

**PRACTICE OF SEXTING AND ITS ASSOCIATED SEXUAL RISKS
AMONG IN-SCHOOL ADOLESCENTS IN OLUYOLE LOCAL
GOVERNMENT AREA, OYO STATE**

BY

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CERTIFICATION

I certify that this study was carried out by AYOOLA DEBORAH EBUNOLUWA under my supervision in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria.

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DEDICATION

This project work is dedicated to the Almighty God who is my father, my fortress, my deliverer and hope.

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ABSTRACT

The use of electronic media for sharing and exchanging content of a sexual nature has become another form of intimate sexual communication attuned to today's technology-driven society. The negative effects of social networking sites sometimes outweigh its advantages. Often students search their course material online in the process of studying. It is well known that the use of mobile phones especially without proper supervision by adolescents could trigger their practice of sexting thereby exposing them to some of the sexual risks. This study aimed to investigate the practice of sexting and its associated sexual risk factors among adolescents attending secondary schools in Oluyole Local Government Area of Oyo state.

Descriptive cross-sectional design was employed and a three-stage sampling technique was used in selecting the 238 respondents from schools within the Local Government Area. The instrument of data collection was a structured open and close ended questionnaire comprising 6 sections which were Socio-demographic data, Knowledge of sexting, Perception of sexting, Practice of sexting, Factors influencing and associated risks involved in sexting among adolescents. Data were entered and managed using SPSS version 21 and were subjected to descriptive (mean, percentages and frequencies) and inferential (Chi-Square) statistical analyses. The level of significance was set at $p \leq 0.05$.

The mean age of respondents was 14.5 ± 1.6 years. More than half (68.9%) of the respondents owned mobile phones, 56.3% were females. Majority of them 87.0% had a high knowledge of sexting and were aware of its consequences. Eighty-seven percent of the respondents had a good perception of sexting and it was found that it has negative effects on their education. There were few respondents 18.0% who do not practice sexting at all, 52.0% of them had low sexting practices while 30.0% had a high sexting practice. Most (77.7%) of the respondents said peer pressure, substance intake, threat/blackmail, sense of belonging and the belief that sexting is safer in its entirety than sex were the leading factors that influence sexting. The leading risks associated with sexting were low self-esteem (79.4%), and blackmail (78.2%), a high risk of getting in touch with a sexual predator and prosecution later in the future. There was a significant association between mobile phone ownership and sexting practices ($p=0.044$). The class of respondents was not significantly associated with their practice of sexting ($p=0.33$).

The practice of sexting was prevalent among the respondents studied. There is an urgent need to orientate/re-orientated the students on sexting highlighting the social, academic and health consequences associated with the practice.

Keywords: Practice, Sexting, In-School adolescents, Associated Sexual risks.

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TABLE OF CONTENTS

CONTENT	PAGE
Title page.....	i
Certification.....	ii
Dedication.....	iii
Acknowledgement.....	iv
Abstract.....	v
Table of Contents.....	vii
List of Tables.....	xi
List of Figures.....	xii
Appendices.....	xiii
List of Abbreviations.....	xiv
Operational Definition of Terms.....	xv
 CHAPTER ONE: INTRODUCTION	
1.1 Background to the study.....	1
1.2 Statement of problem.....	3
1.3 Justification.....	4
1.4 Research questions.....	4
1.5 Objectives of the study.....	5
1.5.1 Broad objective.....	5
1.5.2 Specific objectives.....	5
1.6 Hypothesis statement.....	5
 CHAPTER TWO: LITERATURE REVIEW	
2.1 The concept of sexting.....	6
2.2 Global perspective of sexting.....	9
2.3 Global prevalence of sexting.....	10
2.4 Prevalence of sexting in Africa.....	12
2.5 Prevalence of sexting in Nigeria.....	13

2.6	Practice of sexting.....	14
2.7	Perception of sexting.....	15
2.8	Socio-demographic correlates of sexting.....	16
	2.8.1 Age.....	16
	2.8.2 Gender.....	16
	2.8.3 Sexual orientation.....	17
	2.8.4 Relationship status.....	17
	2.8.5 Educational status.....	18
	2.8.6 Religious affiliation and internet use time.....	18
2.9	Sexting and addiction.....	18
2.10	Predisposing factors to sexting.....	19
2.11	Associated risks.....	20
	2.11.1 Cyber-bullying.....	20
	2.11.2 Emotional effects.....	21
	2.11.3 Sexual risks.....	22
	2.11.4 Sexting and psychological well-being.....	22
2.12	Sexting and adolescents.....	23
2.13	Early sexual activity.....	25
2.14	Relationship among sexters.....	27
2.15	Conceptual framework: PRECEDE MODEL.....	29

CHAPTER THREE: METHODOLOGY

3.1	Study design.....	31
3.2	Study location.....	31
3.3	Study population.....	32
3.4	Inclusion and Exclusion criteria.....	32
	3.4.1 Inclusion criteria.....	32
	3.4.2 Exclusion criteria.....	32
3.5	Sample size determination.....	32
3.6	Sampling technique.....	33
3.7	Study instrument.....	34

3.8 Validity of the instrument.....	35
3.9 Reliability of the instrument.....	36
3.10 Data collection procedure.....	36
3.11 Data management and analysis.....	37
3.12 Ethical considerations.....	38
3.13 Limitation of the study.....	38

CHAPTER FOUR: RESULTS

4.1 Respondents Socio-demographic characteristics.....	39
4.2 Respondents Knowledge on sexting.....	41
4.3 Respondents Risk perception towards sexting.....	44
4.4 Respondents Practice of sexting.....	47
4.5 Factors influencing sexting among the respondents.....	50
4.6 Associated Risks involved in sexting.....	52
4.7 Hypothesis Testing.....	55
4.7.1 Hypothesis one.....	55
4.7.2 Hypothesis two.....	56
4.7.3 Hypothesis three.....	57
4.7.4 Hypothesis four.....	58
4.7.5 Hypothesis five.....	59

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion.....	60
5.1.1 Socio-demographics characteristics.....	60
5.1.2 Respondents knowledge on sexting.....	60
5.1.3 Respondents Risk perception towards sexting.....	61
5.1.4 Respondents Practice of sexting.....	61
5.1.5 Factors influencing sexting among the Respondents.....	62
5.1.6 Associated Risks involved in sexting.....	62
5.1.7 Implication of findings for health promotion and education.....	63
5.2 Conclusion.....	63

5.3 Recommendations.....64
REFERENCES.....65
APPENDICES.....76

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LIST OF TABLES

Table 3.1:	Adaptation of the antecedent factors of the PRECEDE model to research instrument	32
Table 4.1:	Demographic variables of respondents'	37
Table 4.2:	Respondents' knowledge on sexting	39
Table 4.3:	Respondents' risk perception towards sexting	42
Table 4.4:	Respondents' practice of sexting	45
Table 4.5:	Factors influencing sexting among respondents'	48
Table 4.6:	Associated risks involved in sexting	50
Table 4.7:	Chi-square analysis showing the association between the sex of respondents and the practice of sexting	52
Table 4.8:	Chi-square analysis showing the association between the class of respondents and the practice of sexting	53
Table 4.9:	Chi-square analysis showing the association between the ownership of mobile phone of respondents and the practice of sexting	54
Table 4.10:	Chi-square analysis showing the association between the knowledge of respondents and Practice of sexting	55
Table 4.11:	Chi-square analysis showing the association between the Perception of respondents and Practice of sexting	56

LIST OF FIGURES

Figure 2.1:	Application of PRECEDE model	27
Figure 4.1:	Respondents knowledge score on sexting	40
Figure4.2:	Respondents' sexting perception score	43
Figure4.3:	Respondents' sexting Practices Score	46
Figure 4.4:	Associated risks involved in sexting	51

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APPENDICES

Appendix 1: Questionnaire	76
Appendix 2: Oyo State ethics committee approval	80

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LIST OF ABBREVIATIONS

HIV	Human Immuno-Virus
ICT	Information and Communications Technology
LGBT	Lesbians, Gays, Bi-sexuals and Transgender
NCMEC	National Centre for Missing and Exploited Children
NCPTUP	National Campaign to Prevent Teen and Unplanned Pregnancy
NSPCC	National Society for Prevention of Cruelty to Children
STDs	Sexually Transmitted Diseases
PRECEDE	Predisposing, Reinforcing, Enabling Constructs in Educational/ Environmental Diagnosis and Evaluation
WHO	World Health Organization

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OPERATIONAL DEFINITION OF TERMS

Adolescence: The period of life between childhood and maturity.

Adolescents: This is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood in which the age range falls between 10 and 19 years.

AIDS: A disease of the immune system caused by infection with the retrovirus HIV, which destroys some types of white blood cells and is transmitted through blood or bodily secretions such as semen. Patients lose the ability to fight infections, often dying from secondary causes such as pneumonia or Kaposi's sarcoma.

HIV: Either of two strains of a retrovirus, HIV-1 or HIV-2, that destroys the immune system's helper T cells, the loss of which causes AIDS.

In-School Adolescents: This is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood in which the age range falls between 10 and 19 years that are in schools.

LGBT: Lesbians, Gays, Bi-sexuals and Transgender.

Risky sexual behaviour: This includes unprotected intercourse, multiple sex partners and illicit drug use.

Sexting: This is the practice of electronically sending or receiving (majorly through a cell phone) self-produced sexually explicit contents in forms of images, videos and messages from one person to another.

Puberty: A stage of human development commonly occurring in adolescence, during which an individual's body undergoes sexual maturation, reproductive organs develop and become fully functional and individuals also grow in height and body composition will change (Teen Health, 2008).

Practice: This is the repetition of an activity to improve skill.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Sexting is defined as the practice of electronically sending (majorly through a cell phone) self-produced sexually explicit contents in forms of images, videos and messages from one person to another (Temple, Paul, Berg, McElhanyen, 2012). Some studies have highlighted sexting as one of the risky sexual behaviours engaged in by adolescents or an indicator that an adolescent will likely engage in other risky sexual behaviours (Glick, Shaheen and Brown, 2018; Rice, Rhoades, Shanchez and Plant, 2012; Temple et al., 2012) which raises a pointer to the importance of investigating this subject matter.

The term sexting was first coined by the UK press (Gillespie, 2013). It integrates the production, possession and dissemination of usually, nonetheless not always, self-exploitative, sexual materials in both visual and written form (Chalfen, 2009; Gillespie, 2011; Powell, 2010). Though commonly associated with mobile phones, sexting occurs not only via text or a Multimedia Messaging Service (MMS), but also through emailing, posting to user-generated sites such as YouTube, uploading to social networking sites, and streaming footage live via webcam (Gillespie, 2010a; Leary, 2007; Zhang, 2010).

The World Health Organization defines adolescence as a period of transition between childhood and adulthood known as the second decade of life. It is a period in which an individual begins to undergo physical, psychological and psychosocial changes (World Health Organization [WHO], 2012). Adolescents are not a consistent group as their needs vary greatly by age, gender, economic conditions amongst other factors so does their sexual and reproductive health needs vary across groups, culture and religion (Aji, Ifeadike, Ubajaka, Nwabueze and Azuike, 2013). At this stage, they tend to try new innovations such as taking of illicit drugs, involvement in thuggery, sexting and cyber bullying amongst others which make them vulnerable to sexting. Prominent among these behaviours is early involvement in sexual activities. The factors that influence risky sexual behaviour and practices among this group include peer pressure, harsh economic conditions, raging hormones, curiosity and ignorance/fabrication s of sexting on

adolescent sexual behaviour and in turn their health. (Aji et al., 2013; Kumsa, 2015). Netsanet & Mamo, 2014, also highlighted living arrangement, educational status of parents, family connectedness and family support as possible predictors of risky sexual behaviour among this group although several studies have assessed adolescent sexual practices and their indulgence in risky behaviours in different contexts, (Adongo, 2018; Enzuladu, Kwaak, Zwanikken, & Zoakah, 2017; Kumsa, 2015; Netsanet & Mamo, 2014) not many pay attention to some underlying root causes of indulgence in risky sexual practices like sexting and exposure to pornographic and sexually explicit materials. Studies have shown the negative effects of exposure to pornographic and sexually explicit contents on adolescent sexual behaviour (Adongo, 2018; Arulogun, Ogbu, & Dipeolu, 2016; Asekun-Olarinmoye, Asekun-Olarinmoye, Adebimpe, & Omisore, 2013; Eric, Richard, Jill, & Rory, 2012) but not much has been done in assessing the effect

The advent and rise in popularity of smart mobile phones, tablets and other information and communication technology devices plus the recent boom in internet access and use has contributed its fair share of negative effects on the healthy growth and development of adolescents. Sexting according to Doring, is a 21st century neologism that has gained popularity in recent times due to the fore mentioned factor. A literature review by Barrense, Berchtold, Suris and Akre (2017) on sexting and the definition issue highlights some factors as possible influences of sexting practices among adolescents.

The number of teenagers involved in risky sexual behavior is increasing in epidemic proportions. This could be in part because teens have misconceptions about sex and its consequences. Some misconceptions might include that "all teens are having sex," and "you can't get pregnant your first time having sex," or "oral or anal sex are not really sex." To make matters worse, parents are often uninformed themselves regarding how to communicate with their children about sex and risky behaviors (Barrense et.al., 2017). Adolescents are more likely to become involved with risky sexual behaviors when their parents are uneducated, where there is minimal communication between parents and child, when they engage in non-parental supervised activities, hang around sexually active friends, earn low school grades, and not having enough activities to keep them busy. This sexual epidemic is happening at a faster rate and it's happening in homes, schools, and communities. Until children are taught about the risks, understand the

risks and responsibilities of having unprotected sex, children will continue to be in danger (Barrense et.al.,2017).

1.2 Statement of the problem

The digital world has opened up a host of opportunities in adolescent social life. The use of electronic media for sharing and exchanging content of a sexual nature has become another form of intimate sexual communication attuned to today's technology-driven society. Sexting, though a relatively new concept is gaining popularity among the adolescent population and with its rise comes increased risk to their sexual and reproductive health. The negative effects of social networking sites sometimes overweigh the positive ones. Often when students are studying or searching their course material online, they get attracted to some social sites to kill the boredom in their study time, thus diverting their attention from their work.

According to Adongo (2018), the National Campaign to Prevent Teen and Unplanned Pregnancy released data from late September and early October of 2008 which reported that 19% of teens (aged 13 to 19) had sent a sexually-suggestive picture or video of themselves to someone via email, cell phone, or through another form of online interaction, while 31% had received a nude or semi-nude picture from someone else. Cox Communications released findings from a study conducted in April of 2009 indicating that 9% of teens between the ages of 13-19 had sent sexually-suggestive pictures via text or email, 3% had forwarded one, and 17% had received one.

Parents and caregivers should understand that the use of mobile phones especially without proper supervision by adolescents could trigger their practice of sexting thereby exposing them to some of the sexual risks. Therefore, they should be taught and made to understand that there are grave consequences that could result from sexting. This teaching could be included in their school curriculum or as an extracurricular lesson so the students are properly guided. But before this could be done, there is a need to evaluate the knowledge, the perceptions, practice and the prevalence of sexting among the students. The study was therefore conducted to address this gap by looking into the in-school adolescents practice and awareness of its associated sexual risks in Oluyole Local Government Area in Oyo State.

1.3 Justification of the study

Being a new area of problem, not much research has been done on this subject especially in developing countries like Nigeria. In recent years, sexting and sexual behaviour of teenagers and adolescents in the internet environment has been described by a few studies of which point out a relatively high prevalence of sexting in the population of adolescents. Several concerns have fuelled the considerable attention being paid to the problem of “youth sexting” among the media, parents, professionals, educators, and law enforcement. Aside from the potential legal consequences of sexting, more studies are needed to determine if sexting impacts other behaviours and health outcomes among youth and adults and, if it does, what is the direction of the impact. For instance, forwarding sexual media to unintended recipients could have an adverse psychosocial impact on the individual. Also, findings from this research would help the government and the management of the school identify the prevalence of sexting and help put appropriate safety measures in place. For the researcher, the study will help uncover critical areas in the education sector that many researchers were not able to explore and also serve as baseline and catalyst for those who may wish to make research into similar area in the future.

1.4 Research Questions

The study set out to answer the following questions:

- 1) What is the prevalence of sexting among adolescents attending secondary schools in Oluyole Local Government Area of Oyo State?
- 2) What are the associated risks involved in sexting among adolescents attending secondary schools in Oluyole Local Government Area of Oyo State?
- 3) What are the risk perceptions of adolescents attending secondary schools in Oluyole Local Government Area of Oyo State to sexting?
- 4) What are the factors influencing sexting among adolescents attending secondary schools in Oluyole Local Government Area of Oyo State?

1.5 Objectives of the Study

1.5.1 Broad objective

The broad objective of this study was to investigate the practice of sexting and its associated sexual risks among in-school adolescents in Oluyole Local Government Area of Oyo State.

1.5.2 Specific Objectives

The specific objectives were to:

- 1) Determine the prevalence of sexting among in-school adolescents in Oluyole local government area of Oyo state.
- 2) Establish the associated risk involved in sexting among in-school adolescents in Oluyole local government area of Oyo state.
- 3) Assess the risk perception of in-school adolescents in Oluyole local government area of Oyo state to sexting.
- 4) Identify factors influencing sexting among in-school adolescents in Oluyole Local Government area of Oyo state.

1.6 Hypotheses Testing

H₀₁ There is no significant association between the sex of respondents and the practice of sexting

H₀₂ There is no significant association between the class of respondents and the practice of sexting

H₀₃ There is no significant association between mobile phone ownership and sexting practices

H₀₄ There is no significant association between the knowledge of respondents on sexting and the practice of sexting.

H₀₅ There is no significant association between the perception of respondents on sexting and the practice of sexting.

CHAPTER TWO

LITERATURE REVIEW

2.1 The concept of sexting

The word sexting is derived from “sex” and “texting” which is the sending, receiving or forwarding of sexually explicit messages, photographs or images primarily through mobile phones of oneself to others. It could also include the use of a computer or any digital device. Definitions of sexting vary broadly in both law and research as one influential definition came from the National Center for Missing and Exploited Children (NCMEC, 2009), which defined sexting as “writing sexually explicit messages, taking sexually explicit photos of themselves or others in their peer group, and transmitting those photos and/or messages to their peers. Therefore, NCMEC’s definition includes neither minor-to-adult or adult-to-minor transmissions nor images sent under “duress, coercion, blackmail or enticement although a determination of whether these factors exist in any one situation may be complicated.

Sexting has been interpreted in multiple ways, it is a broad behaviour and can be placed on a field that ranges from mutually-consensual, romantic exchanges, to attention-seeking behaviour, to exploitation, sexual harassment and to sexual coercion. Despite such interpretations, adolescent expressions of sexual exploration and/or deviance, using text/MMS messages or posts on social interacting walls, have significant consequences because of their public accessibility, replication, distortion, and digital durability (Gillespie, 2011; Henderson, de Zwart, Lindsay & Phillips, 2010; Powell, 2010; Zhang, 2010).

Sexting may be a new technique used to express sexuality; however, it is not a new subject matter. Sexting is just another method in which nude or semi-nude pictures are viewed. Pew Research Center, (2009) reports that sexually suggestive images shared as part of a prelude to sexual activity and may be just one part of a sexual relationship. Sexting is a social phenomenon; thus, cross-cultural differences may occur. It does not necessarily happen on its own, it can be related to other online issues such as cyberbullying and could be as a result of other factors like influences from celebrity crushes and pornography. It can be a means of flirting or enhancing a

sexual relationship, it can highlight potential vulnerabilities to sexual victimization or to participation in risky sexual practices.

Sexting is potentially a serious legal and psychological consequences for teens has reported by (Strassberg et al.,2012) and developmentally appropriate prevention strategies that target youths directly are needed (World Health Organization, 2011). The World Health Organization (2011) states that “the most polarizing public health threat presented by the Internet may be as a means to intentionally or unwittingly jeopardize the safety of children and adolescents.” Sexting may result in adverse outcomes for those involved, including embarrassment, mental health problems, public dissemination of sexual photos, and legal consequences if the images are of underage individuals (Mitchell, 2012)

Lenhart (2009) stated the three main reasons why adolescent sext and they are as follows;

- 1) To initiate sexual activity between partners i.e. boyfriend and girlfriend
- 2) As an experimental phase of their sexuality prior to ever having sexual intercourse
- 3) As a way to enhance current sexual relationship.

Sexting is inextricably linked to social expectations of gendered sexual behaviours, with females often deriving less satisfaction from their experiences and being perceived more negatively by their peers. In spite of differences in the prevalence of sexting cited in the studies presented above, sexting behaviour is a phenomenon that should be of concern to parents, educators, and school counsellors (Hinduja & Patchin, 2010). The Pew Research Centre commissioned a study on sexting, which divides the practice into three types, they include;

- 1) Exchange of images solely between two romantic partners.
- 2) Exchanges between partners that are shared with others outside the relationship.
- 3) Exchanges between people who are not yet in a relationship, but where at least one person hopes to be.

While sexting is done by people of all ages, most media coverage fixates on negative aspects of adolescent usage. Young adults use the medium of the text message much more than any other new media to transmit messages of a sexual nature, and teenagers who have unlimited text messaging plans are more likely to receive sexually explicit texts. As a result of sexting being a

relatively recent practice, ethics are still being established by both those who engage in it and those who create legislation based on this concept. Whether sexting is seen as a positive or negative experience typically rests on the basis of whether or not consent was given to share the images. In areas where gender roles traditionally expect men to initiate sexual encounters, sexting is used by women to offer nude images to male partners, allowing women greater latitude to instigate sex.

According to Albury and Crawford, sexting was not only an activity occurring in the context of flirtation or sexual relationships, but also between friends, as a joke or during a moment of bonding." Apparently, pleasure-seeking played a role in motivating sexting, and the length of relationship was negatively correlated with sexting behaviours but it is clear that sexting is a phenomenon that is not constrained to simply unattached individuals looking for fun; it is used by those in intimate relationships to increase feelings of intimacy and closeness one's partner. For teens, sexting can also act as an introduction to sexual activity, as an experimental phase for those who are yet to be sexually active, and for those who are hoping to start a relationship with someone.

In a 2013 study conducted by Drouin et al., it was found that sexting is also associated with attachment styles, as those with attachment avoidance are more likely to engage in sexting behaviours (just as these individuals are also more likely to engage in casual sex). Thus, instead of increasing intimacy in these types of relationships, sexting may act as a buffer for physical intimacy. According to a writing by professor Diane Kholoswyssocki, although both men and women participate in "sexting", "women are more likely to sext than men". Even though the article claims that women are more likely to sext than men, the article does not claim that women are the only ones receiving the images.

The rate of phone use has greatly increased in developing countries including sub-Saharan Africa in the last years (Dir et al, 2014). This has also increased smart cell phone possession by young people in this region according to Cyders (2013), even among those of lower socioeconomic status. These phones have become more affordable and have an increasing complex capability to take photos, create videos, and connect to social networking sites without interference (Hinduja, 2010). Thus, with increasing possession of smart phones and access to the Internet, it is possible

that sexting occurs among young people in Nigeria and other developing countries just as it is found in developed countries.

However, literature about this phenomenon barely exists in Africa, including Nigeria. It is, therefore, important to determine the pattern of sexting and its associated problems among Nigerian young people as there may be sociocultural influences amongst others. Rice and others (2012) said there is a great variation in the prevalence of sexting among young people as reported in the literature. This variation can be explained by the different methodologies employed and the different definitions given to sexting in these studies.

2.2 Global perspective of sexting

Sexting is a global perception with the existing research identifying incidence rates from the US, UK, Canada, Mexico, Spain, New Zealand and Australia (Chalfen, 2009). Results gathered of similar studies from New Zealand, Canada and the UK suggest that between 1 in 4 and 1 in 5 teenagers, aged between 13 and 16, have admitted to producing, possessing and posting explicit, self-exploitative material (Chalfen, 2009; Gillespie, 2011; Powell, 2010; Zhang, 2010). In an era of social networking and technological change, the youth of America are faced with severe negative consequences for this new phase of technologically enhanced self-expression including jail sentencing and suicide (Kotch, 2009; Inbar, 2009).

National debates have ensued due to the overwhelming numbers of teens and young adults who are being arrested and charged with possession and distribution of child pornography. Some of the countries with documented cases include USA, Nigeria, Australia, Canada, China etc. (Orr, 2009; Contemporary Sexuality, 2009). Given the interest in relation to the negative consequences of sexting and sexual behaviours, research on this topic is essential. There have been few mass media research studies conducted on sexting. In addition, there is no known scientific research regarding the relationship between the beliefs, attitudes, and behaviours associated with sexting and sexual behaviours. Therefore, it is vital to investigate why teens and young adults participate in this new phase of communication involving the exchange of nude or partially nude photographs and sexually suggestive text messages of themselves, with others (National Campaign to Prevent Teen Pregnancy, 2008).

In considering the sensation of sexting, it is broadly accepted that various circumstances and motives lead to the creation and dissemination of sexual images. What appears to be consistent, according to two studies undertaken by the National Society for the Prevention of Cruelty to Children (NSPCC) (Phippen, 2012; Ringrose, Gill, Livingstone and Harvey, 2012), is that the prevalence of threats involved with sexting characterize the behaviour as a coercive act. Sexual coercion can be the result of explicit pressure from peers, or arise as a result of implicit pressures related to the wider sexualisation of children through both media representations, legislative and political responses to such representations. It has been argued that access to, and the consistent evolution of, technology magnifies this problem. One of the few data sources on sexting is an online survey conducted in 2008 to investigate online sexual activity of teenagers and young adults. The study revealed that of the 1,280 teen respondents between the ages of 13 and 19, 39% of them reported sending or posting sexually provocative images or messages; 48% reported receiving such messages.

2.3 Global Prevalence of Sexting

The prevalence and “mundanity” of sexting is something that is widely known among this age group (10-19) and while not all are engaging in such practices, they have peers that are. One of the first published studies on youth sexting was conducted in 2009 before the current fertile use of smartphones among youth (Lenhart, 2016). Among youth aged 12 to 17 years, results indicated that 4% reported sending and 15% reported receiving nude or semi-nude images. A 2012 study revealed a low prevalence of sexting among participants aged 10 to 17 years, with 2.5% and 7.1% of predominantly older youth sending and receiving sexts, respectively. This study had notable strengths, including a nationally representative sample, an explicit definition of sexting, and a wide age range.

However, several methodological limitations likely resulted in the underreporting of sexting, including the use of landlines to conduct the survey and interviews with youth in the presence of parents. Recent studies reveal that sexting is an increasingly common practice with the prevalence increasing each year until youth reach the age of 18 years (Temple et.al., 2012).

A prevalence rate of 15.0% was reported among Los Angeles high school adolescents using a self-administered questionnaire in the school environment (Rice et.al., 2012). Sexting has been

reported to be more prevalent among the older age group (Klettke, Hallford & Mellor, 2014). Sexting has also been defined in different ways, and this resulted in high prevalence rates when the definition is broad to include sending of both sexually suggestive or explicit pictures and texts. The prevalence was lower when the definition is limited to sending of just sexually suggestive or explicit pictures or texts. Prevalence reported among young people in the United State varies between 1.0 and 44.0% (Benotsch, Snipes, Martin & Bull, 2013).

Sexting has been described as a harmless behaviour and a normal way of communicating intimacy by some scholars (Ferguson, Dorin, 2011). This suggestion is strengthened by the fact that sexting has been observed to be common among romantically involved young people (Cox, 2009.). Some adolescents also use sexting as a way of expressing their sexuality and serves an alternative to more explicit physical sexual acts. Adolescents who engage in sexting have reported that their peers also sext, and this suggests that this activity is being viewed as a normal behaviour among them.

However, sexting has been shown to be associated with some factors, including health risk behaviours (some of which have devastating consequences) and environmental and personal factors. Some of the health risk behaviours include risky sexual behaviours, pornography and substance use, bullying, and even suicide (Gordon, 2013). Young people who engage in sexting were more likely to engage in risky physical sexual activities (Johnsson, 2012) and more likely to seek the fulfilment of the aroused desires shortly after exchanging sexual messages with their sexual partners. There has been a suggestion that young people who have online sexual behaviours (which can include sexting) were more likely to have problematic family background. This was corroborated by Benotsch et.al. (2013) who reported that adolescents who live with both parents were less likely to be involved in sexting. Young people who get involved in sexting have been reported to develop new risky sexual behaviours. Personality has been shown to be a strong predictor of behaviours, and personality traits that have been associated with sexting include extraversion, neuroticism, and low agreeableness (Delevi, 2012).

In the United States, the National Campaign to Prevent Teen and Unplanned Pregnancy (NCPTUP, 2008) conducted a survey using an online sample of 1280 participants between ages 13 and 26 years from a national representative sample. The age group was categorised into two:

13 -19 years (adolescents) and 20 – 26 years (young adults). The study revealed that 20% and 33% of the teens respectively sent their nude image or videos of themselves to others and 48% and 64% of teens and young adults respectively also received such sexual content. In another national representative sample, Lenhart (2009) adopted a telephone survey and sampled 625 respondents aged 12-17 randomly selected from phone numbers and residential address and 14% and 15% reported had sent and received sext respectively. Furthermore, a telephone survey was conducted by Mitchel et al., (2012) using a national representative sample of 1560 internet users aged 10-17. Mitchel et al., (2012) reported that 2.5% and 7.1% had sent and received nude or nearly nude images and 1% and 5.9% had sent and received sexually explicit messages respectively.

Similarly, a study was conducted by Reynolds, Henson, and Fisher (2014) using 974 undergraduate college students in the age group 18-24 years attending a public university in the Midwest. Data for this study was collected online based on a measure that explains sexting as sending of sexually suggestive nude or nearly nude image and 20% and 36% reported sending and receiving such sexual content respectively. Among same college students Strassberg et al, (2014), recruited 1130 college students from the University of Utah and found 19%, 38% and 7% of the college students have sent, received and shared nude pictures respectively.

In the Czech Republic, Kopecky (2011) used self-selected sample of 9,353 basic and senior high school students between age 11 and 18 across the country, the study reported that only 9.7% have engaged in sharing of nude images prior to the study. In Australia, Boulat, Caddaye D'Souza, Glyde, Hatwal, Jansz, Stephen, & Zoppos (2012) recruited a sample of 1012 through a self-selected procedure for the age groups 10-15, 16-20, 21-25 and 26 and above. The study found that prior to the study, participants representing 18.42%, 33.70%, 48.84%, and 34.87% respectively sent their nude pictures to others and 21.43%, 41.85%, 54.26% and 41.03% respectively also received such images from others.

2.4 Prevalence of sexting in Africa

Prevalence of sexting behaviours in Africa is hard to obtain because of the scarcity of literature and especially scarcity of empirical studies on sexting behaviours in Africa. In her dissertation, Schloms-Madlener (2013) found that sexting behaviours among adolescents and adults sample

from Cape Town, South Africa, is at least, prevalent as represented in International studies, though comparison would be difficult to make. Schloms-Madlener (2013) sampled 451 adolescents high school, 319 undergraduate psychology students from the University of Cape Town and 82 adults who were recruited online. Schloms-Madlener (2013) reported that 5.3%-20.1% and 6.1%-35.8% had created and sent nude photos.

Finally, from Ghana, Ogbada (2013) studied determining factors of sexual risk behaviours among 422 young people between ages 14-19 who were sampled through multi-stage stratified random sampling technique among senior high students in La Dade-Kotopon Municipality in the Greater Accra Region, Ghana. Ogbada (2013) reported that more than half (63.5%) of mobile phone users have been involved in sexting (sexually suggestive photos or messages via mobile devices) and 30.7% of these users are still soliciting for a sexting message.

2.5 Prevalence of sexting in Nigeria

In a study conducted by Olatunde and Balogun (2017), showed that young people in Ibadan, Nigeria, engage in sexting, and this is found more among males, the Lesbians, Gays, Bisexuals, Transgender, and those older than 19 years. High extraversion personality and moderate to high problematic phone use were predictive of sexting behaviour. The sexually active study participants had a high rate of risky sexual behaviour but only having multiple sexual partners and early sexual debut were associated with sexting. They also found out that some young people got sexually involved for the first time with the people they exchanged sext with shortly after sexting.

Cognizance of the existence and dangers of sexting among parents and young people is important to prevent possible problems associated with sexting among this age group. More research about the effect of phone use among young people is also important in the study area as phone possession among them is high. There is a need for qualitative and longitudinal studies to have an in depth understanding of why young people engage in sexting and the context in which sexting is carried out. Such studies can also truly establish causality with the identified associated and predictive factors. Dauda (2012) purposively selected 171 undergraduate students from the University of Maiduguri. Dauda (2012) reported from the study that 31% of the participants had sent sexy messages or nude images of themselves and 56.1% of the same

participants had received same sexy content from people they know personally and friend they have met on social networking sites.

2.6 The practice of Sexting

The term sexting was first used in 2005 by the Daily Telegraph, to unify the terms “sex” and “texting” and became an official word in 2009 (Gaylord, 2011). Klettke et al, (2014) in their literature review found significant relationships between sexting and risky sexual behavior and with several other adverse outcomes, such as (a) the sharing of sexual content without consent, (b) legal consequences, and (c) negative mental health repercussions. Furthermore, research highlights an existing relationship between mental health or psychological health and online victimization behaviors, such as cyberbullying, online dating violence or revenge porn (Klettke et al, 2014), which are closely related to sexting. There are different ways in which young people practice this sexting, Previous discussions with young people lead to the belief that sexting was something that occurred within a relationship. Sexting happens mostly before a relationship is formed, in some cases the young people talk about sexting as a way in which their peers decide whether they would go out with someone or not. There is gender imbalance most times as boys would request pictures of girls and girls may send pictures as a result of these invitations, but it is highly unusual for a girl to request a picture of a boy.

Discrepancies found in the literature may be due to differences in the definition of sexting, its measurement, methodologies or even due to the difference between those teens that sext consensually versus those who are pressured into sexting (Frankel et al, 2018). According to Wolak and Finkelhor's 2011, sexting behaviors can be divided into two broad categories: aggravated sexting and experimental sexting. Aggravated sexting behaviors encompass all types of sexting that may involve criminal or abusive elements beyond the creation, sending or possession of youth-produced sexual content, including (1) adult involvement; or (2) criminal or abusive behavior by minors. On the other hand, experimental sexting behaviors comprise those instances that do not include abuse or coercion, whereby teens voluntarily took pictures of themselves to create flirting or romantic interest in others.

Sexting is also practiced when young ones especially the girls are not given enough attention at home, probably if the parents are always busy to discuss the wellbeing of their daughter or

he/she comes from a broken home where nobody cares about the other person's feelings and all they care about is survival, if other people start giving them attention especially from the opposite sex they would find solace and this and would in turn give in to whatever demands is made as long as they are happy. It could also be as a result of low self-esteem and they have to seek the approval of others, if they happen to be in a relationship or they have a friend of the opposite sex that likes them they would tend to send nude pictures to confirm if they are beautiful enough or sexually attractive. To these ones, hearing that they look good from people of the opposite sex matters a lot to them (Temple & Choi 2014).

It is also practiced when they want to feel a sense of belonging. Most adolescents at this stage, the way their brain is wired will want to be amongst the "happening" babes or guys in the school so they would want to do everything it takes to belong to this group. They would not want to feel left out and so whatever experiments their friends are involved in they will be more than happy to partake it in.

Peer pressure is another very important reason why adolescents sext. Most adolescents especially if not well trained are easily influenced by happenings in and around them, it takes a well-disciplined child not be pressurized into doing what they obviously know is not morally right and because of this influence many children are engaged in sending videos, pictures or messages of their nudity to the opposite sex and feeling great about it. There has been a suggestion that young people who have online sexual behaviours (which can include sexting) were more likely to have problematic family background. This was corroborated by Benotsch et al. (2013) who reported that adolescents who live with both parents were less likely to be involved in sexting.

2.7 Perception of sexting

The advent of sexual feelings is a normal aspect of adolescent sexual development. Sexual interest, energy, and drives typically peak during adolescence; curiosity, exploration, and poor decision making may be age-appropriate aspects of adolescent sexual development (Diamond & Williams, 2009). Given this normative range, demarcating the boundaries of typical and atypical sexual behaviour during adolescence is notoriously difficult, and the overlay of social media and electronic technologies makes these distinctions even more complex. Contemporary writing has described the reciprocal influence of new technologies on adolescents' developmental aims

(Diamond & Williams, 2009) A review of related clinical factors may help describe salient influences on sexting between teenagers.

Furthermore, because of the risks associated with sexting, its impact on the school climate, and its relationship with other types of risk behaviours, more research into how context influences adolescent sexting is warranted (Karalan, 2012). A deeper understanding of adolescents' perception about sexting is needed to develop prevention and educational efforts and to identify avenues for future research (Lippman and Campbell, 2014).

2.8 Socio-demographic correlates of sexting

2.8.1 Age

Even though findings vary across studies, there is a linkage between age and sexting behaviours. Studies that used a representative sample of adolescents (Rice et al., 2012; Mitchel et al., 2012) have reported age as a positive predictor of higher prevalence of sexting behaviours. Among studies that used a non-representative adolescent samples (Kopecky, 2011; Strassberg et al., 2013; Dake et al., 2012) found older age as a predictor of increasing sexting practices. Other studies that sampled adults (Benotsch et al., 2013; Dir et al., 2013; Gorden-Messer et al., 2013) and considered age as a factor of sexting behaviours found no significant relationship between adults and sexting behaviours. This means findings in terms of age as a predictor of sexting is still inconsistent across studies.

2.8.2 Gender

A study established that adolescent males are less likely to send sexts as compared females (Mitchell et al., 2013). Another study which sampled adolescents found that females, unlike males, are less likely to receive nude images (Strassberg et al., 2013). Others studies have found that there is no gender difference in terms of sexting behaviours among adolescents (Dake et al., 2012; Kopecky, 2011; Temple et al., 2012). Furthermore, a study found that there is no gender difference among adolescents for sending a sext (Rice et al., 2012) and Lenhart (2009) found that there is no gender difference among adolescents for sending or receiving sexts. Among adults' samples studies have found that adult males are less likely to send sext than females (Englander, 2012; Wysocki & Childers, 2011).

Studies that used adults sample have found that adult females are less likely to receive sext than adult males (Dir et al., 2013; Gordon-Messer et al., 2013) and finally, some researchers have found that among adult samples there is no gender difference in sexting behaviours (Benotsch et al., 2013; Dir & Cyders et al., 2013). Studies in the area of sexting have found males more likely to receive sexts than females and females are more likely to send sexts than males among all age groups. Other studies also reported no difference between males and females in sexting behaviours and these findings make gender as a correlate of sexting unclear which demands further exploration (Chaudhary et al., 2017; Drouin & Landgraff (2012); Englander, 2012)

2.8.3 Sexual orientation

A study has found that young people that belong to sexual minority groups such as lesbian, gay, bisexual transgender or queer sexual orientation (LGBTQ) are more likely to engage in sexting behaviours than those young people that belong to a heterosexual group (Rice et al., 2012). A study that used adult samples reported that women who belong to LGBTQ are more likely to send or receive sext (Wysocki & Childers, 2011) but Gordon-Messer et al. (2013) found no effect. Few studies have considered sexual orientation as a correlate of sexting and findings are not consistent with what Gordon-Messer and colleagues reported.

2.8.4 Relationship Status

Studies that have considered relationship status as a correlate of sexting behaviour have found that people who are in relationship are likely to engage in sexting behaviours unlike others who are not in relationship (Dir & Cyders et al., 2013; Drouin et al., 2013; Weisskich & Delevi, 2012). Explanation to this could be that those in a dating relationship or romantic relationship share such sexy content via mobile phone consensually, to please each another or to satisfy one's sexual desire. Drouin and Landgraff (2012) reported that marital status is not related to sexting practices. A study has also found that number of years in marriage does not correlate with sexting prevalence (Drouin & Landgraff, 2012). Perker et al. (2013) found that the length of a relationship negatively correlates with the explicit nature of sext content sent to romantic partners. The explanation to Parker and colleagues finding could be that the more time one spends with a romantic partner the less they send sext because they may be having series of physical sexual contacts that leaves sexting not a regular option in such a relationship.

2.8.5 Educational Status

A study has reported that women with a lower level of education were related to the likelihood of engaging in sexting behaviours (Wysocki & Childers, 2011). The possible explanation could be that women with lower educational status used sexting to communicate sexuality. It could also mean that men would send sexts to such women in order lure them into sexual activities. Thus, women with lower educational status are vulnerable to receiving or sending a sext. Other studies have also found no relationship between educational status and sexting behaviours (Benotsch et al., 2013; Gordon-Messer et al., 2013). This shows that studies that have given attention to educational status have found inconsistent results which need to be explored further.

2.8.6 Religious Affiliation and Internet Use Time

Wysocki and Childers (2011) considered religious affiliation as a correlate of sexting but found no association with prevalence of sexting. This means that religious affiliation alone cannot predict engagement in sexting behaviours but religiosity may be essential. Gordon-Messer et al. (2013) explored participants' daily hours on the internet and found that daily internet use hours have no association with sexting behaviours. More studies are needed to explore religious affiliation, religiosity and the internet use time in sexting studies.

2.9 Sexting and addiction

Sexting, or the act of sending sexually explicit material through text messages, often through mobile phones can be an addiction that destroys lives in much the same way other addictions do. It is normally carried out deliberately, with people sending sexts about themselves. Sext messages that contain sexually explicit material about someone else can be sent in some cases when the subject of the sexts has not given consent. Sexts can also be sent to someone who does not wish to receive sexually explicit material. Sexting can be symptom or manifestation of sexual addiction, which is an illness like other addictions and causes destructive consequences. For some people, sexting is the primary behaviour involved in sexual addiction while for others an all-consuming interest in pornography, sexual encounters with sex workers, pathological infidelity or cybersex relationships can be the main focus of the addiction (Dir, Coskunpinar, Cyders (2011).

Sexual addiction is related to obsessive and compulsive thoughts and actions, and the inability to control behaviour, even when addiction is destroying family relationships, self-esteem, a career, and even finances. Similar to other addictions, sexual addiction is progressive in nature. This means that the person who suffers from sexual addiction will spend more and more time and energy engaging in the specific behaviours related to their addiction. Sex addicts often seek more intense experiences as the addiction progresses in order to achieve the same “high” they once got from more benign activities (Benotsch, Snipes, Martin and Bull, 2013).

2.10 Predisposing factors to sexting

Some factors that predispose adolescents to sexting could be peer pressure and social norms, these are the main motivators for them to engage in sexting pertaining to the correlates of sexting, findings from prior research indicate that being sexually active, reporting pleasure in sex, having multiple sex partners, having unprotected sex, and experiencing forced intercourse are significant predictors of sexting (Dake et al., 2012; Dir et al., 2013; Gordon-Messner et al., 2012; Rice et al., 2012; Temple et al., 2012). It could also be because the Internet access is more readily available and cheaper in certain regions.

A survey by AP-MTV (2009) found almost 61 percent of the participants in the survey had sexted based on the pressure they received though the source of the pressure was not stated. Walrave et al. (2014) who wanted to address the gap in AP-MTV (2009) study reported that pressure from friends and partners which were specific to girls was a reason why females engage in sexting. The findings of AP_MTV (2009) were confirmed by the findings of Englander (2012) that girls are most often pressured to sext.

Recent studies have also suggested that females in romantic or dating relationship engage in sending their self-nude image or videos in order to sustain their relationship because the pressure that male partners may use to solicit for sext in a romantic relationship can also be used to solicit sext from others outside the romantic relationship (Drouin & Tobin, 2014; Renfrow & Rollo, 2014). This study finding suggest that females, in particular, produce sexy content unwillingly to help maintain their relationship with their romantic partners and this could explain why females are more likely than men to send sext and men are more likely than females to receive a sext.

Pressure to sext may produce some psychological challenges in the creator of the sext content since such content was produced unwillingly. VandeenAbee, Campbell, Eggermont and Roe (2014) in their pursuit to understand the motivation behind boys and girls sexting behaviours, the researchers reported that boys and girls involve in sexting specifically gaining popularity and peering respect. This means that the way young people view group norms can influence their involvement in risky behaviours without thinking of the possible effects of their behaviours.

2.11 Associated Risks

Engagement in sexting is associated with risks such as the unauthorized distribution of the photographs. One study has found that, among high school students, one-third of the respondents had shared sexting messages with others without the permission of the creator (Fleschler Peskin et al. 2013). An AP-MTV study on sexting found that reasons for forwarding sexting photographs included the ‘assumption that others would want to see them’ (52%), ‘a desire to show off’ (35%), ‘as a joke’ (31%), ‘to be funny’ (30%), and ‘boredom’ (26%) (Associated Press and MTV 2009). The social consequences of unauthorized distribution of sexting photographs seem to differ between boys and girls. In previous studies, involvement in sexting has been found to have almost no adverse social consequences for boys, and often has a positive impact on their peer group status (Lippman and Campbell 2014; Ringrose et al. 2013; Walker, Sanci, and Temple-Smith 2013). By contrast, engagement in sexting has been found to negatively impact the reputation of girls, who often become victims of name-calling and bullying if a sexting message is distributed (Lippman and Campbell 2014; Ringrose et al. 2013; Walker, Sanci, and Temple-Smith 2013). Sexting has also been linked with, cyber dating abuse victimization, bullying victimization, and being a victim of cyberbullying (Dake et al. 2012; Van Ouytsel, Ponnet, and Walrave 2016; Wachs and Wolf 2015).

2.11.1 Cyberbullying

Sexting done with the intent to seek revenge, embarrass, denigrate, belittle, malign, threaten, and/or humiliate others is a form of cyberbullying (NCMEC, 2009). Electronic bullying, online bullying, or cyberbullying has been defined as the intentional act of denigrating, humiliating, emotionally abusing, or physically threatening others through electronic media, such as e-mail, instant messaging, social Internet sites, chat and bash rooms, and voting booths (Beale & Hall,

2007). Several studies have identified a relationship between cyberbullying and sexting behaviors (Korenis & Billick, 2014). Fahy et al.'s (2016) investigation emphasizes the high prevalence of cyberbullying and the potential of cyber-victimization as a risk factor for future depressive symptoms, social anxiety symptoms, and below average well-being among adolescents. Their results show that cyber-victims and cyberbully-victims were significantly more likely to report symptoms of depression and social anxiety. According to these results, it would be expected that sexting behaviors as a form of victimization might also be related to a higher likelihood of reporting depressive and anxiety symptoms. Along the same line of reasoning, research findings indicate that a higher degree of depressive symptoms is associated with greater Internet use (Tokunaga & Rains, 2010), and a more frequent and problematic internet use is associated with higher rates of sexting behavior (Holoyda et al, 2018). Therefore, it would be reasonable to hypothesize that higher engagement in sexting behaviors might predict higher rates of depressive symptoms. Approximately 20-40% of middle and high school students have been the victims of one incident of online bullying (Stover, 2006).

2.11.2 Emotional Effects

Sexting can have emotional effects on students. Twenty-one percent of students appearing in, or creating sexually explicit images, and 25% of students receiving such images have reported feeling very upset, embarrassed, or afraid as a result of their involvement (Mitchell et al., 2011). Students who are victims of sexting may feel isolated, fearful, and discouraged about school, causing them to be absent more often, withdraw from school activities, and decrease their academic performance (Stover, 2006). Students who are victims of sexting may be more prone to engage in school fights and other risky behaviours (Bradshaw, O'Brennan, & Sawyer, 2008). Many also feel ostracized, labelled, depressed, and suicidal as was the case of an 18-year old high school senior in Cincinnati, Ohio who committed suicide after her nude photograph was sent to students at other schools (Feyerick & Steffen, 2009).

For today's teenagers, sexting is part of their sexual culture as the majority of them have grown up being exposed to sex and sexually provocative acts readily available through a variety of media sources (e.g., reality television, sexually explicit websites) (Clark-Flory, 2009). Sometimes, teenagers believe that engaging in this type of behaviour is a form of entertainment when bored, (NCMEC, 2009). Students who get into trouble for sexting may already have been

at risk for other reasons, such as having experienced abuse at home, living in economically disadvantaged conditions, having prior academic, social, and emotional problems (Levine, 2009; Willard, 2007), or lacking close and positive relationships with significant adults (McAdams, 2007).

2.11.3 Sexual Risks

Negative consequences of sexting are gaining attention in literature. For example, some studies have reported a significant relationship between sexting and risky sexual practices, such as multiple sexual partnership (e.g., Dir, Cyders, & Coskunpinar, 2013; Crimmins & Seigfried-Spellar, 2017; Yeung, et al., 2014). Young people who engaged in sexting behaviour were also reported to have begun dating and to have had sex than those who did not sext (Jeff & HyeJeong, 2014; Benotsch, Snipes, Martin, & Bull, 2013). It also reported that teenagers who sext are more likely to have unprotected sex. Scholars (Dir, et al., 2013; Temple, Le, van den Berg, Ling & Paul, 2014) posited that sexters will likely use drugs or alcohol and abuse substances before sex. On the contrary, some studies, did not find a relationship between sexting and sexual risky behaviours (Currin, Hubach, Sanders & Hammer, 2016; Gordon-Messer *et al.*, 2013).

Though there is disagreement concerning the consequences of sexting among scholars but there a consensus that teenagers may be jeopardize futures opportunities by putting compromising, ineffaceable images online that could be available to potential employers, academic institutions, and family members (Lithwick 2017: Klepper, 2011). Early sexual debut (initiating sex before or at 14 years of age) is also one of the sexual risks. Findings from cross-sectional studies of high school students suggest that teenagers who sext engage in higher rates of sexual activity, which may put them at further risk for unintended pregnancy, HIV, and sexually transmitted diseases.

2.11.4 Sexting and Psychological Well-being

Dake et al. (2012) further reported that young people who have engaged in the creation and sending of sexts felt sad and hopeless had contemplated suicide and attempted suicide. Englander (2012) who sampled undergraduate students found that individuals that had engaged in sexting (whether pressured or freely) reported signs of depression than those who had never sexted and those who sexted with pressure from others reported extreme anxiety and dating violence while

in senior high school than those who had never sexted and those who sexted with no pressure from others. Mitchell et al. (2012) also further reported that 21% of the participants that were involved in the creation of nude content reported feelings of anger, embarrassment and/or fear. A study showed that a teenage girl who had sent nude images of herself to her boyfriend and had those same pictures distributed to others by him when they broke up committed suicide (Celizic, 2009). Another example is a teen who took a picture of herself topless and sent to her classmate with the hope of getting his attention, a third party acquired the pictures and sent to students at her school and other surrounding areas, she also committed suicide (Inbar, 2009). There have also been reported cases where the threat to make public a single explicit picture sent to a boyfriend/girlfriend has been used to blackmail the sender into sending additional information, even more explicit, cell phone pictures (Englander, 2010). While such consequences are extreme and likely rare, they illustrate, at least the end point of a continuum of possible psychosocial risks associated with sexting.

Sorbring, Skoog and Bohlin (2014) sampled Swedish adolescents and found specifically with adolescent girls that engagement in online sexual activities is related to the poor relationship with immediate family (father, mother and siblings) and peers. Other studies conducted have found no relationship between engagement in sexting behaviours and psychological well-being (Gordon-Messer et al., 2013; Temple et al., 2014). With regards to the finding of Sorbring et al. (2014) that online sexual activities are related to the poor relationship with family, Jonsson, Priebe, Bladh and Svedin (2014) found that there is no association between sexting and problematic family relationship. Cooper et al. (2016) explain that there are limited research works that have explored the relationship between sexting and psychological well-being and such studies only provided a tentative explanation for the possible link between sexting, risk and personality. This means exploring the relationship between sexting and psychological well-being in the current study is relevant.

2.12 Sexting and Adolescents

Adolescence is a transition phase of growth and development between childhood and adulthood. The World Health Organization describes adolescents as anyone between the age of 10 and 19. WHO also describes the phase as one of the most rapid in human development where there are biological changes, physical changes, changes in character, social and psychological changes?

Sexting, consistent with neurobiological development, may be viewed as an emotionally driven behaviour that is often impulsive and without a clear anticipation or understanding of the potential adverse consequences. Adolescent sexting can be viewed as part of a normative developmental process related to an increased interest in sexuality. For some teenagers, engagement in sexting could play a role within the developmental period of adolescence (Temple & Choi, 2014). Some adolescents might find that engaging in sexting is a more comfortable way to express their feelings and sexual desires than in-person communication (Le et al, 2014). Another study suggests that sexting can be used to sustain intimacy in a long distance romantic relationship (Walker, Sanci and Temple-Smith 2013).

Sexting might also be a precursor for early sexual activity among adolescents, for example to make sexual advances or as a first step within a sexual relationship (Temple, 2015). Sexting can also be an alternative way of expressing sexual interest or a substitute for sexual activity, for instance for young people whose religion prohibits sexual contact before marriage (Lippman & Campbell, 2014). Karaian (2008), an adolescent who speaks rationally about sexting when calm may nonetheless engage in the behaviour (including in an aggravated manner) when emotionally aroused. Real-world decision making typically occurs under conditions of “hot cognition,” or high emotional arousal (Giedd, 2008). Although adolescents may be more digitally savvy than their parents, their lack of maturity and inattention to consequences can quickly lead to serious negative outcomes. This may be particularly true for youth identified as at-risk because of emotional and behavioural difficulties, for whom research has identified higher rates of sexual risk behaviours (Brown, 2010). Furthermore, because youth become more interested in romantic relationships and sexuality during puberty, sexting is likely to emerge during the middle school years. Personality has been shown to be a strong predictor of behaviours according to Chamorro and Barrick and these traits that have been associated with sexting include;

- 1) extraversion,
- 2) neuroticism, and
- 3) low agreeableness (Delevi et al., 2013).

The negative consequences of sexting may be a serious issue among young people because of their inability to handle complex emotional issues which sometimes accompany sexting. There

are also other factors which are external stressors like academic and social demands which are common at this stage of development. Outside of a romantic relationship, reasons for engaging in sexting include, the use of sexting messages as a joke or a bonding ritual (Albury and Crawford, 2012), and for the lure of risk-taking, and in some countries, the illegality of sending nude photographs through cell phone and internet applications. Sexting has also been linked to peer pressure both within and outside of a romantic relationship. Adolescents might feel that they have to engage in sexting because they are under the impression that the behaviour is normative among their peers and that they need to engage in it in order to get attention from others (Walker et al, 2013).

2.13 Early sexual Activity

Teenagers are beginning to engage in sexual activity at younger ages as time goes by. Teenagers from ages 15-19 are starting to have a decrease in early sexual activity whereas ages younger than 13 are having an increase according to the article Risk Behaviours: Sexual Activity among Teens and Teen Pregnancy (2002). Among adolescents younger than 14 years old, 27.8% have touched each other under clothing, 19.9% have touched each other's genitals, and 7.6% have had sexual intercourse (Sex Education, 396). The Journal of Research on Adolescence says that "Youth who develop strong self-regulatory skills in middle childhood are better equipped to avoid risky behaviour in adolescence including risky sexual behaviour". This tends to begin in early childhood with the parental regulation. The trend that teens are maturing faster than they used to years ago and their hormone levels are on the rise contributes to the fact that adolescence are more likely to be pursued by older adults, which could lead to poor decision making skills due to peer-pressure.

Adolescents, association with deviant and sexually active peers is connected to greater possibility of sexual behaviour (Journal of Research on Adolescence, 507-508). The media may have a significant impact on how males and females view themselves, which may also lead to early sexual activity. This happens because when girls go through puberty, adolescence and into womanhood, females are viewed as sexual objects or objects of desire. (Risk Behaviours, 2002) suggested that girls have to be sexually attractive based on looks, and the view is for even more sexually experienced to be an adult or be considered a "woman." Men, on the other hand, may

have to uphold their manhood by being involved in sexual activity. Peers may look at the guys as being "boys" if they haven't had sexual experiences and a "man" if they had.

Another factor that lean towards encouraging early sexual activity is the denial that oral sex or anal sex is actually "sex." Adolescence are trying out oral and anal sex at younger ages because they believe it doesn't constitute as sex, and one can't get diseases if they are not having intercourse (Risk Behaviours, 2002). This growing epidemic of teens and early sexual activity is also giving rise to teens and emotional problems. Early promiscuity could cause depression and depression in turn could cause a teen to choose to have numerous sexual encounters to relieve stress and anxiety or to improve popularity. The Emotional Risks of Early Sexual Activity article in 2002 stated that it has been clear for quite some time that teen sex and emotional problems such as depression are related. What has not been clear is if teen sex causes depression, or depression causes teens to have sex. Recent research suggests that both may be true. Teens, especially girls, who have sexual intercourse may be at greater risk for depression. And depression in teens is now known to lead to risky sexual behaviours.

Early sexual activity may also lead to later adulthood risky behaviour. When adolescents are taking risks whether it is with substance abuse and early sexual activity, they tend to lose many things which can include: friends, family, education, dreams, goals, and hope. What tends to happen is that parents think back to times when they may have felt they lost something and this becomes a challenge for them. Parents may possibly refuse to talk about these risky sexual behaviours because they could return to these moments of deprivation and loss, and in order to repair what went wrong, they need to attempt to re-find what was lost. Early sexual activity is also contributing to more serious problems including other risky behaviours and the onset of disease: STD's, HIV, and AIDS amongst teenagers. According to a division of CDC, approximately 18% of all new HIV diagnoses are among young people aged 13-24 and teens and young adults have the highest rates of sexually transmitted diseases (STDs) of any age group. Internet surfing, alcohol consumption, sexting, experimenting with drugs and other risky behaviour all may contribute to early sexual activity (CDC, 2009).

In addition to psychological and social connotations, the act of sexting violates the criminal statute due to the definition found in the federal child pornography statute. The current federal child pornography statutes make no distinction between pornography created by minors for one another and the deeply exploitative materials created from actual rape and molestation of children. (Brunker, 2009) Consequently, several incidents of arrest have made recent headlines as jurisdictions have punished sexting incidents with charges of dissemination and possession of child pornography by using pornographic laws in the absence of laws to handle this new type of sexting criminality. This common occurrence of sexting—sending, receiving, or forwarding sexually suggestive or explicit images or messages via cell phone or internet—among the teenage and young adult generation has become epidemic. (Mike, 2009). The use of child pornography laws to deal severely with sexting not only leads to an unlimited rise of prosecution, but also to social uproar. Parents' rights groups, scholars, and academia question the use of laws originally designed to protect children from sexual abuse.

2.14 Relationship among Sexters

Many studies have been done to discover why teens and young adults endanger their careers by involvement in this illegal behavior. Studies show that many students will engage in serious relationships for the first time while attending college. Many students will also use this transition to explore their sexuality and develop new sexual behaviors. In some cases, sexting has been used as a new avenue to channel and explore sexual freedom. Researchers have studied attitudes and perceptions related to college students, relationships, and sexting.

According to Hudson's study (2011) in regard to sexting, authors note young adults, mainly college students, use sexting as a means to initiate or begin a romantic relationship. This seems to be common practice among college students interested in casual relationships. Hudson, associated sexting with a certain comfort level for the sender; the person sending the text is in control of the direction and speed of the relationship. Also, sexting is said to encourage the relationship in a flirtatious, sexual fashion, and at the same time young adults feel more comfortable sexting as opposed to personal interaction with a potential partner.

According to Drouin and Landgraaf's study (2012), "...text messaging helps to strengthen bonds and foster intimacy, mainly within existing dyadic relationships." This article also discusses two attachment styles, which may have a significant role in sexting among college students. Anxious

Attachment is described as a yearning to be close, while coupled with fear of separation and abandonment. These individuals feel the need to seek approval from others, but experience feelings of distress when the feelings are not returned. Authors assumed that students who exhibit Anxious Attachment characteristics are more likely to sext their partners to receive reassurance. Adversely, the Avoidant Attachment style is characterized by self-reliance, self-dependence, and fear of intimacy. Individuals that show signs of the Avoidance Attachment style will prefer to maintain independence while in a relationship. This takes an interesting effect on sexting practices.

Another empirical research based article discusses that for young adults, "Sexting" is just a part of dating". Researchers at the University of Michigan found sexting is a common practice among students aged 18-24, and reported no associations among sexting and psychological problems or risky sexual behavior. Their findings reported most who received sexts also sent sexts, suggesting sexting is a reciprocal practice that occurs between partners in romantic relationships (Gordon-Messer et.al. 2013).

Henderson and Morgan (2011) in their article, "Sexting and Sexual Relationships among Teens and Young Adults," explain attitudes towards the sexting trend. According to them, females feel pressured by males to post or send sexually explicit messages or photos. Peer pressure from friends is another contributing reason young adults and college students resort to sexting. However, roughly 26% of males and 19% of females believe sexting is harmless, but could eventually yield negative consequences. The article also discusses reasons for sexting. Like much of the previously discussed literature, these authors believe sexting is conducted for three main purposes: to initiate a sexual relationship, enhance a current relationship (casual or committed), or to enhance and explore sexuality without having to engage in sexual intercourse. These authors also note young adults send sexual pictures and messages as a means to keep the other partner's interest and attention.

2.15 Conceptual Framework: PRECEDE Model

Several studies have supported the positive impact the PRECEDE model has had on the effectiveness of health promotion programs. Some of these studies include preventive behaviours for type 2 diabetes mellitus in high-risk individuals (Moshki, Dehnoalian, and Alami, 2016), health promotion options for breast cancer survivors (Tramm, McCarthy, and Yates, 2012), fitness-emphasized physical activity and heart-healthy nutrition education program for elementary school children (Slawta and DeNeui, 2009), internet based weight management program for young adults (Kattelman, White, Green et al, 2014), among others.

The PRECEDE framework was first developed by Dr Lawrence Green and colleagues in the 1970's to address the lack of direction and adequacy of public health promotion to sufficiently plan before implementing an intervention. (Green and Kreuter, 2005). This theory is based on the premise that educational diagnosis of a problem is very important when developing and implementing an intervention plan, it also helps to understand the causal factors of any given public health behaviour. The PRECEDE is an acronym that stands for predisposing, reinforcing and enabling constructs in educational environmental diagnosis and evaluation

The three key concepts of this model are explained below:

The Predisposing factors: They are factors which motivate or provide a reason for behaviour. Knowledge, attitudes, personality traits, cultural beliefs, perceived needs and abilities and readiness to change determine how students react to the concept and practice of sexting. The practice of this sexting can be reduced by their knowledge of the associated sexual risks. They also should be stimulated to engage in positive thinking.

The Enabling factors: These are what enable persons to act on their predispositions; these factors include available resources, accessibility, money, time, supportive policies, assistance, and services. These are skills or physical factors such as availability and accessibility of resources or services, supportive policies and assistance that facilitates the motivation of behavioural change among the adolescents.

The Reinforcing factors: Include factors that reinforce the desired behaviour change and they are individuals (family, friends and peers) that give social support, identity and role definition. For example, economic rewards and social norms will influence the extent to which adolescents manage psychological stress. These factors come into play after the behaviour has been initiated. They encourage repetition or persistence of behaviours by providing continuing rewards or

incentives e.g. Social support (family, peers), health care workers, law enforcement, and the media.

The model discussed above is thereby conceptualized below:

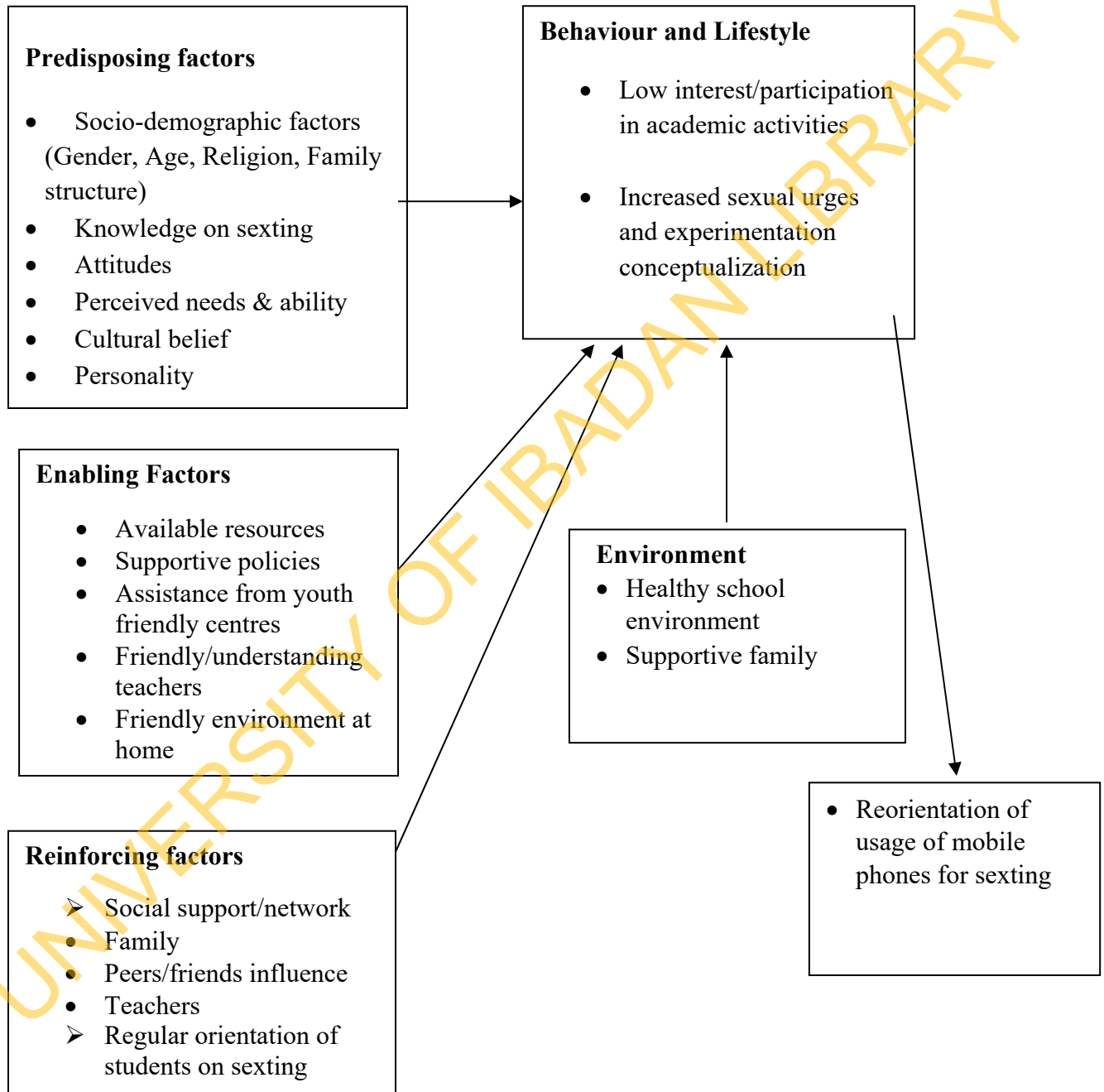


Figure 2.1: Diagram illustrating precede model

CHAPTER THREE

METHODOLOGY

3.1 Study Design

This study was a descriptive cross-sectional survey. It explored the extent of the practice of sexting of the respondents and their knowledge about its associated sexual risks.

3.2 Study Location

The study was carried out in Oluyole Local Government Area of Ibadan, in Oyo State, Nigeria. The local government is one of the oldest local government council in Oyo state and has its headquarters at Idi-Ayunre Old Lagos/Ibadan road. It shares boundaries with four local government areas which are Ibadan south-west, Ibadan South-East, Ona-Ara and Ido within Ibadan metropolis while it shares boarders with Ogun State through Egbeda-Obafemi, Odeda and Ijebu-North Local Government Areas. Oluyole Local Government was established in 1976 and the council occupies about 4,000 square kilometres. Based on 2006 census its population is 202,725. There were 10 wards in Oluyole Local government and these wards were divided into two sectors, namely; Idi-Ayunre sector and Olode sector (Oyo State Government, 2019).

Idi-Ayunre sector comprises of Ward 2 (Orita/OdoOna-Elewe), Ward 5 (OdoOna-Nla/Idi-Ayunre), Ward 8 (Abanla/Olonde), Ward 9 (Onipe/Busogboro), and Ward 10 (orisunbare). Older sectors comprise of Ward 1(Ayegun), Ward 3 (Pegba/Egbeda Tuba), Ward 4 (Muslim/Ifelodun) Ward 6 (Latunde), Ward 7 (Olomi/Olunde). However, this Olode sector is now Akorede Local Council Development Area and it was established in January 2017 by the AbiolaAjimobi Administration. The urban section of the Local Government comprises such area like Lagos/Ibadan Express road, old Lagos road, new garage, Oritaodoona, Elewe where many big companies were sited. Companies like British America Tobacco (BAT), ROM Oil, Agrited Company, Black-Hors plastic company, Jubaili Agro-Limited, KAMAR Industries, Oriented foods and many others. It has many public and private schools, many public and private secondary schools, one private university and Oyo state owned Technical University under

construction. There is one state general hospital, 24 local government health facility centre and many other registered private clinics (Oyo State Government, 2019).

3.3 Study Population

The respondents for the survey were unmarried adolescents both male and female aged 10 – 19 attending private secondary schools in Oluyole Local Government Area of Oyo state. Adolescents are susceptible to practice sexting. The associated sexual risks involved in sexting requires that attention be giving it. This study was conducted among this population to investigate their practice of sexting and its associated sexual risks.

3.4 Inclusion and Exclusion Criteria

3.4.1 Inclusion Criteria

For the purpose of this study, participants eligible for this study were unmarried adolescents aged 10-19 attending private secondary schools in Oluyole Local Government Area of Oyo State. All adolescents within this age bracket was considered for the study regardless of their class.

3.4.2 Exclusion Criteria

Married adolescents in school or those adolescents in higher institutions of learning and those eligible but not willing to participate was excluded from the study.

3.5 Sample size Determination

The study population consisted of adolescents in schools in Oluyole Local Government Area of Oyo State, Ibadan. To determine the number of respondents that were used in this survey, the findings of Aji et al.,2013 on the prevalence of sexting was used. This percentage was used to calculate the sample size (n) which was determined using the Lwanga and Lemeshow (1991) sample size determination formulae of

$$n = \frac{Z^2 p(1-p)}{d^2}$$

$$n = \frac{z^2 \times (P \times 1 - P)}{e^2}$$

z = constant for 95% CI

p = prevalence of sexting as reported by (Aji et al.,2013)

e = margin of error

If p = 16.9%

z is 1.96; standard for the normal distribution and

e= absolute deviation from the true value (degree of accuracy: 5%)

Hence,

$$N = \frac{(1.96)^2 \times 0.169 \times 0.831}{0.05 \times 0.05} = 216$$

Adjusting for anticipated 10% non-response rate;

$$10\% \text{ of } 216 = \frac{216 \times 10}{100} = 22$$

Therefore, 22 was added to sample size calculated to make the sample size 238. A total sample size of 238 was distributed.

3.6 Sampling Technique

A multistage sampling technique involving four (4) stages was used for the selection of respondents for this study.

Stage 1: Three wards in the urban area of Oluyole local government were selected using simple random method.

Stage 2: A school each was selected from each of three selected wards in stage 1.

Stage 3: A stratified sampling was used to allocate 38 questionnaires to students in Junior Secondary School (JSS) and 200 questionnaires to students in Senior Secondary School (SSS).

Stage 4: A systematic random sampling was used to distribute copies of the questionnaire to the respondents. To achieve this, a sampling interval was used. The sampling interval was calculated by dividing the estimated adolescent population size in the local government selected that are attending school by the sample size. A random balloting was used to select the first respondent

and then the sampling interval was followed in a systematic manner until the desired sample size is completely selected.

3.7 Study Instrument

A structured, pre-tested (details in appendix), self-administered questionnaire was employed for this study. Information gathered from reviewed literature was used as guide to the design of the questionnaire with adaptation of the three antecedent factors (predisposing, reinforcing and enabling factors) of the PRECEDE model. The instrument was designed to address the objectives of the study.

The structured questionnaire consisted of set questions that were closed-ended. It consisted of six (6) sections.

Section 1: Contained socio-demographic data such as age, class, sex, ethnic group, religion, father's education, mother's education and if they owned a mobile phone.

Section 2: Assessed knowledge of sexting. It contained seven closed ended questions

Section 3: Determined the perception of sexting among the respondents which could be positive or negative.

Section 4: Ascertained the practice of sexting among the respondents of which they answered always, when necessary, rarely or never.

Section 5: Identified some factors that influence sexting among the respondents.

Section 6: Identified some associated risks involved in sexting leaving the respondents to agree or disagree.

Table 3.1 Adaptation of the PRECEDE model antecedent factors of a behaviour to the research instrument.

Antecedent factors	Variable
Predisposing factors	Knowledge of sexting (definition, likely causes, and consequences) Perception of sexting (Positive or negative)
Reinforcing factors	Factors associated with sexting, Reasons that compels sexting(peer pressure, sense of belonging)
-Enabling factors	Factors that could encourage sexting (unsupervised use of mobile phones, social media influence)

3.8 Validity of the instrument

Validity of a research instrument evaluates the level to which the instrument measures what it is designed to measure (Robson, 2011). In order to establish the validity of the instrument used, the face and content validity were ensured. Content validity is the extent to which the questions on the instrument and the scores from these questions represent all possible questions that could be asked about the content or skill (Creswell, 2005) while face validity refers to the degree to which a test appears to measure what it claims to measure (Leedy & Ormrod, 2004). Therefore, it was confirmed that the questionnaire included adequate set of items that involved the concept. Relevant literatures were consulted in developing the instrument and variables constructed were compared with other variables and data of previous studies.

The variables were matched to the stated objectives, research questions and the set hypotheses of the research. Variables in the theoretical framework were represented in the instrument to ascertain construct validity. The researcher also looked over the instrument for troublesome wordings and employed simple and easy to understand words. After the construction of the instrument, it was thoroughly reviewed by peers, lecturers, supervisor and other researchers

within the Health Promotion and Education department to ensure that the items under each section of the questionnaire measured the variable construct.

3.9 Reliability of the instrument

Reliability of an instrument measures uniformity, accuracy, repeatability, and credibility of the research instrument (Chakrabartty, 2013). In quantitative research, the result of a researcher is considered reliable if consistent results have been obtained in identical situations but different circumstances. The most common internal consistency measure is Cronbach's alpha (α). Its value typically varies between 0 and 1, Alpha values above 0.7 are generally considered acceptable and satisfactory, above 0.8 are usually considered quite good, and above 0.9 are considered to reflect excellent internal consistency (Cronbach, 1951).

To establish the reliability of the research instrument, a pre-test technique was employed. This is a process whereby the research instrument is administered among 10% of the total study population in another representative population. The location for the pre-test was the Ibadan North-West Local Government Area Oyo State, Ibadan which shared similar characteristics with the study area. The pre-test was conducted on 24 in-school adolescents which represented 10% of the sample size for the study. The pre-test helped to provide insight into respondents' understanding of the items on the questionnaire and also helped in identifying adjustments needed. Copies of pre-test questionnaire were coded, entered into the computer and analysed. A Cronbach's Alpha measurement and reliability co-efficient measure was conducted and a Cronbach's Alpha coefficient of 0.67 was obtained, hence the instrument was considered to be reliable.

3.10 Data collection procedure

Three (3) research assistants who were literate, mature and have had previous experience on data collection were recruited and trained by the researcher on the objective of the study and the instrument for data collection. Ethical issues were also discussed as it relates to the research. They helped in administering the copies of the questionnaire at the study area which was carried out over a period of two weeks. The questionnaire was administered in schools from 9am-1pm daily. It was a self-administered questionnaire and clarification was sought for on any item on

the questionnaire when needed. An informed consent was sought for from the adolescents that partook in the study. The anonymity and confidentiality of the respondents were also kept safe by the research assistance. The questionnaires were tagged with number for accountability. The completed copies of the questionnaire were all checked for completeness and collated. After the collection process, the questionnaire was stored in a safe box.

3.11 Data Management and Analysis

After administering the questionnaire, the principal investigator checked all copies of the questionnaire for the purpose of completeness and accuracy. Collation, editing and sorting of questionnaire were carried out. The editing and sorting involved assigning serial number to each questionnaire for easy identification and data entry. Coding guide for data entry was developed.

Data were entered and managed using SPSS version 21 and were subjected to descriptive (mean, percentages and frequencies) and inferential (Chi-square) statistical analyses. The findings were presented in tables and figures. The level of significance was set at $p \leq 0.05$.

The overall assessment of knowledge, perception and practice were done by scoring. There was scoring for sexting practices, positive responses to the questions asked to assess sexting practices “Always” was scored 1, “When Necessary” was scored 0.5, “Rarely” was scored 0.2 and “Never” was scored 0. The respondents who scored 0 were regarded as “Do Not Practice Sexting”, respondents who scored more than 0 but less than 2 were regarded as “Low Practice of Sexting” while respondents with score more than 2 were regarded as “High Practice of Sexting”. Knowledge of sexting was assessed using a 7-point scale. A score of ≤ 3 was classified as low knowledge, >4 was classified as high knowledge. The scoring for perception was done on a 6-point scale where scores ≤ 3 were poor perceptions and scores >3 represented good perception. The scoring for the practice was done on an 8-point scale where scores = 0 were classified as do not practice, scores ≤ 2 were classified as low practice and ≥ 2 was classified as high practice. The hypotheses were tested to establish different level of significant relationship between variables.

3.12 Ethical considerations

Ethical clearance was obtained from the Oyo State Ministry of Health Research Ethics Committee before the study was conducted (details in appendix 2). Steps were taken to ensure that all the principles of research were duly adhered to. Authorization was granted by the Principals of the schools to conduct the research. The content and nature of the research was made known to the respondents. Verbal and written informed consent was obtained from all the respondents. Only respondents who were able to give their consent participated in the study. Respondents were assured of anonymity and confidentiality, hence the questionnaires were identified by serial numbers and not names. Respondents were informed about right of participants such as opportunity to decline participation and non-exposure to risk. The research was also relatively risk free which ensured that the principle of non- maleficence was not violated. The result of the study will serve as a guide in planning appropriate programs for this target group which will promote good sexual health and well-Being.

3.13 Limitation of the Study

Some participants (about 8 of them) did not want to take part in the study because of some of the sensitive questions especially in the practice section of the questionnaire. Some felt the questionnaire was built to assess the level of their intelligence and so did not want to participate. Respondents were re-assured of anonymity and were informed that the study was solely for research survey. Those who still felt uncomfortable despite the assurances were allowed to decline so as to ensure that ethical issues were not violated.

CHAPTER FOUR

RESULTS

Introduction

In this chapter, the researcher presented the analysed results of findings from the research instrument. The method of data analysis used was the computer method with SPSS software version 20. Simple percentages, and tables were used to present the analysed data based on the questionnaire items retrieved from the one hundred (238) respondents who were the sample size for the study.

4.1 Respondents Socio-demographic characteristics

Table 4.1 shows the socio-demographic characteristics of the respondents. Two hundred and thirty-eight adolescents were interviewed for this study. Age of respondents ranged from 10 to 19 years with a mean of 14.5 ± 1.6 years. Majority (56.3%) of the respondents were females while most of the respondents were predominantly of Yoruba ethnic background (83.2%). Christianity was the most prominent religion practiced by the respondents (68.5%). Almost half of the respondents were in SSS3 (49.6%), some (19.3% and 16.8%) were in SSS2 and SSS1 respectively while few (4.2%) respondents were in each of JSS1 and JSS2. Many respondents (65.1% and 60.9%) had fathers and mothers with post-secondary education while some (23.9% and 22.7%) had fathers and mothers with secondary level of education respectively. Majority of the respondents (68.9%) owned mobile phones.

Table 4.1 Demographic Profile of Respondents**(N = 238)**

Variable	Frequency	Percent %
Age		
10-15	173	72.7
16-21	65	27.3
Sex		
Male	104	43.7
Female	134	56.3
Class		
JSS1	10	4.2
JSS2	10	4.2
JSS3	14	5.9
SSS1	40	16.8
SSS2	46	19.3
SSS3	118	49.6
Tribe		
Yoruba	198	83.2
Igbo	23	9.7
Hausa	17	7.1
Religion		
Christianity	163	68.5
Islam	66	27.7
Traditional	9	3.8
Fathers education		
No formal education	15	6.3
Primary	11	4.6
Secondary	57	23.9
Post-secondary	155	65.1
Mothers education		
No formal education	23	9.7
Primary	16	6.7
Secondary	54	22.7
Post-secondary	145	60.9
Do you own a mobile phone		
Yes	164	68.9
No	74	31.1

***Mean age 14.5 ± 1.6 years**

4.2 Respondents knowledge on Sexting

Majority of the respondents (62.6%) defined sexting to be sending, receiving or forwarding sexually explicit messages, photograph or messages primarily between mobile phones of oneself to others, 18.5% defined it to be Writing a sexually explicit messages on papers to friend and families while 12.6% mentioned that sexting is when one browses the internet for sexual messages. Many respondents (75.6%) believed that mobile phones can encourage sexting, and 77.7% mentioned that sexting can affect a person's mental health.

Almost all the respondents (84%) knew that sexting is a risky practice. About 80% knew that sexting could give them a bad reputation. Many respondents (77.7%) mentioned that sexting could have legal consequences while 83.2% believed that sexting could trigger physical sexual behaviour. Figure 4.1 shows the respondents' knowledge on Sexting. It was revealed that majority of the respondents 87% had a high knowledge of Sexting while 13% had a low knowledge (Table 4.2).

Table 4.2: Respondent's Knowledge on Sexting

(N = 238)

Variable	Frequency	Percentage %
Definition of sexting		
Sending, receiving or forwarding sexually explicit messages, photograph or messages primarily between mobile phones of oneself to others	149*	62.6
Writing a sexually explicit messages on papers to friend and families	44	18.5
Browsing the internet for sexual messages	30	12.6
I do not know	15	6.3
Mobile phones encourage sexting		
Yes	180*	75.6
No	57	23.9
No response	1	0.4
Sexting affect a person's mental health		
Yes	185*	77.7
No	52	21.8
No response	1	0.4
Sexting a risky practice		
Yes	200*	84.0
No	37	15.5
No response	1	0.4
Sexting can give a bad reputation		
Yes	190*	79.8
No	47	19.7
No response	1	0.4
Sexting could have legal consequences		
Yes	185*	77.7
No	52	21.8
No response	1	0.4
Sexting can trigger physical sexual behaviour		
Yes	198*	83.2
No	39	16.4
No response	1	0.4

***Correct Responses**

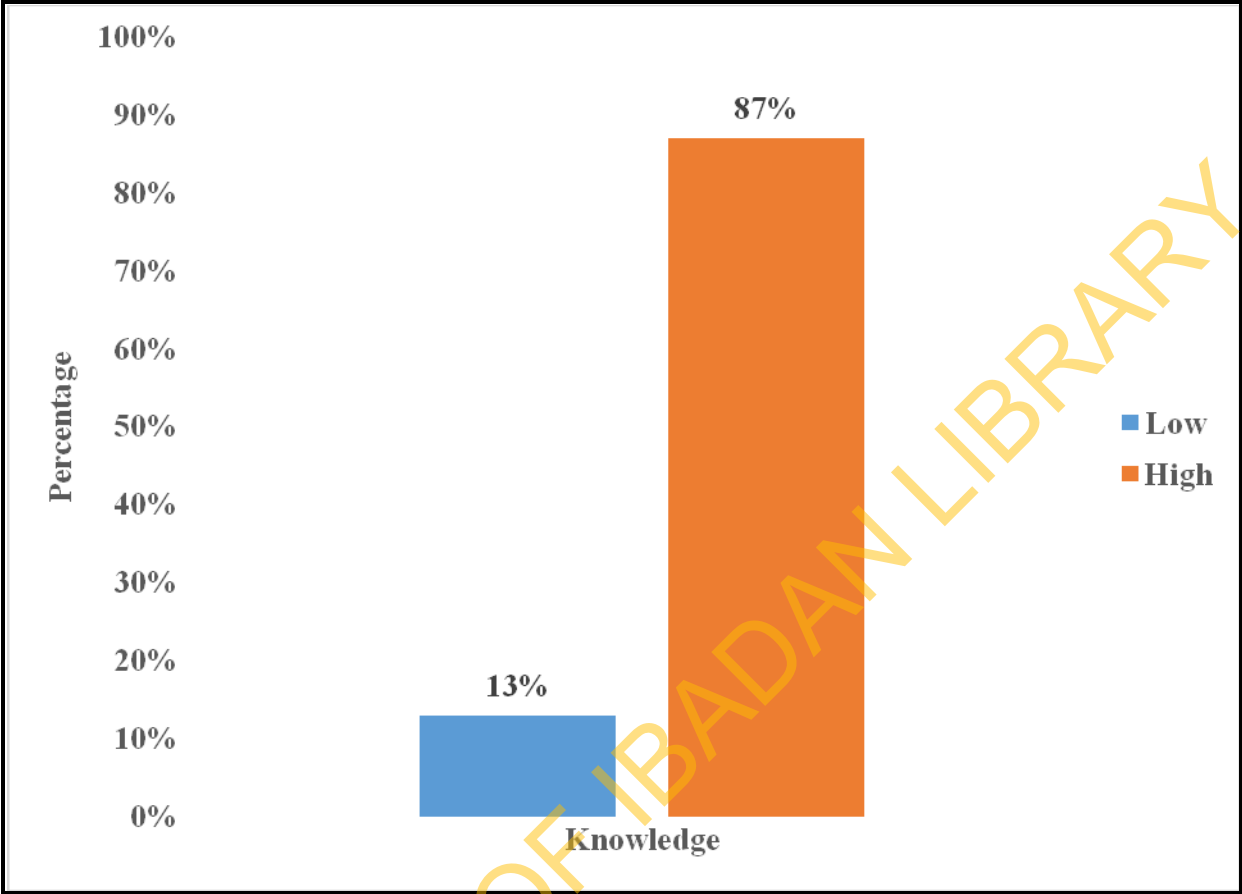


Fig 4.1: Respondents Knowledge Score on Sexting

4.3 Respondents risk perception towards sexting

Table 4.3 shows the respondents perception towards sexting. 82.4% of the respondents felt that sexting eventually leads to sexual relationships. Many respondents (90.8%) have it in their thought that sexting distracts an individual involved in it from concentrating on academic activities. Almost all the respondents (92.7%) agreed that sexual relationships which results from sexting leads to unplanned pregnancy. There were more respondents (79.4%) who agreed that sexting might in the long run lead to rape. Many respondents (73.5%) felt sexting might result in someone being cyber-bullied. More respondents (80.7%) believed that sexting may eventually lead to depression.

Fig. 4.2 shows the respondents' perception score. 87% of respondents (87%) had a good perception of sexting while 13% had a poor perception.

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Table 4.3: Respondents risk perception towards sexting

(N = 238)

Variable	Frequency	Percent %
I feel sexting eventually leads to sexual relationships		
Agree	196*	82.4
Disagree	42	17.6
I think sexting distracts individuals involved from academic activities		
Agree	216*	90.8
Disagree	22	9.2
Sexual relationships resulting from sexting leads to unplanned pregnancies		
Agree	220*	92.7
Disagree	18	7.6
Sexting may in the long run lead to rape		
Agree	198*	79.4
Disagree	49	20.6
I feel sexting can cause one to be cyber bullied		
Agree	175*	73.5
Disagree	63	26.5
I believe sexting may eventually lead to depression		
Agree	192*	80.7
Disagree	46	19.3

***Correct-Responses**

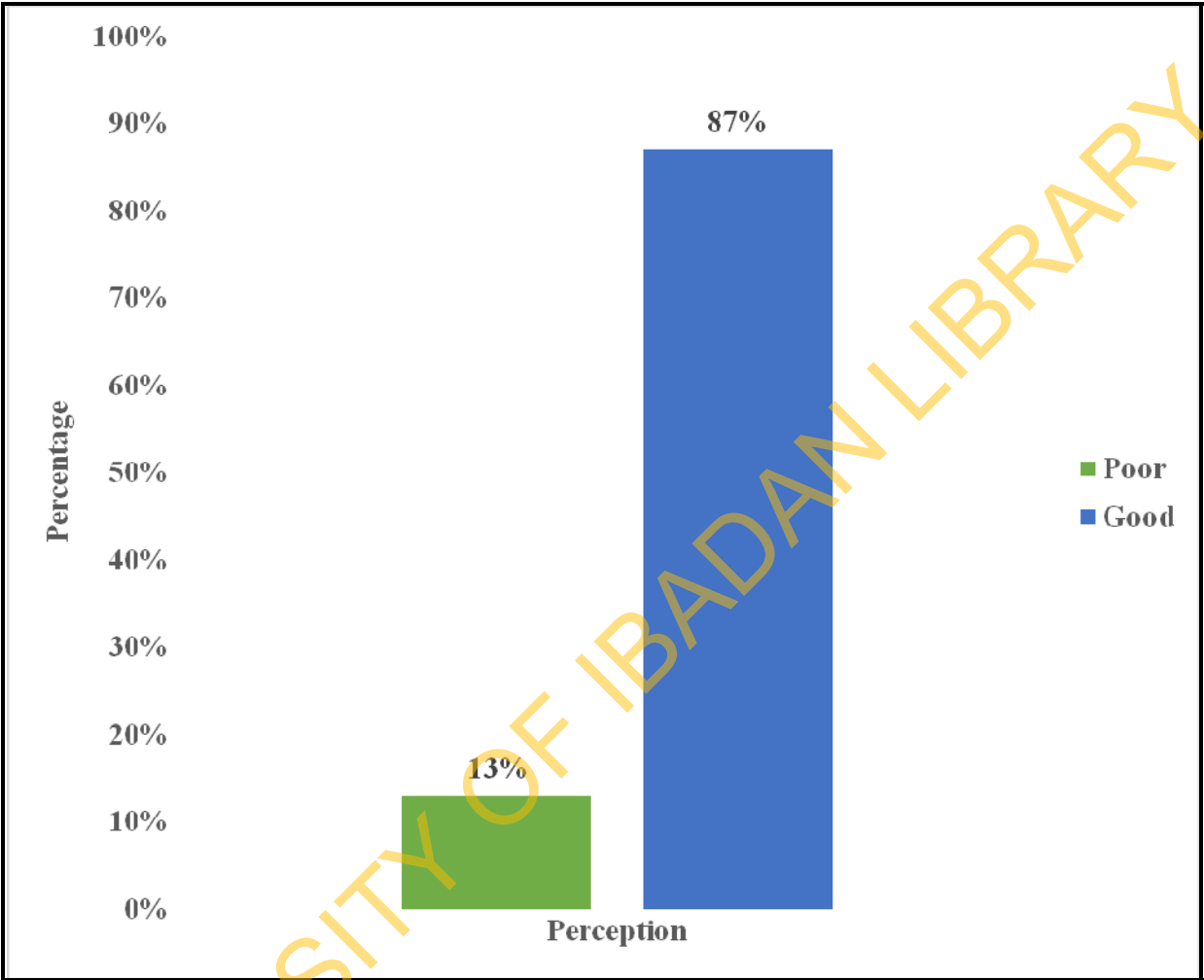


Fig. 4.2: Respondents' sexting perception score

4.4 Respondents Practice of Sexting

Table 4.4 shows the respondents' practice of sexting. About 50% had never sent sexual text message, this is followed by 34.5% who sent sexual text messages always, while 63.9% had never received a sexual text message, some (13.69%) receive sexual text messages always and 11.3% and 1.9% receive sexual text messages when necessary and rarely respectively. About half of the respondents (50.4%) had never sent a naked/half naked picture. Followed by some 27.3% who always send naked/half naked picture while 11.3% and 10.9% sent naked/half naked picture when necessary and rarely respectively.

Majority of the respondents (62.6%) had never received a naked/half naked picture while 15.5% receive it always, 11.3% receive it when necessary and 10.5% rarely receive such message. Many respondents (61.8%) had never requested for a naked/half naked picture while 20.6% request for it always. More than half of the respondents (53.4%) had never made a sexual video of themselves and send while 29% always make a sexual video of themselves and send. More of the respondents (62.6%) had never received a sexual video while 19.7% receives sexual video always. While 53.4% of respondents never request for sexual videos, 29% request for sexual videos always.

The prevalence of sexting among in-school adolescents in Oluyole Local Government of Oyo State is 31.4%. Fig. 4.3 shows the respondents' sexting practice score. Overall, it was found that 18% do not practice sexting at all, 52% had a low sexting practice while 30% had a high sexting practice.

Table 4.4: Respondents' Practice of Sexting**(N = 238)**

Variable	Always (%)	Never (%)	When Necessary (%)	Rarely (%)
I send sexual text message	82 (34.5)	117 (49.2)	16 (6.7)	23 (9.7)
I receive sexual text message	33 (13.9)	152 (63.9)	27 (11.3)	26 (10.9)
I send naked/half naked picture	65 (27.3)	120 (50.4)	27 (11.3)	26 (10.9)
I receive naked/half naked picture	37 (15.5)	149 (62.6)	27 (11.3)	25 (10.5)
I request for naked/half naked picture	49 (20.6)	147 (61.8)	20 (8.4)	22 (9.2)
I make a sexual video of myself and send	69 (29.0)	127 (53.4)	20 (8.4)	22 (9.2)
I receive sexual videos	47 (19.7)	149 (62.6)	20 (8.4)	22 (9.2)
I request for sexual videos	69 (29.0)	127 (53.4)	20 (8.4)	22 (9.2)

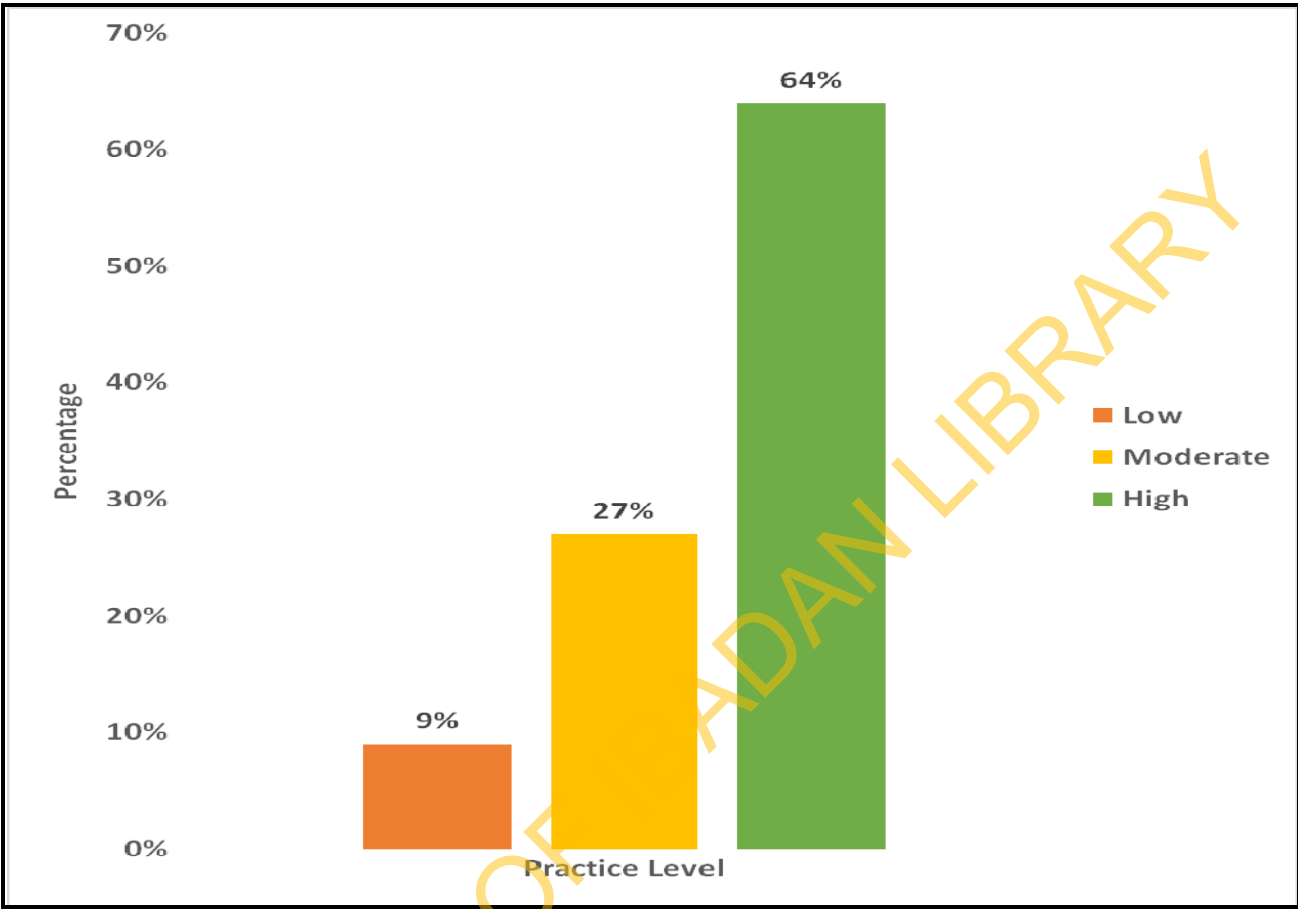


Fig. 4.3: Respondents' Sexting Practices Score

4.5 Factors Influencing Sexting among the Respondents

Table 4.5 shows factors influencing sexting among the respondents. 77.7% of respondents agreed that peer pressure influences sexting and 23.3% disagreed. 80.3% listed substance use as one of the factors influencing sexting. Another factor mentioned to be contributing to sexting by 79.8% was curiosity while assessing the impelling factors, sense of belonging and Infatuation were also mentioned by the respondents with 78.6% and 74.4% agreeing and 22.4% and 25.6% disagreeing respectively. Likewise, Partner's decision (77.7%), threat/blackmail (81.9%), love or affection expression (79.8%) were other sexting contributing factors mentioned. Lastly, 88.2% said that sexting is safer than sex and 11.8% standing against the statement.

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Table 4.5: Factors Influencing Sexting among the Respondents

(N = 238)

Variable	Frequency	Percent %
Peer pressure		
Agree	185	77.7
Disagree	51	21.4
No Response	2	.8
Substance use		
Agree	191	80.3
Disagree	44	18.5
No Response	3	1.3
Curiosity		
Agree	190	79.8
Disagree	43	18.1
Sense of belonging		
Agree	187	78.6
Disagree	51	21.4
Infatuation		
Agree	177	74.4
Disagree	56	23.5
Partner's decision		
Agree	185	77.7
Disagree	48	20.2
Threat/Blackmail		
Agree	195	81.9
Disagree	38	16.0
Love or Affection Expression		
Agree	190	79.8
Disagree	43	18.1
The believe that it is safer than sex		
Agree	210	88.2
Disagree	28	11.8

4.6 Associated Risks Involved in Sexting

Table 4.6 shows the associated risks involved in sexting. 79.4% agreed that sexting brings about a low self-esteem. Majority of the respondents (76.5%) agreed that sexting attracts unwanted attention from negative people. 81.1% agreed that sexting brings blackmail, 78.2% and 77.3% said that sexting results in emotional stress and high level of anxiety respectively. More of the respondents (76.9%) said that sexting compromises or ruin someone's reputation.

Almost all the respondents (80.7%) agreed that sexting has a high risk of getting in touch with a sexual predator, and 81.5% agreed that sexting could lead to prosecution later in the future. Fig. 4.4 shows the severity of sexting consequences which ranges from "Low" to "High". Majority (64%) pointed out that the severity of sexting consequences is high, 27% mentioned that it is moderate while 9% mentioned that the consequences is low (Table 4.6).

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Table 4.6: Associated Risks Involved in Sexting

(N=238)

Variable	Frequency	Percent (%)
It brings a low self esteem		
Agree	189	79.4
Disagree	49	20.6
It attracts unwanted attention from negative people		
Agree	182	76.5
Disagree	56	23.5
It often brings blackmail		
Agree	193	81.1
Disagree	45	18.9
It may result in emotional distress		
Agree	186	78.2
Disagree	52	21.8
It results in high level of anxiety		
Agree	184	77.3
Disagree	54	22.7
It compromises or ruin someone's reputation		
Agree	183	76.9
Disagree	55	23.1
There is a risk of getting in touch with a sexual predator		
Agree	192	80.7
Disagree	46	19.3
It could lead to prosecution later in the future		
Agree	194	81.5
Disagree	44	18.5

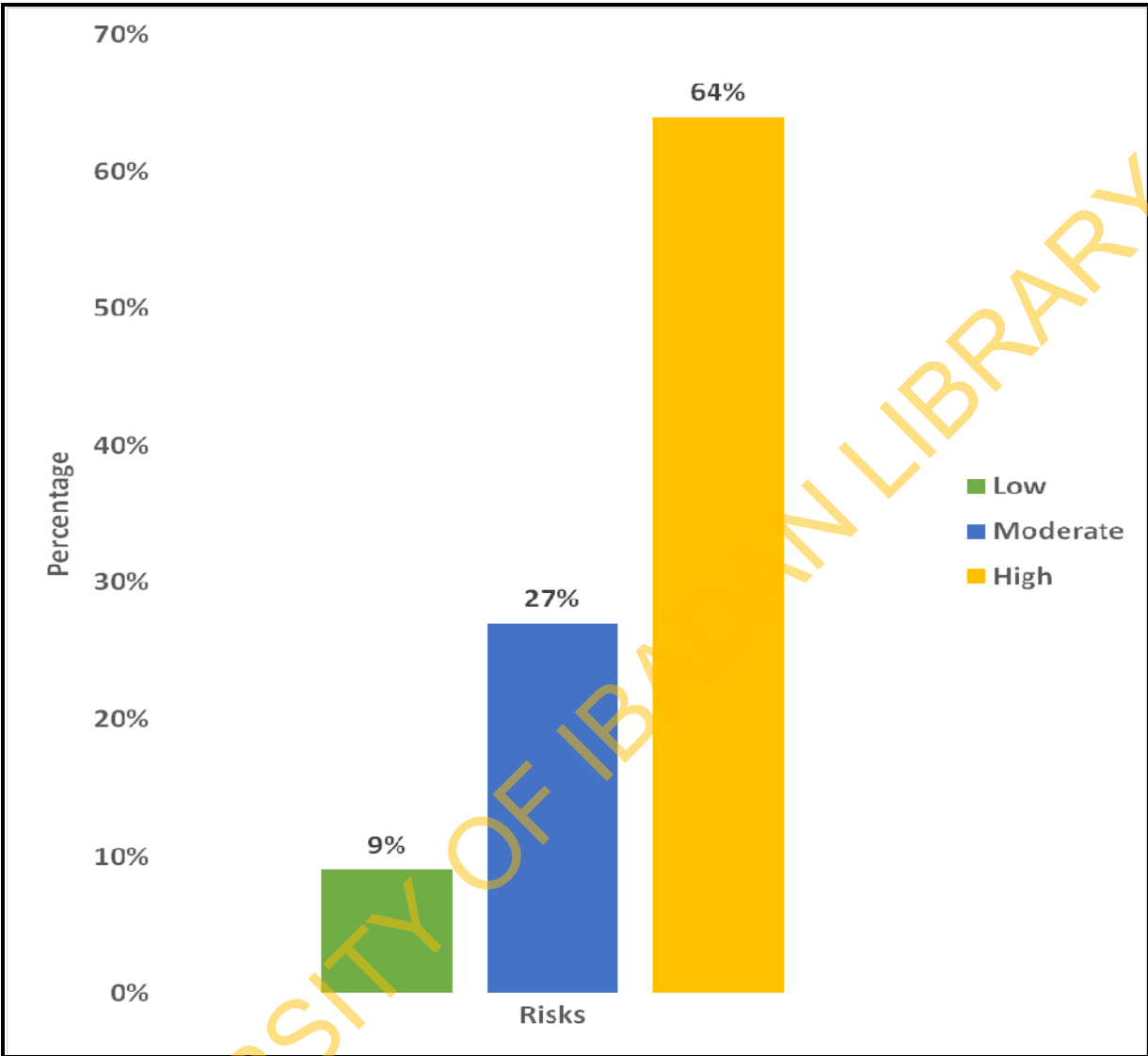


Fig. 4.4: Associated risks involved in Sexting

4.7 Hypothesis Testing

4.7.1 Hypothesis one:

There is no significant association between the sex of respondents and the practice of sexting among adolescents attending selected secondary schools in Oluyole Local Government Area of Oyo State.

Pearson Chi-Square was used in testing this hypothesis. It was observed that there was no significant association between the sex of respondents and practice of sexting ($X^2(2) = 3.6$, $p = 0.16$). The null hypothesis is hereby accepted (Table 4.7).

Table 4.7: Chi-square analysis showing the association between the sex of respondents and the practice of sexting

Variable	Sexting Practices			Total N (%)	Chi square	df	p- value	Hypotheses
	Do Not Practice (%)	Low Practice (%)	High Practice (%)					
Sex								
Male	14(33.3)	53(42.7)	37(51.4)	104(100)	3.6	2	0.16	Accepted
Female	28(20.9)	71(53)	35(26.1)	134(100)				

4.7.2 Hypothesis Two:

There is no significant association between the class of respondents and the practice of sexting among adolescents attending selected secondary schools in Oluyole Local Government Area of Oyo State.

Pearson Chi-Square was used in testing this hypothesis. It was observed that there was no significant association between the class of respondents and practice of sexting ($\chi^2(10) = 11.38$, $p = 0.33$). The null hypothesis is hereby accepted (Table 4.8).

Table 4.8: Chi-square analysis showing the association between the class of respondents and practice of sexting

Variable	Sexting Practices			Total N (%)	Chi square	df	p- value	Hypotheses
	Do Not Practice (%)	Low Practice (%)	High Practice (%)					
Class								
JSS1	3(30.0)	5(50.0)	2(20.0)	10(100.0)	11.38	10	0.33	Accepted
JSS2	3(30.0)	5(50.0)	2(20.0)	10(100.0)				
JSS3	1(7.1)	6(42.9)	7(50.0)	14(100.0)				
SSS1	10(25.0)	16(40.0)	14(35.0)	40(100.0)				
SSS2	6(13.0)	30(65.2)	10(21.7)	46(100.0)				
SSS3	19(16.1)	62(52.5)	37(31.4)	118(100.0)				

4.7.3 Hypothesis Three:

There is no significant association between mobile phone ownership and sexting practices among adolescents attending selected secondary schools in Oluyole Local Government Area of Oyo State.

Pearson Chi-Square was used in testing this hypothesis. It was observed that there was a significant association between the mobile phone ownership and practice of sexting ($\chi^2(2) = 5.2$, $p = 0.044$). The null hypothesis is hereby rejected (Table 4.9).

Table 4.9: Chi-square analysis showing the association between the ownership of mobile phone and practice of sexting

Variable	Sexting Practices			Total N (%)	Chi square	df	p- value	Hypotheses
	Do Not Practice (%)	Low Practice (%)	High Practice (%)					
Mobile Phone Ownership								
Yes	28(17.1)	79(48.2)	57(34.8)	164(100)	5.2	2	0.044	Rejected
No	14(18.9)	45(60.8)	15(20.3)	74(100)				

4.7.4 Hypothesis four:

There is no significant association between the knowledge of respondents on sexting and the practice of sexting among adolescents attending selected secondary schools in Oluyole Local Government Area of Oyo State.

Pearson Chi-Square was used in testing this hypothesis. It was observed that there was no significant association between the knowledge of respondents on sexting practice of sexting ($X^2(2) = 0.779$, $p = 0.68$). The null hypothesis is hereby accepted (Table 4.10).

Table 4.10: Chi-square analysis showing the association between the knowledge of respondents and Practice of sexting

Variable	Sexting Practices			Total N (%)	Chi square	df	p- value	Hypotheses
	Do Not Practice (%)	Low Practice (%)	High Practice (%)					
Knowledge								
Low	4(12.9)	16(51.6)	11(35.5)	31(100)	0.779	2	0.68	Accepted
High	38(18.4)	108(52.2)	61(29.5)	207(100)				

4.7.5 Hypothesis five:

There is no significant association between the perception of respondents on sexting and the practice of sexting among adolescents attending selected secondary schools in Oluyole Local Government Area of Oyo State.

Pearson Chi-Square was used in testing this hypothesis. It was observed that there was no significant association between the perception of respondents on sexting practice of sexting ($X^2(2) = 4.04, p = 0.13$). The null hypothesis is hereby accepted (Table 4.11).

Table 4.11: Chi-square analysis showing the association between the perception of respondents and Practice of sexting

Variable	Sexting Practices			Total N (%)	Chi square	df	p- value	Hypotheses
	Do Not Practice (%)	Low Practice (%)	High Practice (%)					
Poor	2(6.3)	17(53.1)	13(40.6)	32(100)	4.04	2	0.13	Accepted
Good	40(19.4)	107(51.9)	59(28.6)	206(100)				

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This study explores the practice of sexting among in-school adolescents. The demographic characteristics of the respondents, their knowledge on sexting, perception of sexting, practice of sexting, factors influencing sexting and the associated risks involved in sexting were investigated. The implication of the findings of this study to health promotion and education was discussed and recommendations were made at the end of this report.

5.1.1 Socio-demographics characteristics

The study found that respondents' age ranged from the age of 10 years to 19 years which according to Nigeria (2003) DHS and Huebler (2005) is found to be within the age range of secondary school student in Nigeria. The total number of students (238) averaged 14.5 ± 1.6 years. It was found that the dominant ethnic group is the Yoruba ethnic background and this could be because the study was carried out in the southwest geopolitical zone of Nigeria which is densely dominated by the Yoruba tribe. The major religion practiced was Christianity which could be because majority of the residents practiced Christianity and majority of the students attended schools located in their Local Government of residence. There were many students from the senior class who took part in this study especially those in Senior Secondary School (SSS) three and this is because they should be mature enough to give adequate and valid answers to the researcher's question. It was discovered that the parents of the students were educated up to the secondary school level or more. It was also discovered that many of the respondents own a mobile phone.

5.1.2 Respondents knowledge on sexting

Knowledge according to concise oxford dictionary is information and skills acquired through experience and/or education. The study found that majority of the respondents knew what sexting was. Many respondents' belief that that mobile phones can encourage sexting and this may not be unconnected with the fact that majority own a mobile phone. Also this was found to

be in line the works of Farrow (2018) who claimed that teen access to smart phones has led to increase in teen sexting but contrary to ElHage (2018) who claimed that sexting is only being carried out by minority of teens. The study found that majority of the respondents had a high knowledge of Sexting and were are aware of its consequences as some mentioned that it could give a bad reputation and have adverse legal consequences which is in line with Strassberg, Cann and Velarde (2017) which found that psychosocial and even the legal risks associated with sexting by minors are significantly serious.

5.1.3 Respondents risk perception towards sexting

The study found that majority of the respondents had a good perception of sexting. It was found that sexting eventually leads to sexual relationships which is in line with Allyson, Elizabeth, Riley, Melissa, and Gregory (2019) where sexual assault between 46.7-80.3% of college students were those who had at one time or the other exchanged sext. It was also discovered that sexting distracts an individual involved in it from concentrating on academic activities which is in line with Rice et.al. (2014); Kolawole and Ayeni (2018) who had underreported that sexting is expected to have some negative effects on the education of students.

5.1.4 Respondents practice of sexting

The study found that though there were many respondents who practiced sexting on the low level, there were few respondents who did not practice sexting at all and few had a high practice. Sexting practices among the respondents include sending and receiving sexual text message, sending and receiving naked/half naked picture, making, sending/receiving sexual video of themselves and send. The study found that the prevalence of sexting among in-school adolescent in Oluyole Local Government of Oyo State is 31.4%. This explains why an approximate number of 3 out of 10 respondents practice sexting. This is a moderately high prevalence of sexting among the teens and this is in line with Strassberg, Cann and Velarde (2017) whose findings suggested that sexting among adolescents remain a fairly common behaviour. Also in Strassberg, Rullo and Mckinnon (2012), the prevalence rates of sending and receiving sexually explicit cell phone picture adolescents was low with a prevalence of 1/5 accounting for about 20% of the population of study. Together, these reports indicates that sexting by adolescents is common and that it is higher than 2.5% reported by Mitchell et.al. (2012) and O'Connor (2011) Although

many claimed to be aware of the emotional and legal consequences, they simply do not take this seriously which is in line with Mohan (2013) which stated that 40% of young people were reported sending and 50% reported transmitting sexually suggestive or explicit images/messages without anticipating emotional and/or legal ramifications.

5.1.5 Factors Influencing Sexting among the Respondents

The respondents for these research were aged between 10 years and 19 years of age and this seems to be the time adolescents always want to try new things which are in vogue. The study found that peer pressure, substance intake, threat/Blackmail and the belief that sexting is safer in its entirety than sex were the leading factors that influence sexting among the male and female respondents which is contrary to Casas and Rey (2019) where participation in cyber gossip and the need for popularity were the leading factors for the female respondents while for the male respondents, it was level of normalization and willingness to sext. Another fact that influences sexting was sense of belonging which is similar to Rey, Ojeda, Casas, Mora-Merchan and Elipe (2019) which explains that one of the factors that influence sexting is the need to be popular.

5.1.6 Associated Risks Involved in Sexting

The study found that the leading risks associated with sexting were low self-esteem, blackmail which is in line with Englander (2010) who mentioned in his research that there has been reported cases where the threat to make public a single explicit picture sent to a boyfriend/girlfriend has been used to blackmail the other into sending additional more explicit pictures. Another associated risk is a high risk of getting in touch with a sexual predator which is in line with Ingham (2019) who explained that the dangers of teen sexting included risk of sexual predators, ruining of teen's reputation and lasting damage in the future. It was found that sexting though may not have a present effect, there could be later consequences such as prosecution in the future which is in line with Rey et al. (2019) where it was found that sexting does not appear to have a negative impact in the short term. Lithwick (2009) and Schorsh, (2010) who reported several instances where there were serious legal consequences for teens for sending and explicit cell phone pictures. Also Lutz (2010) mentioned a case in India where a 13-year old girl and a 12-year old boy were charged for child pornography and child exploitation after it was discovered that they were using their cell phones to exchange nude pictures of themselves.

5.1.7 Implication of findings for Health Promotion and Education

From the findings of this study, it was shown that majority of the students who took part in this study knew what sexting was, it is still necessary that they are further educated on its negative impacts. The students were fully aware of the copious adverse effect but unfortunately, many who own a mobile phone still engage in the sexting act. While the retrieval of the mobile phone from them may not be the best idea, it is necessary that its usage be strictly monitored and there is need for retraining of the students to make sure that their good knowledge and perception is transferred into practice as only few do not practice sexting at all while other practice either on a high scale or a low scale with the prevalence of 31.4% which is too high at their level.

Peer pressure, substance intake, threat/Blackmail, sense of belonging and the belief that sexting is safer in its entirety than sex were the leading factors that influences. The adverse effect of these should be discussed with the students and they be made to understand that they have a mind of their own where they decide on their own without a negative influence from their peers. The leading risks associated with sexting were low self-esteem, blackmail, a high risk of getting in touch with a sexual predator and prosecution later in the future. All these can be better explained to the students with vivid examples given so that the adverse effect of these can be passed across in knowledge. They should be made to understand that a great future lies ahead of them and they should ignore/shun anything whatsoever that would cloud their bright future.

5.2 Conclusion

This study investigated the practice of sexting and its associated sexual risks among in-school adolescents in Oluyole Local Government Area. Findings from the study revealed that many of the respondents own a mobile phone. Majority of the respondents had a high knowledge of Sexting and were aware of its consequences. There was a good perception of sexting but it has some negative effects on the education of students. There were few respondents who do not practice sexting at all. An approximate number of 3 out of 10 respondents practice sexting. Peer pressure, substance intake, threat/Blackmail, sense of belonging and the belief that sexting is safer in its entirety than sex were the leading factors that influences sexting. The leading risks associated with sexting were low self-esteem, blackmail, a high risk of getting in touch with a sexual predator and prosecution later in the future. There is an urgent need to orientate/re-

orientate the students on sexting and further educates them stating the social, academic and health consequences coupled with delayed consequences in the future.

5.3 Recommendations

Based on the findings from this study, the following recommendations were made:

1. The purpose of mobile phones in schools should be adequately explained to the students as for sole purpose of information gathering and research and not for illicit purpose.
2. The students should be made to understand that the practice of sexting will distract them from their academic activities which could mar their future.
3. The use of mobile phones at the early stages of the Junior Secondary School should be discouraged since most students do not at this time have a mind of their own and majority can hardly make individual decisions.
4. There should be appropriate monitoring of students use of mobile phones and there should strict penalty for offenders so as to serve as deterrent for others.
5. There should be proper understanding by the management that as adolescents, they explore both positive and negative options and like to try new things without proper thinking about the end result which most times do lead to regrets later in life. Thus, the emotional and mental state of mind of the students should be worked on and provide a counsellor from whom the students can seek advice where necessary.
6. There should be a forum for the students to adequately understand that the negative consequences of sexting is high and may not even be immediately but later in the future.
7. There should be a sort of rehabilitation for those who have been grossly involved in sexting, wishes to put a stop to it but finding is difficult to do so.

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APPENDICES

APPENDIX I

QUESTIONNAIRE

**PRACTICE OF SEXTING AND ITS ASSOCIATED SEXUAL RISKS AMONG
IN-SCHOOL ADOLESCENTS IN OLUYOLE LOCAL
GOVERNMENT AREA, OYO STATE**

INFORMED CONSENT

Greetings, I am a Master of Public Health student of the University of Ibadan. I am writing my research project which is investigating PRACTICE OF SEXTING AND IT'S ASSOCIATED SEXUAL RISKS AMONG IN-SCHOOL ADOLESCENTS IN OLUYOLE LOCAL GOVERNMENT AREA. The questions won't take much of your time. I will be grateful if you can spend some time answering these questions honestly. All the information provided will be kept confidential and will not be shown to another person. There are no rights or wrong answers to the questions asked or the statements made, what is desired of you is honest responses to ensure the success of the research. This is a voluntary participation and you have the right to withdraw at any time. Be assured that there are no risks associated with your participation in this study. All information provided will be treated with utmost confidentiality and will be solely used for research purpose. Kindly indicate your willingness to participate by inputting your initials below.

CONSENT: Now that I understand the content of the process of this study, I am willing to take part in this study survey.

Initials:.....

Date:.....

Serial No:.....

SECTION A: SOCIO-DEMOGRAPHIC DATA

1. Sex: 1. Male <input type="checkbox"/> 2. Female <input type="checkbox"/>
2. Age as at last birthday
3. Ethnic group: 1. Yoruba <input type="checkbox"/> 2. Hausa <input type="checkbox"/> 3. Igbo <input type="checkbox"/> 4. Others
4. Class: 1. JSS 1 <input type="checkbox"/> 2. JSS 2 <input type="checkbox"/> 3. JSS 3 <input type="checkbox"/> 4. SS1 <input type="checkbox"/> 5. SS2 <input type="checkbox"/> 6. SS3 <input type="checkbox"/>
5. Religion: 1. Christianity <input type="checkbox"/> 2. Islam <input type="checkbox"/> 3. Traditional <input type="checkbox"/> 4. Others...
6. Father's education: 1. No formal education <input type="checkbox"/> 2. Primary <input type="checkbox"/> 3. Secondary <input type="checkbox"/> 4. Postsecondary <input type="checkbox"/>
7. Mother's education: 1. No formal education <input type="checkbox"/> 2. Primary <input type="checkbox"/> 3. Secondary <input type="checkbox"/> 4. Postsecondary <input type="checkbox"/>
8. Do you own a mobile phone? Yes <input type="checkbox"/> No <input type="checkbox"/>

SECTION B: KNOWLEDGE OF SEXTING AMONG IN-SCHOOL ADOLESCENTS

Instruction: please tick the appropriate answer you feel for each question

9. Which of the following best define sexting? (1) sending, receiving or forwarding sexually explicit messages, photograph or messages primarily between mobile phones of oneself to others (2) Writing a sexually explicit messages on papers to friend and families (3) browsing the internet for sexual messages (4) I do not know
10. Use of mobile phones (internet) encourages sexting Yes No
11. Sexting can affect a person's mental health Yes No
12. Sexting IS a risky practice Yes No
13. Sexting can give a bad reputation? Yes No
14. Sexting could have legal consequences? Yes No
15. Sexting can trigger physical sexual behaviour? Yes No

SECTION C: PERCEPTION OF SEXTING AMONG IN-SCHOOL ADOLESCENTS

S/N	PERCEPTION STATEMENTS	Agree	Disagree
16	I feel sexting eventually leads to sexual relationships		
17	I think sexting distracts individuals involved from academic activities		
18	Sexual relationships resulting from sexting leads to unplanned pregnancies		
19	Sexting may in the long run lead to rape		
20	I feel sexting can cause one to be cyber bullied		
21	I believe sexting may eventually lead to depression		

SECTION D: PRACTICE OF SEXTING AMONG IN-SCHOOL ADOLESCENTS

Instruction: please tick the appropriate answer you feel for each question

S/N		Always	When necessary	Rarely	Never
22	I send sexual text message				
23	I receive sexual text message				
24	I send naked/half naked picture				
25	I receive naked/half naked picture				
26	I request for naked/half naked picture				
27	I make a sexual video of myself and send				
28	I receive sexual videos				
29	I request for sexual videos				

SECTION E: FACTORS INFLUENCING SEXTING AMONG IN-SCHOOL ADOLESCENTS

Instruction: Please tick the appropriate answer you feel for each question

S/N	The following factors influences sharing of sexually explicit messages, pictures or videos?	Agree	Disagree
30.	Peer pressure		
31.	Substance use		
32.	Curiosity		
33.	Sense of belonging		
34.	Infatuation		
35.	Partner decision		
36.	Threat/Blackmail		
37.	Love or Affection Expression		
38.	The believe that it is safer than sex		

SECTION F: ASSOCIATED RISKS INVOLVED IN SEXTING AMONG ADOLESCENTS**Instruction: please tick the appropriate answer you feel for each question**

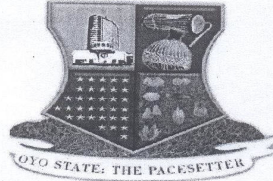
S/N	The following are associated risks involved in sexting among adolescents	Agree	Disagree
39	It brings a low self esteem		
40	It attracts unwanted attention from negative people		
41	It often bring blackmail		
42	It may result in emotional distress		
43	It results in high level of anxiety		
44	It compromises or ruin someone's reputation		
45	There is a risk of getting in touch with a sexual predator		
46	It could lead to prosecution later in the future		

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APPENDIX II
ETHICAL APPROVAL LETTER

TELEGRAMS.....

TELEPHONE.....



MINISTRY OF HEALTH
DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION
PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

Your Ref. No.

All communications should be addressed to

the Honorable Commissioner quoting

Our Ref. No. AD 13/479/ 1407

15th August, 2019

The Principal Investigator,
Department of Health Promotion and Education,
Faculty of Public Health,
College of Medicine,
University of Ibadan,
Ibadan.

Attention: Ayoola Deborah

**ETHICS APPROVAL FOR THE IMPLEMENTATION
OF YOUR RESEARCH PROPOSAL IN OYO STATE**

This is to acknowledge that your Research Proposal titled: "Practice of Sexting and Its Associated Sexual Risks among In-School Adolescents in Oluyole Local Government Area, Oyo State." has been reviewed by the Oyo State Ethics Review Committee.

2. The committee has noted your compliance. In the light of this, I am pleased to convey to you the full approval by the committee for the implementation of the Research Proposal in Oyo State, Nigeria.
3. Please note that the National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations, in line with this, the Committee will monitor closely and follow up the implementation of the research study. However, the Ministry of Health would like to have a copy of the results and conclusions of findings as this will help in policy making in the health sector.

4. Wishing you all the best.


Dr. Abbas Gbolahan
Director, Planning, Research & Statistics
Secretary, Oyo State Research Ethics Review Committee