) defined gender as the condition of being a male, female or neuter. Gender also refers to the biological characteristics that define either the male or female division of species, especially as differentiated with reproductive functions (James &Bundekaan, 2017).

Girls are believed to be more vulnerable to risky sexual behaviour than their male counterparts. Mmaduakonam (2006) attributed this belief to some cultures in Africa that consider it an aberration for a lady to express her sexual feelings to a man she is interested in. Odimegwu and Somefun (2017) corroborates this by stating that cultural belief or practice where women are meant to be passive and should not express their sexual feelings the way their male counterparts do has led some ladies into lesbianism and masturbation among others. Nwankwo and Nwoke (2009) opined that access to social media has enabled the female adolescents to erode the values which the culture placed on their sexual life. Male in-school adolescents were reported to have been exposed to explicit sex materials which put their lives at risk of contracting sexually transmitted infections (STIs) including HIV/AIDS because of their involvement in unsafe sexual practices which is as a result of impulsivity and conformity (Owens,

Buhun, Manning & Reid, 2012). The authors further argued that the exposure of the in-school adolescent males to pornography lures them into having unprotected sex which leads to the spread of venereal diseases. Petersen Bhana and Mckay (2005) opined that secondary school male adolescents who watch pornography live in sexualized environments meaning that the environment where they stay promotes sexual promiscuity. Petersen et al went further to state that environment is a major factor that reinforces risky sexual behaviour among in-school male adolescents.

According to Nwankwo and Nwoke (2009) unwanted pregnancies, drop out from schools, deaths and abortions are other factors that affect most secondary school adolescent girls that get themselves involved in risky sexual behaviour. Ivankovich and Douglas (2013) also stated that sexually transmitted infections and unplanned pregnancies are the most public health problems confronting in-school adolescents. This is because some of the secondary school adolescent girls have been raped, impregnated and abandoned by their on line lovers. Estimates have suggested approximately 23% of adolescent girls have begun child bearing while 54% have given birth to a child by age 20 (Federal Ministry of Health FMH, 2009). The ministry went further to opine that in-school adolescent girls make up over 60% of women treated for complications from unsafe abortion many resulting in death or permanent injury or infertility. Gubhaju (2002) supported this assertion when he argued that sexually active secondary school adolescents, due to gender power imbalances are increasingly at risk of unwanted pregnancy, abortion, contracting and transmitting sexually transmitted diseases including HIV/AIDS. The in-school adolescent girls are more disadvantaged because at the end of the day they will be abandoned and labeled as prostitutes while their male counterparts are without any blame because the African culture believes that men are promiscuous and polygamous in nature and not blamed for any reckless sexual activity.

A good number of ladies have lost their lives through internet chatting, face booking, what sapping and other forms of digital technology usage. The secondary school adolescent boys themselves are not left out of this as some of them have resorted to crimes and drug abuse in order to date female adolescents (Chukwurah, 2006). The author stated further that most in-school adolescent boys have lost their lives in the process of trying to relate with the secondary school adolescent girls commonly referred as 'slay queens'. This quest has also increased the rate the in-school male adolescents' urge to join cults, go for charms because they want to get access to their dream girls (Marist Brothers of the Schools MBS, 2010). The Marist Brothers further reported that the secondary school adolescent boys go as far as robbing and killing in order to relate with these girls and may lead to transmission of venereal diseases to their female counterparts.

Sexually transmitted diseases among most youths especially the boys are as a result of having unprotected sexual intercourse. Supporting this assertion Mberu and White (2011) and Carlson (2014) opined that ethnic concentration in a particular community can influence in-school adolescents' decision to engage in unprotective or risky sexual behaviour. Adhikari (2010) reported that most boys who are involved in drug abuse are less likely to use condoms than those who rarely consumed alcohol. Based on their societal norms and values for example there are cultures that abhor protected sexual activities (Okoro, 2001). Anderson and Anderson cited in Odimegwu and Somefun (2017) stated that the effect of ethnicity might be different for male and female youth. The authors went

further to argue that adolescent sexual behaviours are shaped by subgroups expectations and norms. These groups may be peer groups or the family depending in the society or culture.

A Washington post article on the effects of cell phone text messaging on children's social development documented the "text life" of a 15 year old American girl who "texts at home, at school, in the car, while her mother is driving during homework among others. During one month she sent and received 6,473 messages.

Of the over 75 billion text messages sent monthly in the US. Teens aged 12-17 send the most, with an average of 2,272 texts each month per teen, according to Nielson Co. The study, published in the *Journal of Adolescent Health*, documented the internet use patterns of 9,405 Taiwanese teenagers. Researchers labeled 25 percent of males and 13 percent of females as internet addicts. Among these, 37 percent reported aggressive behaviour within the last year, compared to less than 23 percent for all teens.

### **Research Questions**

The following research questions guided the study;

1. What is the relationship between digital technology usage and in-school adolescents' risky sexual behaviour?
2. What is the relationship between digital technology usage and in-school adolescents' risky sexual behaviour based on gender?

### **Hypotheses**

**Ho<sub>1</sub>:** There is no significant relationship between digital technology usage and in-school adolescents' risky sexual behaviour.

**Ho<sub>2</sub>:** There is no significant relationship between digital technology usage and in-school adolescents' risky sexual behaviour based on gender.

## **II. Methods**

The study was carried out in some selected public secondary schools in Gwagwalada area council of the FCT Abuja. The research design was correlational survey. A questionnaire on digital technology usage as correlate of in-school adolescents' risky sexual behaviour (DTUCIARSBQ) was developed by the researchers and the instrument was validated by three lecturers one from measurement and evaluation and two from educational psychology department at the University of Abuja. The population of the study consisted of 1693 in-school adolescents in public secondary schools in Gwagwalada area council of FCT. The sample was drawn from students and staff. A total of 253 respondents were drawn using simple random sampling technique. The reliability of the instrument was ascertained through test retest method and Pearson product moment correlation was used to compute the reliability which yielded reliability index of 0.73. This reliability coefficient is high enough and it warranted the use of the instrument for the study. Analysis of the scores was done using regression analysis. Two hypotheses raised were tested at 0.05 level of significance.

### III. Results

**Research Question One:** What is the relationship between digital technology usage and in-school adolescents' risky sexual behaviour?

**Table 1:** Regression analysis of the relationship between digital technology usage and in-school adolescents' risky sexual behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825 <sup>a</sup>	.680	.679	7.58511

a. Predictors: (Constant), Digital Technology Usage

Table 1 shows that the correlation coefficient for the relationship between digital technology usage and in-school adolescents' risky sexual behavior is 0.825 with a coefficient of determination of 0.680. This means that there is a high positive relationship between digital technology usage and in-school adolescents' risky sexual behavior. Besides, the coefficient of determination of 0.680 indicates that 68% variation in in-school adolescents' risky sexual behavior can be attributed to their use of digital technology.

**H<sub>01</sub>:** There is no significant relationship between digital technology usage and in-school adolescents' risky sexual behavior.

**Table 2:** Analysis of variance of relationship between digital technology usage and in-school adolescents' risky sexual behavior

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	54788.785	1	54788.785	952.287	.000 <sup>b</sup>
Residual	25775.179	448	57.534		
Total	80563.964	449			

a. Dependent Variable: RiskySexualBehaviour

b. Predictors: (Constant), DigitalTechnologyUsage

Table 2 reveals that there is a significant relationship between digital technology usage and in-school adolescents' risky sexual behavior,  $F(1, 448) = 952.287, p = 0.000$ . Hence, the null hypothesis was rejected since the p-value of 0.000 is less than the 0.05 level of significance.

**Research Question Two:** What is the relationship between digital technology usage and in-school adolescents' risky sexual behavior based on gender?

**Table 3:** Regression analysis of the relationship between digital technology usage and in-school adolescents' risky sexual behavior based on gender

Model	Gender	R	R Square	B	t	Sig
1	Male	.60	.36	.654	20.371	.000
	Female	.81	.66			

a. Predictors: (Constant), Digital technology usage

Table 3 shows that the correlation between male in-school adolescents' risky sexual behaviour and digital technology usage is 0.60 with a coefficient of determination of 0.36 while those of the female in-school adolescents are 0.81 and 0.66. This means that 36% variation in male in-school adolescents' risky sexual behaviour can be attributed to their usage of digital technology while 66% variation in female in-school adolescents' risky sexual behaviour can be attributed to their usage of digital technology. This implies that there is a positive relationship between digital technology usage and in-school adolescent risky sexual behaviour with female being mostly affected.

**Ho<sub>2</sub>:** There is no significant relationship between digital technology usage and in-school adolescents' risky sexual behaviour based on gender.

Table 3 shows that there is a significant moderating influence of gender on the relationship between digital technology usage and in-school adolescents' risky sexual behaviour,  $t(448) = 20.371, p = 0.000$ . Thus, the null hypothesis was rejected.

#### IV. Discussion

The study found that there is a high positive relationship between digital technology usage and in-school adolescents' risky sexual behaviour in Gwagwalada Area Council FCT Abuja. There is a significant relationship

between digital technology usage and in-school adolescents' risky sexual behavior,  $F(1, 448) = 952.287, p = 0.000$ . This finding is expected as watching nude pictures, actions, sexual attitudes, oral and anal sexual relationships through digital technology could stimulate an individual's organs into actions. Such exposure could make an individual to look for avenue to practice what he or she observed on the media. The finding was in line with Abudullahi et al (2013) which stated that the incidence of rape, homosexuality and bestiality are high among the in-school adolescents and is attributed to the exploration of pornographic sites in the internet. This shows that digital technology usage is responsible for the in-school adolescent risky sexual behaviour.

The study also found that there is a positive relationship between male and female in-school adolescents. This means that digital technology is responsible for the in-school adolescents' risky sexual behaviour between male and female students with females being mostly affected.

There is a significant moderating influence of gender on the relationship between digital technology usage and in-school adolescents' risky sexual behaviour,  $t(448) = 20.371, p = 0.000$ . This has made the in-school adolescent girls to start going after the opposite sex (boys) to practice what they have watched. Those who are unable to get the boys resort to lesbianism, oral sex in order to satisfy their sexual urge. This is an aberration in the sense that in our culture boys should go to girls and not the girls going after the boys this is because of their exposure to digital technology. This finding was in line with the findings of Nwankwo and Nwoke (2017) which states that access to digital technology has helped to erode the values which the culture placed on the sexual life of adolescents' boys and girls. This means that digital technology has played a role in compromising the values the society has on sex because the exposure of the in-school adolescents to pornography has in-turn affected their moral lives which runs contrary to the societal norms of the society.

## **V. Conclusion**

This study concluded that the use of digital technology is responsible for the risky sexual behaviour among in-school adolescents. This is because the use of this technology has aroused the sexual feelings of the in-school adolescents and this has made them to be exposed to risky sexual behaviours. Gender also plays a role in the view of in-school adolescents concerning risky sexual behaviours because girls are more vulnerable than their male counterparts to risky sexual behaviour given their weak fragile nature.

## **VI. Recommendations**

1. Parents should give their children sex education at home even before they assume formal school as this will help to reduce the cases of risky sexual behaviours among the in-school adolescents orchestrated by exposure to digital technology.
2. In-school adolescents should not oppose their parents stand on discipline mostly as it concerns exposure to digital technology because their positions on issues of discipline are for their own good.

3. Guidance counsellors and Educational psychologists working in secondary schools should counsel the in-school adolescents on the dangers of exposure to negative areas of digital technology in order to arrest unwholesome risky sexual behaviours as a result of exposure to unhealthy sites of digital technology.

4. There is need for the parents and teachers to monitor the in-school adolescents whenever they browse the internet. This will reduce cases of cyber bullying and sexting which if addressed properly will reduce the incidence of rape, unwanted pregnancies and sexually transmitted diseases among the in-school adolescents.

5. Parents should monitor their children and find out the types of sites they watch. This will help the parents to understand the rate at which their adolescent children view dangerous sexual sites on the digital technology.

6. School guidance counsellors should be allowed to carry out family counselling within the school setting because most of the risky sexual behaviours of the adolescents are home related problems that can only be solved through family counselling.

7. Parents should censor the films their secondary school adolescent children watch as films that have pornographic content can promote risky sexual behaviour among their children.

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