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**FACULTY OF HUMANITY AND EDUCATION
MASTER OF ARTS IN EDUCATION**

**THE INFLUENCE OF TECHNOLOGICAL SEXUAL EXPLICIT MATERIALS ON
STUDENTS' LEARNING IN SECONDARY SCHOOLS IN DODOMA
MUNICIPALITY**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE MASTER OF ARTS IN EDUCATION OF ST. JOHN'S
UNIVERSITY OF TANZANIA**

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CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance by St John’s University of Tanzania, a dissertation entitled: “***The Influence of Technological Sexual Explicit Materials on Students’ Learning in Secondary Schools in Dodoma Municipality***” in partial fulfillment of the requirements for the degree of Master of Arts (Education) of St John’s University of Tanzania.

.....

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DEDICATION

This work is dedicated to my beloved children **Devine, Patricia, Frank** and **Columba** for their encouragement and support.

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LIST OF ABBREVIATIONS

CD	Compact Disk
CIPA	Children's Internet Protection Act
FGD	Focus Group Discussion
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
NECTA	National Examination Council of Tanzania
PSHE	Personal, Social Health and Economic Education
SEM	Sexual explicit materials
SPSS	Statistical Package for Social Sciences
STD	Sexual Transmitted Diseases
TSEM	Technological Sexual Explicit Materials
TV	Television
URT	United Republic of Tanzania
USA	United States of America

ABSTRACT

This study explored the influence of technological sexual explicit materials on students learning in Dodoma municipality secondary schools. Mixed research approaches with the help of sequential exploratory research design were opted to accomplish the study. The researcher employed questionnaires, interviews, focused group discussion and documentary review in gathering data. It was found that, majority of the secondary school students are accessing and using technological sexual explicit materials. The findings of this study revealed that about (46.7%) of students agreed to accessing and using technological sexual explicit materials, while 33.3% strongly agreed to have used technological sexual explicit materials. This study further found that, 50 (46.3%) of students agreed that most students have been affected academically by viewing pornographic materials. Also, teachers were found to possess negative perception on students who watch pornographic materials at school and at home. Based on these findings the study recommended for various measures to be taken to prohibit various technological Medias that enable students to have access and use technological sexual explicit materials. This study suggest that this could be achieved by enacting a law for pornographic materials and making sure that various technological materials including websites which contain technological sexual explicit materials are secured from students to accessing them. Likewise the study recommends that, all stakeholders need to cooperate in taking care of youths in the society including providing them with lessons on social ethics. Thus, the government under the ministry responsible needs to strengthen the subjects at school that give student social ethics on how to behave in the community and have fear of God.

Key words: *sexual explicitly material, pornography, social media, internet.*

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This section describes the background of the study, the statement of the problem, objectives of the study, research questions, and significance of the study, delimitation of the study and operational definition of the key terms.

1.1.1 Background of the problem

Digital technology has become vital in the modern days' life of the people (Rideout, 2001). It changes rapidly and integrates into our society at such an accelerated rate. It is hard to keep up with it, let alone manifest on the effects it has in our life. The uses of technologies such as internet and social media influence students' academic learning both positively and negatively (Mehmood & Tawir, 2013).

In the modern age the use of technology is inevitable in both developed and developing countries. Gillwald, Mileke and Stork (2010) assert that technology plays a significant role in African countries' development, and this is the fact which is now well documented. Technology is rapidly adopted and used in teaching and learning in both developed and developing countries. Mikre (2011) maintains that Information and Communication Technologies (ICTs) are making dynamic changes in the society in every aspect of life such as economical, agriculture, political and social aspects.

Today's generation of teenagers, born in the 1990s, labeled as iGeneration (Internet generation) is the most connected generation ever technologically. These youths are digital inhabitants growing up in an era of massive invention of technology (Rosen, 2010). Gross (2004) maintains that, adolescents' youth uses digital technological forms for various purposes, among these are to interact with friends, acquaintances and discussing academic matters. This means that they use technology to communicate with offline and online friends who they see often and keep in touch with those they see rarely. However, various studies indicate that, drop in students' grades and academic learning, and lack of time for studies could be linked to the students' exposure to technological sexual explicit materials (Banquil et al, 2009, Kirschner & Karpinski, 2010, Ndaku, 2013). For example,

internet provides a unique venue for sexual opening and exploration of youth (Gonsalves, 2010).

Mattebo (2014) maintains that today's youth (students) accessing and using pornography has become part and parcel of their life, since they spend more time online exploring pornography, rather than using internet for learning purposes. This means that recently the use of technology among youth in developing countries including Tanzania has tremendously changed, since the youth have turned to using technologies such as internet, twitter, viper, YouTube, WhatsApp and blogs for accessing sexual explicit rather than for learning purpose. Gonsalves (2010, p.20) maintains that youth resort to utilizing internet for sexual related activities in times of great stress as a means of coping. Moreover, Ybarra and Mitchell (2005) found in their study that about 15% of adolescents' lied about their age just to access to website with sexual explicit materials. Cooper, Boies, Maheu and Greenfield (1999), Peter and Valkenburg (2006) stressed that relative to other social media, internet is considered to be a highly sexualized environment. Numerous studies have indicated that there is significant increase in the number of youth who intentionally or accidentally encountered pornographic materials online (Mitchell, Wolak & Finkelhor, 2007, Wolak et al. 2007).

Studies in developed countries indicate that, secondary schools' students who explore technological sexual explicit materials have increased day after day. The study conducted by Mattebo (2014) in Sweden noted that, about 90% of children aged 11 years old use internet and have daily access to it, whereby among the same group of adolescents 82% use internet for their own private matters. However, the study by Wanajak (2011) in Thailand on "internet use and its impact on secondary school students in Chiang Mai, Thailand" reported that technological materials such as internet materials have been beneficial for learning among secondary school students. The study in Thailand revealed that, 31.03% of respondents reported to have benefited from the use of internet in acquiring more knowledge, while 25.07% of respondents benefited by using it to search for information of interest and gratification, and 25.59% benefited for using it for relaxation. However, Wanajak further argued that, despite the benefits which technological materials offered to students particularly for learning purpose, yet significant number of students used it for exploring sexual explicit materials, which in turn affected their academic learning.

Scholars argue that increases in students' exploration on sexual explicit materials is due to being unmonitored by their parents or lack of teachers' guidance on the effects of being exposed to such materials on students' learning (Federal Bureau of Investigation, 2011). Demonic and Griffin (2008) and Lam, Ping, Mai and Jing (2009), maintains that adolescents' access to internet pornographic materials using smartphones has tremendously risen in recent years.

The situation is the same in the case of Africa, whereby secondary students' exploration of technological sexual explicit materials is rapidly increasing, as Ndalala (2011) pointed out that, children and young people are active argentic consumers of media, using critical skills and perspectives in interpreting sexual content (Buckingham & Bragg, 2003). Study conducted by Jeckoniah and Paul (2015) on access to social media and sexual behaviour among secondary school students in Morogoro Tanzania, revealed that, majority of students (94%) had access to social networks where mobile phones and computer modems were the common means used by students to access social networks. It was observed that, students are accessing the social media without proper guidance by knowledgeable people such as teachers and parents, which increase their exposure to the risk of exploring contents related to sexual explicit materials (Jeckoniah & Paul, 2015).

Despite of the establishment of rules and regulations prohibiting child labour and sexual exploitation by Ministry of Education that governs students in secondary schools (Mutembei, 2013, p. 9 & 14) on children rights, and the article No. 14 (13) sub section (1) of the cybercrime law of 2015 which prohibit child pornography, and considers anyone who facilitate in publishing or enabling a child to access pornographic materials, or even for a child alone to access such materials through computer system to be committing a criminal offense. However, student are still using technological devices to watch sexually explicit materials, due to the absence of the strong mechanism or system for monitoring of social media content, whereby the most common setting for watching is at home (Mattebo, 2014 p.23).

From the literature reviewed, it has been observed that, numerous studies have been carried out on the impact of technology on teaching and learning (Wondimu, 2015, Longe et al, 2007). For instance, various studies were conducted on the access and use of information and communication technologies (ICTs) in learning, while another study looked into the influence of social media and students' performance in secondary schools (Wanajak, 2011). In addition, Ndalala (2012)

conducted a study which investigated on students' attitudes and the effects of pornography in South Africa.

However, little have been done in Tanzania regarding the influence of technology on students learning in secondary schools. This is substantiated by the argument made by Kihwele and Bali (2013), Magoma (2011), Rumanyika and Mashenene (2012), Jeckoniah and Paul (2015) who stressed that study need to be conducted regarding students access to pornography and its impact on academics learning in secondary schools. The implication is that, students' exploration of sexual explicit materials seems to be peripheral issue in the process of learning. Since, numerous studies indicate that students spend more time on exploring sexual explicit materials, the fact which make imperative to conduct the study on the influence of technological sexual explicit materials on students learning in secondary schools. Based on this fact, the researcher thought that it was essential to exert efforts on exploring the extent to which technological sexual explicit materials influence students learning in secondary schools.

1.2 Statement of Problem

Despite the fact that technological materials are crucial for learning purpose as they improve learning among students in secondary school. Yet, the advancement of communication technology has brought huge challenge in various countries including Tanzania particularly among youths who spend most of their time using internet technology and social media for exploring sexual explicit materials, which in turn affect their learning at schools (Banquil et al, 2009). For example, Banquil et al (2009), Kirschner and Karpinski (2010) and Ndaku (2013) stressed that the expansion of communication technology particularly internet has made possible for students to easily accessing eventually spending much of their time in exploring sexual explicit materials, which has resulted to the change on students' behavior and deteriorate their learning process.

The study by Juma (2015) on development of biological literacy in Tanzania, noted that watching films on the internet or listening to music that is sexually oriented tend to arouse sexual emotions that eventually leads students to engage in risky sexual activities, which may eventually lead them to the risk of contracting HIV, STDs and unwanted pregnancies for female students. Thus, this means that accessibility to technological sexual explicit materials among secondary schools students and

availability of uncontrolled content bring the students into risky situations that may endanger their learning and health.

Therefore, although children exposure to the sexual explicit materials is very rampant in Tanzania, yet very little is known about the influence of technological sexual explicit materials on students learning in this country. Hence, this study aimed at exploring the influence of students' use of technological devices such as smartphones, internet, and multimedia to watch sexual explicit materials and its influence on their learning.

1.3 General Objective

The main objective of this study was to explore the influence of technological sexual explicit materials on students learning in Dodoma municipality secondary schools.

1.4 Specific Objectives of the Study

This study had accomplished the following specific objectives:

1. To find the extent secondary school students in Dodoma municipality use technological sexual explicit materials.
2. To explore students' attitudes toward the effect of technological sexual explicit materials on their learning.
3. To explore teachers' perceptions towards students' usage of technological sexual explicit materials and their effects on students' learning.
4. To examine measures employed by the schools' leadership in controlling students' exposure to technological sexual explicit materials.

1.5 Research Questions

1. To what extent do secondary school students at Dodoma municipality use technological sexually explicit materials?
2. What are the students' attitudes towards the effects of technological sexual explicit materials on their learning?
3. What are the perceptions of teachers' towards students' usage of technological sexual explicit materials and their effects on students' learning?
4. What are the measures taken by the schools in controlling students against exposure and the effects of technological sexual explicit materials?

1.6 Significance of the Study

The findings of this study will help the government in determining the extent of students' use of the sexual explicit materials in secondary schools and through the ministry of education, science and technology, formulate a strategy or interventions that will assist in combating this problem among students of secondary schools in Tanzania. Likewise, the results of this study provide a yard stick for curriculum developers in designing a good intervention on teaching children about the effects of watching and listening sexual explicit materials on learning. In addition, the study provides an advice on inclusion of a topic in secondary schools' curriculum related to early exposure to sexual explicit materials and its effects on learning. Moreover, the study is expected to help teachers understand students' behaviors and their perception of sexual explicit materials and be able to know how to handle them at schools if they arise. The study is also beneficial to students as it provides them with knowledge on impact of sexual explicit materials in impeding their learning at school, and provides them with ways to cope if they encountered them intentionally or unintentionally. Furthermore, the study shall be useful both theoretically and practically to educators, whereby it serves as a body of knowledge for researchers in the related fields.

1.7 Delimitations of the Study

According to Orodho (2005) delimitations of the study refers to the boundaries of the study. This study was conducted within public and privately owned secondary schools, whereby few schools were purposively chosen in order to gain deeper understanding of the phenomenon under investigation.

In this study the focus was to explore the influence of technological sexual explicit materials on secondary school students' learning, in which the schools located within Dodoma Municipality were selected as the case study. Therefore, based on the nature of the findings, this study cannot necessarily be generalized to all secondary schools in Tanzania. Moreover, although students from both public and private schools were included as respondents for this investigation, these students differ in economic status. The difference in economic status means students who come from lower income background may not have been exposed to sexual explicit content just because of inability to possess multimedia gadgets, rather than the knowledge of their effects, which this study could not ascertain for sure. Also secondary schooling is characterized by students who are in the age (12/13 to 16/18) of adolescence, whom if not carefully handled would also be exposed to

those materials and impede their academic achievement. However, this study concentrated on exploring the views of students who are 18 years old and above.

1.8 Definition of key terms

1.8.1 Technology

Technology is an art of applying and utilization of science (George, 1990). For this study, technology refers to the application of computer programmes for editing, sending files, pictures, surfing through internet, watching and listening video content through the internet.

1.8.2 Social Media

Tess (2013) describes social media as technological related system in which people interact and share information through social networking sites, blogs, wikis, multimedia platforms, virtual game worlds. Generally social media refers to channel such as Facebook, Twitter, YouTube, WhatsApp, Instagram, Viper, Skype, Snapchat and Google plus. These media allow individuals and organizations to create, engage, and share new user generated or existing content in digital environments through multi-way communication.

1.8.3 Internet

The word Internet emanates from the words Internet Connection Network (Greenfield, 1999), which connect computers around the world by the use of a standard protocol. It is believed that the distinctive features of the Internet, such as speed, accessibility, intensity and stimulation of its content, contribute to internet applications (Greenfield, 1999). In addition, Chou (2001) indicated that the most appreciated Internet features included interactivity, simplicity, availability, and abundant and updated information. In fact, the Internet's attractiveness has increased because of its availability, accessibility, and affordability. The development of friendlier interfaces provides users with easier and more comfortable access

1.8.4 Sexual Explicit Materials

Peter and Valkenburg (2009 p. 408) defined sexual explicit material as content that depicts sexual activities in unconcealed ways often with aroused genital and of oral, anal or vaginal penetration. Generally, it refers to any illustrative material displaying direct physical situation of unclothed genitals, masturbation, sodomy that is bestiality or oral or anal intercourse. Sexual explicit materials include video,

photography, creative writing presents sexual content without deliberately obscuring or censoring it. Sexual explicit often used as euphemism for pornography, it includes unassimilated sex acts, sexual intercourse and uncovered genitalia

1.9 Summary of the Chapter

This chapter has analysed briefly on the influence of technological sexual explicit materials on secondary school students' learning. It has provided information on the background of the problem, objectives of the study, significance of the study and key terms were defined. However, through the expected results from this study as the chapter explains, it would be helpful to the general society of Tanzania and help the government in combating this problem among students of secondary schools in Tanzania.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

In this chapter the review of literature is applied by relating it to the objectives stated in chapter one. The purpose of reviewing literature was to explore the influence of technological sexual explicit materials on students learning in secondary schools. It is believed that today's technological advancement has huge impact in all aspects of people's life. One of the areas where such advancement has impacts is its potential to influence students positively or negatively in their academic learning. This chapter covers; theories which underpinned the study, conceptual framework and review of literature in relation to the theme or subtitle of the study (empirical study) and the knowledge gap.

2.2 Empirical Evidence

This section deals with the empirical review of literature in relation to the similar studies conducted on "the influence of technological sexual explicit materials on students learning in secondary schools". The review conducted reflects the themes or subtitles drawn from the study objectives, which were reviewed from global to local level.

2.2.1 The Use of Sexual Explicit Materials among young People

2.2.1.1 Global level

Statistics indicate that adolescents today spend more time on the internet for communication, educational and for entertainment purposes including exploring sexual explicit materials (Lenhart, Madden and Hitlin, 2005, Korean Educational Development Institute, 2003, Packel and Rainie, 2001). The study conducted by Mattebo (2014) in Sweden noted that, about ninety percent of children aged 11 years old use internet daily, while about eighty two percent of adolescents of the similar age use internet for their own private matters. The Study reports that social media gratify their loneliness and help them in findings friends and partners, while others use it for exploring sexual explicit materials. The researcher further added that about ten percent and thirty percent of Swedish students aged 18 years watch pornographic at least once a week. Among adolescents in the Nordic countries, ninety two percent reported to have watched pornography. However, there was gender variation of ninety nine percent the boys and eighty six percent of the girls who reported to have viewed pornography (Mattebo, 2014).

Moreover, the study by Hackbarth (2002) in Florida on “media influence on young adults’ sexual attitudes and behaviours,” revealed that students spend about 0 to 180 minutes watching sexual related materials. This implies that teens spend more time with diverse media sources exploring sexual related materials. Mayden (2005) maintains that students spend an average of 6 to 7 hours a day with some form of media devices in their bedrooms, where they utilize them to view sexual explicit materials away from their parents’ control. Mayden (2005) further added that students who watch three to five hours of television a day would view about 2000 sex acts each year.

On the other hand, advancement of technology in the world today, made possible for pornography to be easily accessed by anyone with a computer, a television or a cell phone (Thompson, 2007). This implies that even secondary school students have access to and use digital technological material such as smart phone, laptop and other technological materials with which they can easily be exposed and access sexual explicit materials. The website Bio-Medicine recently reported on a survey that included 429 students aged between 13-14 from across Alberta, Canada, the study which was conducted by Sonya Thompson, a former sex education teacher that “majority of the students (seventy four percent) reported to be viewing pornography on the Internet. Forty-one percent reported to have viewed them on video or DVD and fifty seven percent reported to have seen them on a specialty TV channel” (Thompson, 2007, p.1). Moreover, according to a recent report in the journal Pediatrics, forty two percent of adolescents, ages 10 to 17 have viewed internet pornography (Castleman, 2009).

2.2.1.2 Facts from Africa

In South Africa, Rogala and Tyde (2003: 39) assert that there has been an increase in the uses of pornography in the media, the internet and in magazines, which students are largely exposed to. Longe et al (2007) in their study in South West Nigeria noted that almost ninety percent of 8 to 16 years old, who are at schooling have viewed pornography online while doing the homework, of which others are accidentally exposed to pornography while surfing the web, and sixty six percent were still exposed to them even though they did not seek the images out and do not want to view them. They further maintain that in the measurement of performance, the mean value of 81.0 of teenagers was found to have contacted pornography on the internet. This agreement is supported by the previous study of Longe and Longe (2005) which found that children and teenagers belonging to the age range

of 7 to 18 years constitute over thirty-two percent of internet users in Nigeria. Students' access to social media where they explore diverse materials including sexual explicit materials seems to increase. The study by Muia (2016) in Kenya revealed that students use several social media sites. This found that ninety-three percent of respondents agreed to be using WhatsApp daily, thirty nine point three percent agreed to be using Facebook and fifty two point four percent uses Twitter daily.

2.3 Facts on Students' Access to Technological Sexual Materials in Tanzania

Over the years in Tanzania, internet usage through social networking such as: YouTube, WhatsApp, Facebook, and Twitter have become more and more common among students particularly with the aid of smartphones (Kibona & Mgaya, 2015). This has become a common way of making connections, with friends outside of schools. Meanwhile, the internet helps people feeling that they belong to a community (Lenhart, Madden & Hitlin, 2005). According to Lenhart, Rainie and Lewis (2001) the Internet provides socialization as it stimulates the closeness of existing interpersonal relationship by reducing restrictions of time and location.

The government has liberalized communication sector with several operators covering large areas of the country (URT, 2003). While there were below three million mobile phone users in 2003, the number has doubled to six point five million subscribers in 2007 (Reuters, 2007, Jan 23). This implies that large population increased in accessing and using Information and Communication Technology (ICT) (especially mobile phones in this context) has to be part of larger national development strategy mainly for a country like Tanzania, whereby youth are among the group who are accessing and using ICTs. Despite the government integration of ICTs in education being delayed, yet secondary school's students need ICTs and social media such as internet services for academic purposes. However, students' needs and wants for gratification seem to have overlapped the use of ICT services for academic purposes. For instance, Mahega (2014) conducted a study on secondary school students in Arusha, which argued that, students frequently access the internet cafes to view sexual explicit materials such as pornographic films, romantic pictures and chats with known and unknown friends about love affairs online. He further added that most of students who visited internet cafés, about twenty two point three percent of them visited pornographic websites, though according to her study the music websites were found leading having been visited by thirty three percent of students.

Furthermore, the Study by Jeckoniah and Paul (2015) regarding access to social media and sexual behavior among secondary school students in Morogoro Tanzania, revealed that, majority of students (about ninety four percent) had access to social networks where mobile phones and computer modems were the common means used by students to access social networking sites. The findings obtained indicated that half of the respondents in the study confirmed to be introduced to social media their friends. In addition, the study reported that, students are accessing the social media without proper guidance by knowledgeable people such as teachers and parents, which expose them greatly to a risk of exploring contents that may contain sexual messages (Jeckoniah and Paul, 2015).

2.4 Students Attitude on the Effects of Technological Sexual Explicit Materials on their Learning

Technological sexual explicit materials have affected students' attitude and their academic learning as numbers of scholars suggested. It is argued that, the attitude and effect of sexual explicit materials is viewed differently in different countries and this is due to diversity in democratic level of a given country, whereby some countries have high sense of democracy compared to others. Traeen and Martunusse (2008) argue that Nordic countries (Norway and others) have greater social acceptance for adolescent and female sexuality, but strict when it comes to touching body display. This implies that they have positive attitude towards looking at sexual explicit materials, but not touching it. In contrast, most African countries have negative attitude of accepting pornography and sexuality (Ndalala, 2011). Moreover, the study by Jubihlela (2011) in South Africa contends that people had different attitudes towards the using of female body in advertising corporate and product images for influencing their purchase intentions. For example, in South Africa adverts depicting and promoting alcohol, sexual appeals, and immorality are offensive, culturally sensitive appeals are unacceptable, seen as western culture and even as a taboo (Jubihlela, 2011). This implies that the country has negative attitude towards youth being exposed to sexual materials that may affect their academic learning and as well as increasing their vulnerability to sexual abuse and exploitation.

Benedek and Brown (1999) maintain that students viewing of pornography can be disturbing and even accelerates child's (student's) inappropriate sexual development. Students' exposures to technological sexual explicit materials that are not appropriate with their age can affect their general lifestyles and have

influence on their learning process in a positive or negative ways. For example sleep disturbance, nightmares and regressive behaviour are among other things resulting from students' engagement with technological sexual explicit materials (Benedek & Brown, 1999). In the same vain with this, Brand et al (2011) maintain that students' addiction on internet exploration may cause daily problem in social relationships and academic learning processes since they spend much time in watching or listening to pornographic materials, eventually finding themselves in the problems such as sleeping and psychological problems.

The study by Mahega (2014) in Arusha, Tanzania agreed with what other scholars have reported on the effect of technological materials such as internet, television, newspaper and radio to students learning in secondary schools, particularly students who explore pornography who end up being highly used to engage in sexual behaviour. Moreover, this is in line with what Collin et al (2004) called the impact of Television viewing. Furthermore, there is evidence that exposure to technological sexual explicit materials affect students learning as most often such students tend to engage in sexual aggression against others (Flood & Hamilton, 2003).

2.5 Influence of Technological Materials and Learning

The study by Wanajak (2011) in Thailand on "internet use and its impact on secondary school students in Chiang Mai, Thailand" reported that technological materials such as internet have been beneficial for learning among secondary school students. The study reported that about 31.03% respondents confirmed to have gained knowledge via internet, while it helped about 25.07% of students involved to search for useful information of interest, and 25.59% of students used it for relaxing. The argument is supported by Ojedokun and Owalabi (2003) who asserts that social media has become vital tool for learning, teaching and research and for accessing global knowledge and sharing information worldwide (Ehikhamenor, 2003).

Internet is a source of promise for upcoming generation and a source of concern as well, since most of the youth spend their time in exploring social media that offers enormous range of positive educational experiences, but at the same time among these students, there are those who use it for exploring inappropriate sexual related materials (Wanajak, 2011). In Uganda technology play vital role to both teachers and students. The availability of modern computers, peripherals, networking and

resources within an increasingly diverse range of technologies is an essential part of learning and teaching in the 21st century (Opira, 2010). This implies that the extensive expansion of the internet all over the world has speedup accessibility and usability of these technologies to all users including students who are in the age of adolescents. However, many students changed the utilization of these technologies from academic and knowledge gains to exploring technological sexual explicit materials for their sexual gratification. As Eberstadt (2009) maintain that pornography has become the most searched item on the internet and the most profitable for distributors.

Still many scholars such as Flood (2009) states that regular and frequent exposure to sexual content in mainstream media produces greater sexual knowledge and more liberal attitudes among students on sexual education. Huston et al (1998) in his experimental study revealed that children exposed to sexual media content have greater sexual knowledge about topics such as pregnancy, menstruation, homosexuality and prostitution than controlled groups.

Beside the benefits of technology among secondary school students negative impact have been identified, which including impaired academic learning, health problems, personal relationship and social dysfunctional. Schere (1997) in his study found that 13% of students reported difficulties in their academic learning due to technological material uses. This is what Nalwa and Anand (2003) called addiction in social media, whereby students spend more time in exploring them, and eventually become addicted with technological materials including sexual explicit ones that results into inappropriate personal behavior and neglecting academic learning among students. Mingles and Adams (2015) in their study argue that students accessing technological materials misuse their study time, as it was found that 70% of the students interviewed agreed that majority of them are negatively affected study time as they spend much time on pornography watching.

2.6 Teachers' Perception on Students' Usage of Technological Sexual Materials and their Learning

The study by Matimbwa and Anney (2016) on Tanzania teachers' perception towards students who access technological materials such as smart phones, revealed that, most teachers believe that if students are using technological materials uncontrolled may ultimately develop bad behaviors or indiscipline

attitudes, since through exploring different websites including pornographic ones, these students will eventually learn bad culture.

Different scholars who studied perception of teachers on students using technological materials including phones in schools have acknowledged its effect on students' academic learning (Swartz & Wachira, 2010, Urassa, 2012, Kihwele & Bali, 2013). The findings show that, teachers have negative perception towards students who access and use different social media such as phones, internet, Facebook, and WhatsApp (Kafyulilo, 2012). For example, Kihwele and Bali (2013) argued that, teachers have reported that students who possess mobile phones perform poorly and misbehave more often badly than students without mobile phones.

However, teachers' attempts to prohibit students from accessing and using mobile technology have encountered number of challenges. Since, students are given mobile phones with their parents, because they are being trusted as mature enough to have self-control. However, some respondents believe that female students are not supposed to have mobile phones, as they are more likely to be influenced into having sexual relationships (Kihwele & Bali 2013). Meanwhile, as found by Kihwele and Bali (2013) from different studies, teachers are hesitant on mobile phone use because of their negative effects on students behaviour. There is undisputable truth that laptops, iPods, and other technological devices can as well have several negative outcome to students if are not used properly (Kafyulilo, 2012). Therefore, the strategies that teachers use to overcome negative impacts of other technology should also apply to mobile phones that are used for educational purposes. This will help in controlling students from exploring sexual explicit materials which have a lot of negative impacts on students' academic learning due to the time spent and exposure to pornographic materials.

2.7 Role of School in Governing Students who Explore Sexual Explicit Materials

Students during schooling are in the age of adolescence, which need high care from both teachers at schools and parental care when at home, to safeguard them from exposure to intensive sexual explicit materials. Therefore, teachers at school need to take active role on controlling them out of these materials. PSHE Association (2012) report suggests that young people (students) need support to be able to develop high critical thinking on the effect of things they might be exposed to, or are seeking out. PSHE (2012) added that teachers need to address some of

the issues with their students at school concerning pornographic materials, but they need support in order for them to deliver the right message and advice to students. This means that students need to be familiarized on positive and negative effects of being exposed to such materials and how pornography may distort their behaviour and sexual relationships.

The study by Overaa (2014) in United States of America (USA) revealed that schools need to protect both primary and secondary schools' students from accessing inappropriate materials through the internet, which include pornographic materials. And to meet this challenge, all public schools use filtering software. Meanwhile, according to Willard (2010) in (Overaa, 2014) she cites a National Cyber Security Alliance Article.4 which describes policies and/or procedures schools should use to ensure appropriate uses of technology and internet. This means that schools' computers must be installed with software that block all social media networking sites that may contain inappropriate materials for students. She further maintains that the federal government under the Children's Internet Protection Act (CIPA) made mandatory for all public schools' to use filtering technology to block obscene images, children pornography, or images that are harmful to students. Nevertheless, without support, public schools are not able to afford the recommended technologies to protect these vulnerable children.

2.8 Theoretical Framework

There are many theories governing technological sexual explicit materials and learning. The study was governed by two theories, which are social learning theory and uses-and- gratification theory. Several studies had acknowledged these theories in their studies, for example, Atieno (2014); Mahega, (2014); Kim, (2011) and Wondimu, (2015) respectively.

2.8.1. Social Learning Theory

The study adopted Albert Bandura's social learning theory of 1986. Bandura was mainly concerned with how cognitive factors influence development of behavior which he called the theory as social cognitive theory. Bandura believed that cognitive development alone cannot explain changes in behaviour in childhood and believed that learning processes are primarily responsible for children's development (Bandura, 1994). Bandura, (1977), the theory emphasizes that an individual learning occurs within the social context, from this point of view Bandura

postulated principle governing learning. According to this theory student can learn through:

2.8.1.1 Observation

According to the principle of observation, an individual can acquire new behaviours simply by watching others and copying them. Bandura called this observational learning as social learning theory that occurs when an individual for this matter students learn new behaviours after observing other and he or she may be affected positively or negatively (Bandura, 1986). The theory accounts learning as encompasses both imitation and role-play by observing others in their environment.

2.8.1.2 Strengths and Weakness of the Theory

According to the theory any behaviour given the right environment can be changed. The theory is optimistic on changing an individual behaviour regardless of inconsistencies of the behaviour. It also gives the accurate picture of the way behaviours are learned as students or an individual tend to copy others behaviours. Moreover, the theory integrates the learning theory and cognitive development approaches (Bee, 1992). However, the theory is criticized for concentrating much on emphasizing what happens to an individual as he or she learn by observing, rather than what the individual (students) does with the information she or he has. It also does not take into account physical and mental development changes that occur as the learner matures in the context (Bee, 1992, Bandura, 1976).

2.8.1.3 Implication of the Theory to the Study

The theory is useful in this study as Bandura argues that an individual (student) learn new behaviours by observing others. Therefore, secondary school students who explore technological sexual explicit materials can be easily influenced by what they observe from such materials, eventually being negatively affected in terms of behavior change and their learning at school. From social learning theory perspective, students can learn about sexual explicit materials from observing others as depicted in the media (Bandura 1994, Mahega, 2014). This may be through watching or listening sexual explicit materials, specifically they may observe the mechanism of sexual behaviour, but they may fail to learn about the context within which the behaviours occur. The theory also assumes that students learning would be affected as a result of exposure to technological sexual explicit materials, since by observing them they will acquire aggressive behaviour (sexual

violence) and consume most of their time viewing such materials, at the expense of learning (Ndalala, 2012).

Moreover, the theory is concerned about students' learning through observing and imitating what others do in the society. This implies that exposure of students to uncontrolled digital technology and social media such as Facebook, Twitter, YouTube, WhatsApp, Instagram, Snapchat, Google Plus, television or interactive media will affect their academic learning, particularly if they are using such media tools for pornographic purposes. Furthermore, Atieno, (2014), Bandura and Walters (1963 p.49) maintains that real models and symbolic models which are presented through oral, written or drawing or through combination of both verbal and pictorials devices such as films, audio visual have greater influence on one's behaviours. Meaning to say, students learning will be tremendously affected if they are highly exposed to the world of digital with sexual explicit materials.

2.8.2 Use-and-gratification Theory

The researcher was convinced to adopt use-and-gratification theory in this study as it is the psychological theory mainly concerned with explaining how an individual use electronic or mass media. The theory's origin can be traced back to the work of Lasswell's (1948) models of who uses which media, how and what effect. However, Wimmer and Dominick (1994) proposed that use-and-gratification theory began in the 1940s when researchers became interested in why people engaged in various forms of media behaviour such as listening to radio or reading newspapers. Still, others credit Use-and-gratification perspective with Schramm's (1949). Sparks (2006) holds that, Elihu Katz, Jay Blumler and Michael Gurevitch formalized the theory.

Basically, the theory assumes that an individual select and use mass media and its content to fulfill needs or wants. These needs are expressed as motives for adopting particular medium use and are connected to the social characteristics, and media attributes. The person chooses the media for his or her satisfaction or gratification of desires or needs (Rubin, 1994). It gives the consumer power to discern what media they consume, with the assumption that the consumer has a clear intent and use (Wondimu, 2015).

The strengths of Use-and-Gratification theory lie in its applicability to variety of media contexts. Despite the diversity of context and interests, use and gratification

theory tend to share common frame that focus on motives, social and psychological antecedents (Ruggiero, 2001). However, the theory is criticized based on the fact that it relied heavily on self-reports and it is too much uncritical of the possible dysfunction both for self and society of certain kinds of audience's satisfaction (Katz, 1987).

2.8.2.1 Implication of Use-and-gratification Theory to the Study

The researcher was convinced to adopt this theory as it focuses on which media an individual use, why and how is used. The theory is relevant to this study, since it has strength to tell us the rationale behind students' choice of a particular form of communication technology and not the others. For instance, students choice of mobile phone and not laptop computer or going to the cyber café might be influenced by the fact that smartphone offer them easy accessibility and privacy compared to other media forms. Likewise, students who explore technological sexual explicit materials might be doing so because they believe that, in so doing, their sexual needs or wants are gratified or satisfied. The researcher also adopts the theory as Greenberg and Dominick (1969) asserts that race and social class predict how teenagers used television as an informal source of learning. This implies that, students choose to explore technological sexual explicit materials for their own sexual gratification, however by doing so their learning ability is ultimately affected. This is due to the time spent on exploring these materials at the expense of the academic learning.

Moreover, It should be observed that people use technological materials such as smart phones for the uses and gratifications including affection or sociability, entertainment, psychological reassurance, fashion or status, mobility (Leung, 2000).

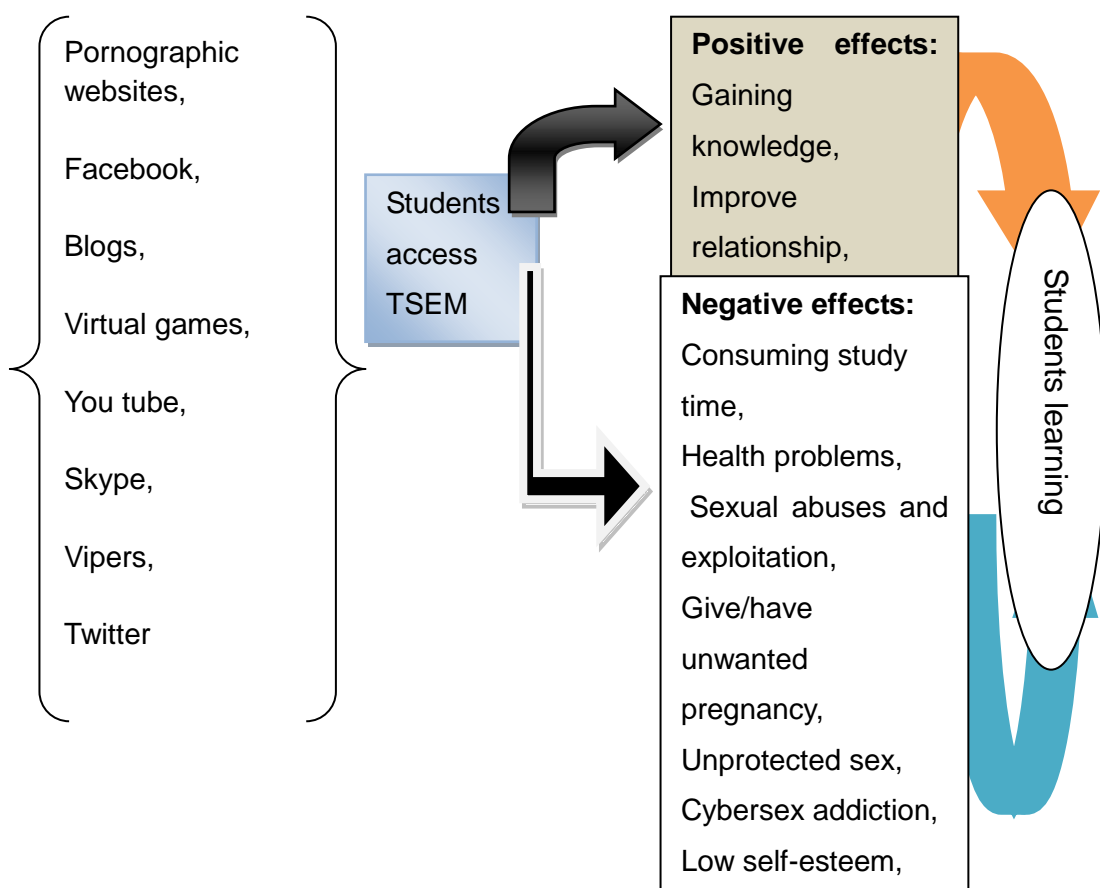
Students for this case are the users of technological materials and are active in finding media, which gratify their needs in terms of cognitive, social interaction and diversion. According to them, interpersonal communication with other people through exploring social media by sending pictorial or any other information is one of the important gratifications that people expect of the internet (Straubhaar & LaRose, 2006). However, uses and gratification do differ based on for using the technological materials (Wondimu, 2015).

2.9 Conceptual framework

This study intends to explore the influences of technological sexual explicit materials on students learning among secondary schools' students in Tanzania. The study was guided by two theories, which are social learning and Use-and-

gratification theory. Social learning theory describes the learned behaviour from the cultural context, means the environment where an individual learns certain behaviors by observing and imitating from others. This implies that students, who explore technological sexual explicit materials by watching or listening to sexual videos, end up imitating what they view, and eventually getting affected by such pornographic pictorial. This effect may positively or negatively affecting students learning due to its influence during using them. According to gratification theory, students select and use social media such as Facebook, pornographic website just for their own needs or wants for gratification. The kind of media selected for use by students tends to influence their learning process positively or negatively. Below is the figure which shows the conceptual framework.

Figure 2.1 Conceptual Framework



Key: TSEM= Technological Sexual Explicit Materials
(Source: Researcher's own construct 2017)

2.10 Knowledge Gap

From the literature reviewed, it was observed that, numerous studies have been carried out on the impact of technology on teaching and learning (Wondimu, 2015, Longe et al, 2007). For instance, a study was done in Thailand on the influences of social media and students' performance in secondary schools (Wanajak, 2011). Meanwhile, Ndalala (2012) conducted a study which investigated on students' attitudes and the effects of pornography in South Africa. Moreover, Chelsen, (2011) conducted a study which examined internet pornography usage among male students. The focus of this study was to examine the attitude and sexual actions that male possess over female, after having accessed and utilized pornography. Therefore, most researchers concentrated on behavioural and sexual harassment as influenced by accessing and using pornography, but leaving aside the influence sexual explicit materials has to students learning.

However, in Tanzania very little information could be found pertaining to the influence of technological sexual explicit materials on students learning in secondary schools. This implies that, students' exploration of sexual explicit materials seemed to be treated as peripheral issue in the process of learning in Tanzania. Although, significant amount of research studies have indicated that students are spending more time on exploring sexual explicit materials. Due to the absence of enough information regarding the influence of technological sexual explicit materials on students learning in secondary schools in Tanzania, the researcher thought that it was imperative to pursue a research study that aimed at exploring the influence that technological sexual explicit materials has on learning among secondary schools' students. The existence of this information gap became the motivation behind the researcher's decision to undertake this research subject.

2.11 Summary of the Chapter

This chapter sought to explore a wide range of related materials through literature review where the following aspects were covered: theories guiding the study, empirical literature review and theoretical framework of the study. The study adopted two theories, which are social learning and Use-and-gratification theories. In empirical review in relations to the subtitles from the objectives, the review, indicate that technological sexual explicit materials have greater potential to influence students learning positively or negatively, with negative effects carrying more weights. Apart from describing the conceptual framework, the chapter also discussed about the knowledge gap, which necessitated the pursuance of this research work.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a description of the research methodology which was employed in the study. It consists of the following sections: the research design, research approach, location of the study and population. The chapter also covers the sampling techniques, sample size, research instruments, elaboration about trustworthiness of the research instruments, research ethics, data analysis and presentation, and wrapped up with a chapter summary.

3.2 Research Approach

The study employed mixed methods approach whereby both qualitative and quantitative approaches were utilized. Each approach was used to avoid the shortcomings of each method. Kumar (2011) argues that, qualitative method is used when the intention is to understand, explain, explore, discover and clarify situations, feelings, perceptions, attitudes, values, beliefs and experiences of a group of people. Moreover, quantitative approach is used when intending to measure. The qualitative research approach was adopted as the main research approach; whereby quantitative approach was used to quantify specific phenomena. Kothari (2004) asserts that quantitative approach is used when the purposes of the study is to collect quantitative data that can be inferred in the population used as a sample in the study. That is to quantify the extent of secondary schools students' exposure to technological sexual explicit materials and its influence on their learning. This means that quantitative approach provides the summary of qualitative data in numerical terms, in a specified degree of confidence. The approach allowed the researcher during data collection to collect numerical data, which in turn was used to make qualitative data more palatable. The qualitative approach was selected to enable the researcher investigate students and teachers' opinions on effects of uses of technological sexual explicit materials on the students' learning in secondary schools.

Meanwhile, the application of qualitative research approach allowed the researcher to get in-depth data from respondents through their personal knowledge, experience and opinions (Best and Khan, 1992; Firestone, 1987). According to Cohen, Manion and Morrison (2000), qualitative studies are highly exhaustive and reliable because they make a deep exploration of respondents to obtain purposive

information. In this way, the researcher was able to collect information from respondents in an interactive manner.

3.3 Research Design

Reduced to the simplest of terms, “research design is a mapping strategy. It is essentially a statement of the object of the inquiry and the strategies for collecting the evidences, analyzing the evidences and reporting the findings (Singh, 2006). According to Kumar (2011) A traditional research design is a blueprint or detailed plan for how a research study is to be completed, operationalising variables so that they can be measured, selecting a sample of interest to study, collecting data to be used as a basis for testing hypotheses, and analyzing the results.

Generally, a research design is a plan, structure and strategy of investigation so conceived in order to obtain answers to research questions or problem. The plan is the complete scheme or programme of the research (Corbin, Strauss, & Strauss, 2014). It includes an outline of what the investigator was doing from writing the hypotheses and their operational implications to the final analysis of data.

This study employed sequential exploratory study design. The researcher adopted exploratory design as the researcher intended to explore and determine the influence that technological sexual explicit materials have over students learning in secondary schools. Explorative study is undertaken where there is insufficient theoretical understanding about the phenomenon being investigated so that key variables, their relationships and their causal linkages are the subject of conjecture (Mwalimu, 2011). Creswell (2007) argue that sequential exploratory design is opted when the researcher intends to collect both qualitative and quantitative data and the collection is conducted in two phases, with the priority given to the first phase. The first phase featured with qualitative data, whereby the findings of these two phases are integrated during interpretation phase. Creswell and Plano (2007) maintain that this design is mainly used when the purpose of this design is to use quantitative data and results to assist in the interpretation of qualitative findings. Moreover, the second phase had gathered quantitative data and conducting focus group discussions to students, also Creswell (2007) maintains that the design is advantageous as the quantitative data obtained in the second phase helps in exploring the phenomenon as well as in expanding qualitative data obtained in the first phase of data collection.

In addition, it is useful in making a largely qualitative study more palatable to a quantitative researcher who may be unfamiliar with the naturalistic tradition. This means that the study used both qualitative and quantitative data in exploring the extent to which technological sexual explicit materials influence students learning in both private and public secondary schools.

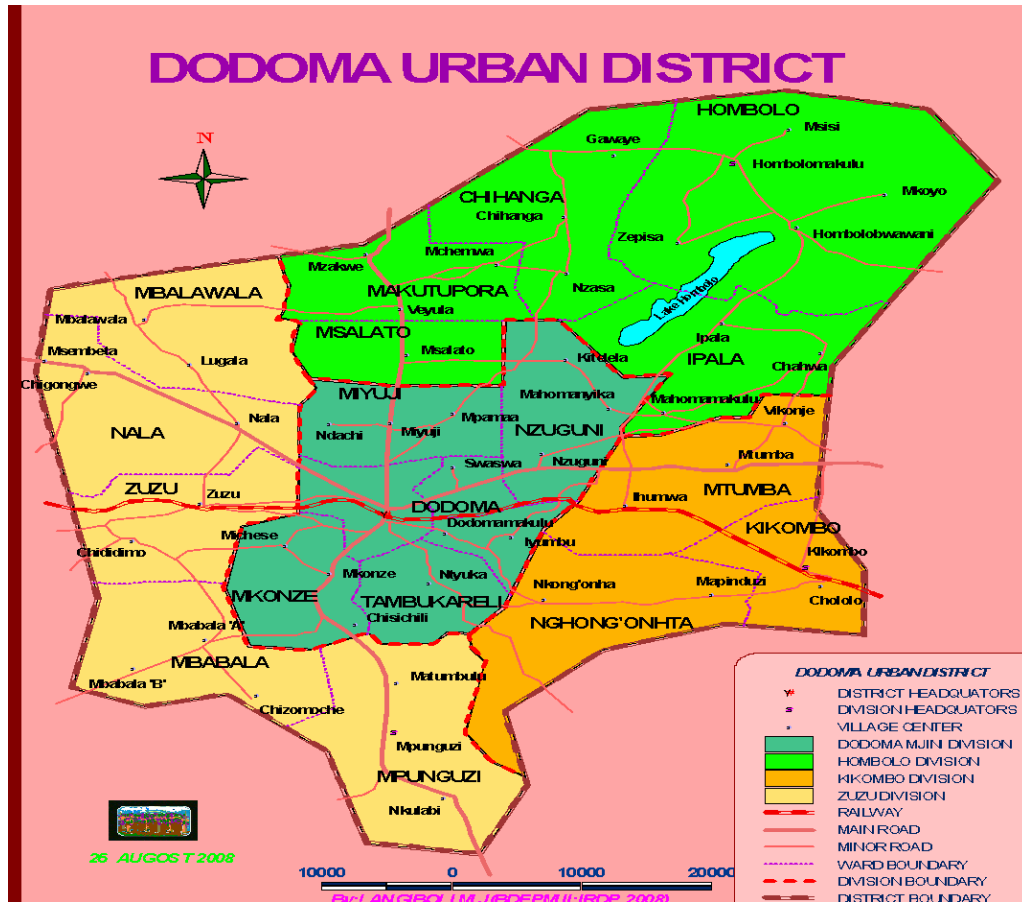
3.4 Area of the Study

Kombo and Tromp (2006) state that, the research area is important and influences usefulness of the information produced, for this matter, a well-planned study should provide a justifiable choice of the area of the study.

Dodoma Municipality is one of the seven administrative districts, which make up Dodoma Region. Others are Kondoa, Mpwapwa, Kongwa, Chamwino, Bahi and Chemba. It covers an area of 2 669 square kilometers of which 625 square kilometres are urbanized (URT, 2012). It is located centrally 6°.00 North and 6°00 South and Longitude 35°.30 West and 36°.02 East. It is found between 6 000 and 1 000 meters above sea level on a broad dry upland plateau.

The area was selected for the study due to: first, its rapid urbanization, which has brought up dramatic changes in different aspects (URT, 2012). This brought changes in the total ways of life due to social interaction and expanding of technology. Accessibility of technological devices like televisions, computers, tablets and smartphones, availability of internet connections influence students easily accessing and using technological materials such as internet and other social media. Second, Dodoma Municipality is the capital of Tanzania; it consists of overpopulated teachers, there are 1292 teachers while the required teachers are 1155. However, students' academic performance is not good (Dodoma Council, 2015), the examination performance is not encouraging. According to NECTA (2016), national form four examinations it ranks 86 position among the districts nationally.

Figure 3.1 The Map of Dodoma District Showing the Area of the Study



Source: Dodoma Municipal Council Profile (2008)

3.5 Population of the Study

A population is the entire set of observation or measurements under study. It is a full set of cases from which a sample is taken (Saunders & Thorhill, 2006). In addition, Kombo and Tromp (2006) explain that, population refers to a group of individuals, objects or items from which samples are taken for analysis. In this regard, the target population of this study was all public and private secondary schools in Dodoma municipal. The population of this study comprised the students, teachers and heads of schools. The reason for these choices of sample was due to the variable under investigation, teachers and heads of school were involved as are the ones responsible for students' care at school.

The study assumed that all secondary school students are at the age of adolescence and they may access mobile phones and other technological devices such as televisions, video players, magazines and internet cafes. Hence they might be viewing sexual explicitly materials.

3.6 Sample

A sample is a subgroup of the population researcher is interested in. Sampling is the process of selecting a few (a sample) from a bigger group (the sampling population) to become the basis for estimating the prevalence of an unknown piece of information, outcome regarding the bigger group (Kumar, 2011). Sampling is the statistical process of selecting a subset (called a “sample”) of a population of interest for purposes of making observations and statistical inferences about that population (Bhattacharjee, 2012). Best and Kahn (2006) contend that there is no sample size that is the best as any sample can be acceptable depending on the nature of the study at hand. In qualitative studies, researchers use a small sample of respondents because they are interested in detailed information from those informants. This is contrary to quantitative studies that rely in large sample without looking for details in data, as its intention is to generalize the findings

3.7 Sample Size

This study involved a sample size of 129 respondents. These included three (3) heads of school, three (3) discipline masters and 15 teachers; 5 from each school. The study also included thirty six (36) students from form four, five and six, in total of 108 students. The researcher involved only students aged 18+ years old because they are in late adolescence and approaching adulthood (Santrock, 2001). The students of that age had experiences and gave genuine facts concerning the use of technological sexual explicit materials. Students and teachers were involved simply because they interact directly in learning process. Heads of school were involved in the sample as they are responsible for monitoring the whole school. The study involved a total number of 129 participants. The researcher used few respondents as a unit of analysis to obtain richer information on the influence of technological sexual explicit material on students learning in secondary school. Table 3.1 below shows sample composition of the study:

Table 3.1 Sample composition of the study

S/N	Category of informants	Number	Rationale
1	Heads of schools	3	Managing school routine
2	Teachers	15	Teaching students at school
3	Discipline masters	3	Maintaining or in charge for students discipline
4	Students from form four, five and six	108	Are students in the given schools and most of them are above children age.

Source: Field Data (February, 2017)

3.8 Sample and Sampling Techniques

Purposive random sampling was used to get participants who were rich in information depending on the nature and purpose of this study (Patton, 1990; Coolican, 2004; Mtahabwa, 2007).

Purposive sampling was used to select three high secondary schools, two private and another one public school. Kumar (2011) asserts that purposive sampling is used depending on the interest of the researchers. The first two schools are private owned, while the last are government school. These are day schools and they are located at the Centre of the town and filled with students within the catchment areas. Hence, the students possessed richer data for research problem compared to other students might in peripheral schools that are less accessible to technological devices.

Purposive sampling was used to select heads of schools that were selected in respective to schools as they are in charge for. Discipline masters were purposively selected basing on their position at schools. While simple random sampling was used in selecting teachers and students from form four to six by using rotary method, by writing numbers in a piece of paper and ask representatives to pick one piece of paper on behalf of others

3.9 Methods of Data Collection

The study employed mixed method in data collection and used more than one instrument in gathering data from the field. This was because no single instrument was complete by itself (Kothari, 2004). Creswell (2005) maintain that, no single technique or research instrument that could be considered adequate in collecting

data for valid and reliable information. Thus, the combination of four instruments namely: interview, focused group discussion, documentary review and questionnaires were used in this study to gather both quantitative and qualitative data regarding the influence of technological sexual explicit materials on students learning in secondary schools.

3.9.1 Questionnaire

According to Creswell (1994), questionnaires are widely used in education to obtain information about current conditions and practices and to make enquiries concerning attitudes and opinions quickly and in precise form. Orodho (2004) emphasizes the use of questionnaire. He points out that questionnaire has the ability to collect large amount of information in reasonably quick space of time and the response can be easily analyzed. Thus fifteen questionnaires were completed by teachers respondents while one hundred and eight were completed by students respondents.

The study used both open-ended and closed ended questionnaires. Cohen, Manion and Marrison (2007) and Bhattacharjee (2012) provided two types of questionnaire. The open formed item is also referred to as the “Open end”, “Short-answer”, or “Free-response” item because after the question there is a space provided in which the respondent is asked to write his answer. The closed form item sometimes is referred to as the “restricted” or “structured” type. It consists of a question or a statement to which a person responds by selecting one or more choices, such as “Yes” or “No”. In one variation of this type, the respondent may be asked to underline award from the two or more alternatives. Another variation requires the ranking of choices. Questionnaires were administered to all students and teachers’ respondents who were expected to read and understand then reply in the space provided. The advantages of questionnaire are that: respondents had adequate time to give well thought out answers, large sample can be made use of, and thus the results can be dependable and reliable (Kothari, 2002).

3.9.2 Interviews

Interview refers to the conversation between the interviewee and the interviewer. Thus in this study interview was conducted between the researchers and the respondents. The study collected information on the influence of technological sexual explicit materials on students learning in secondary school. Whereby, semi-structured interview was involved. Dawson (2002) asserts that semi-structured

interview is used when researcher wants to know specific information that can be compared and contrasted with information gained in other interviews. The interviews were administered to heads of school and discipline master to gain insights on how technological sexual explicit materials influence academic learning among the students. The reason behind using interview among these respondents was that they deal with student's matters in general at school. The interview sessions were face to face.

3.9.3. Focus Group Discussion (FGD)

Kothari (1992) asserts that, FGD is a technique with the objective of tapping relevant information from purposively selected respondents. It is a discussion with small groups of people in which opinions are canvassed on a specific topic with similar background experience to discuss a specific topic of interest to the researcher. Krueger (2000) suggests that focus group discussion must comprise 4 to 6 people to have effective and participatory group discussion.

The choice of this method lies in the fact that, it provided the researcher with high quality data in a given social context as participants got to hear each other's experiences and made additional comments beyond their original responses. It promoted interaction among participants that stimulated them to state what they felt, that they won't otherwise express if they would be interviewed individually.

One focus group discussion each with six students' leaders was used in each school investigated. These helped in obtaining relevant information from students' leaders since concern with their fellow students' matters. The researcher was the facilitator and assumed the position of the secretary to keep the discussion open end but reach the end. The researcher after presenting an issue, encouraged participants to discuss freely to give out their views about effects of exposure to technological sexual explicitly materials on their learning.

3.9.4 Documentary Analysis

According to Kothari (2002) documentary analysis is a process of gathering information whereby the researcher has to review the written documents as intimate diaries, personal letters, autobiography, official documents, articles, personal files, books and journals so as to get useful information related to the study. For that reason, the study analyzed student's' discipline records and minutes concerning expulsion of students from schools. These documents enabled the researcher to

investigate the role played by the schools in governing technological sexual explicit materials usage by students

3.10 Trustworthiness/Validity and Reliability

Cohen, Manion and Marrison (2007) contend that, in quantitative data validity might be improved through careful sampling and appropriate instrumentation. This study fulfilled those requirements, at the same time the supervisor helped in validating the research instruments to ensure validity of data collection in the field. In addition, a pilot study was used to ensure the reliability of the instruments. Test-Retest technique was used in assessing reliability of the data. The researcher administered the same instrument twice to the same group of subjects at two separate times with a time lapse between the first and second. This was done in one school among the three in a sample. The second test was done after one week. This helped the researcher to establish if the instruments were comprehensive enough to elicit the intended information exhaustively, and whenever there was need, a revision was done accordingly.

Whereas quantitative research uses validity and reliability, qualitative research uses trustworthiness (Runhare, 2010). The main aim of trustworthiness in qualitative research is to support the arguments that the inquiry's findings are worth paying attention to (Guba & Lincoln, 1985). To ensure data trustworthiness, Shenton (2004) identified four criteria as developed by Guba (1981) which correspond to the criteria employed by the positivist investigators:

3.10.1 Credibility

Credibility is one of the key criteria addressed by positivist researchers in addressing the internal validity whereby researchers seeks to measure or test what actually is intended to measure (Shenton, 2004). To ensure congruent in qualitative study credibility is important factor to be established in trustworthiness (Merriam, 1998). The study ensured credibility by employing proper methods of data collection and reporting the data as presented by the informants in their natural setting. Moreover, the researcher ensured credibility by established good rapport by the respondents; this was ensured by informing the respondents the aim of the study and gave them freedom to withdraw from the study if they wished to do so.

3.10.2 Transferability

Transferability corresponds to external validity of the study, which is the extent to which the findings can be generalized in the large population (Merriam, 1998). Erlandson (1993) noted that generalisability in qualitative study is impossible as it focuses on specific respondents (few samples). Shenton (2004), Stake (1994) and Denscombe (1998) contrasting with Erlandson that, although each case may be unique, it is also an example within a broader group and as a result, the prospect of transferability should not be rejected. To ensure transferability the study provided contextual information about the field (Shenton, 2004). The study also ensured transferability by identifying the scope of the study, number of participants to be involved, method to be employed, the number and length of the data collection sessions and which data to be collected. Moreover, study aimed at not making statistical generalization. The theory was used to illuminate the findings and guiding the research process.

3.10.3 Dependability

Merriam (1998) explains that dependability is commonly used in naturalistic setting than reliability. To Merriam dependability refers to the extent to which the research findings can be replicated with similar participants in similar context. This implies that the extent to which the data obtained are repeated to another respondent. Biasness was avoided by ensuring dependability, security and flexibility of the participants in the study, by giving them freedom to air their views freely. Additionally, the supervisor reviewed all the data collected. Moreover, dependability was ensured by the researcher through using triangulation (multiple tools in data collection were employed), whereby the researcher used questionnaires, interview, focus group discussion and documentary reviews. The use of all these methods in data collection helped in ensuring the dependability of the data collected from the field.

3.10.4 Confirmability

Confirmability as compared to objectivity, means free from the researcher's bias or subjectivity by ensuring the findings reflect the experiences and ideas of the informants (Patton, 1990). The researcher presented the findings as obtained from the respondents without basing them on the researcher's characteristics and preferences. This was attained through being neutral when examining the research problem while focusing on the intention of the study during data gathering and analysis processes to ensure that the meaning was reflected in this report.

3.11 Back Translation

Brislin, (1970) defined back translation as the process of translating a material from its original language to a different language. The aim is to make easy communication with informants (Mtahabwa, 2007). In this study, the questionnaires for students and focus group discussion were done into Kiswahili for easy communication during data collection and then back into English during report writing.

3.12 Data Analysis Techniques

The collected data are known as 'raw data.' The raw data are meaningless unless certain statistical treatment is given to them. Analysis of data means to make the raw data meaningful or to draw some results from the data after the proper treatment (Singh, 2006). As per this study, the data pertaining to how technological sexual explicit materials influence students learning in secondary schools was rigorously analyzed quantitatively and qualitatively.

Quantitative data analysis is a powerful research form, emanating in part from the positivist tradition. It is often associated with large-scale research, but can also serve smaller scale investigations, with case studies, action research, correlational research and experiments (Cohen, Manion & Marrison, 2007). Furthermore, numerical analysis can be performed using software, for example the Statistical Package for Social Sciences (SPSS, Minitab, and Excel).

Therefore, as this study was concerned, quantitative data was analyzed by using descriptive statistics by entering them into computer for analysis using the SPSS version 20. This processed the frequencies and percentages, which was used to discuss the findings. Tables, pie charts and bar graphs were used to present the data.

Milles and Hubberman (1994) provide three steps in the analysis of qualitative data: reduction, organization and interpretation. Whereby qualitative data obtained through the interviews were subjected to content analysis. Davidson and Zakrison (1987) in Mwalimu (2011) argue that a qualitative analysis as interplay between the researcher and the text. The aim of using content analysis was to gain understanding of the text as a whole and its context using both theoretical and pre-understanding perspective. Therefore, the researcher started to analyze data through reading the transcripts and reviewing each unit of analysis and categorized

them according to themes from the objectives. After analysis, data were interpreted and discussed.

3.13 Ethical Consideration

Leedy and Ormrod (2005) categorized ethical issues in research into four groups. These are informed consent, right to privacy, honesty with professional colleagues and protection from harm. The researcher therefore did the following.

Research procedures like permission from the responsible personnel, for example from St John's University of Tanzania, Dodoma Municipal Council and schools were obtained. Consideration of the confidentiality of the information collected was respected to the maximum. The participants' consent was sought after the purpose of the study was clearly explained to them before data collection process. Neither the real names of the participants nor of the institutions were included in the report to ensure confidentiality. Furthermore, the researcher informed the participants of their freedom to withdraw from the study once they felt like doing so.

3.14 Chapter Summary

The chapter focused on the methodological issues of the study, which guided how the study was carried out. The study employed mixed approaches and sequential exploratory research design; the researcher employed these approaches to guide in obtaining both qualitative and quantitative data from the field relating to how technological sexual explicit materials influence students learning in secondary schools. The chapter presented sample and sampling procedures, whereby purposive and simple random selection was employed to obtain a sample size of 129 respondents used in the study. Furthermore, multiple methods were employed in data gathering at the field. The researcher had also explained how anonymity and confidentiality was maintained to meet ethical considerations required in conducting a research study. Data were analyzed both qualitatively and quantitatively by using Statistical Package for Social Science (SPSS) and content analysis respectively.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS

4.1 Introduction

This chapter presents, analyzes and discusses the data obtained from the field of study conducted in Dodoma municipal council in Dodoma region. The study examined the influence of technological sexual explicit materials on students' learning in public and private secondary schools in Dodoma municipality. Both qualitative and quantitative data were analyzed, presented and discussed in accordance to research objectives and research questions as mentioned in chapter one.

4.2 Demographic Information

The study sought to extract demographic information from the respondents, as they are useful information as far as the study was concerned. This information helped in judging technological sexual explicit materials and its influence on students learning in secondary schools. This information included the gender, age, class level and working experiences for the case of teachers, teachers experience at work was included as tenure of an individual implies he/she has experienced a lot concerning students and technological effects on their learning.

4.2.1 Gender of the Respondents

The respondents were asked to state their gender. The purpose of this question was to ensure the perspectives of both gender groups were covered by the study. The findings are shown in the table below:

Table 4. 1. Gender of the respondents

	Teachers		students	
gender	Frequency	Percentage	Frequency	percentage
male	8	53.3	59	54.6
female	7	46.7	49	45.4
total	15	100	108	100

Source: Field data (May 2017)

This table shows that the research sample of teachers consisted of eight male (53.3%) while the female respondents consisted of seven (46.7%) of the target population, as the sample needed was 15 respondents. Therefore, it was obvious that one gender should exceed by one. On the other hand, the sample of students included 59(54.6%) boys and 49(45.4%) girls. The researcher executed gender balancing in all levels of students, but it was not easy due to the condition that respondents should be not less than eighteen years old. This implies that there were uneven in gender distribution among teachers in both private and public schools, also according to the data obtained among number of boys and girls in both private and public schools it implies that boys were many compared to the girls, thus an even gender distribution could not slightly be materialized.

4.2.2 Age of Respondents

In this question, respondents were required to establish their age groups. This question aimed to ensure that the age group of respondents is the one required by the researcher. The study problem was expected to involve the students with 18+ years:

Table 4. 2 Age of the respondents

age	Teachers		Students	
	Frequency	Percentage	Frequency	Percentage
18-19			57	52.8
19-20			29	26.9
20-22			21	19.4
22-25			1	0.9
25-35	13	86.6		
35-45	1	6.7		
45-60+	1	6.7		
Total	15	100	108	100

Source: Field data (May, 2017)

Table 4.2 shows the age of 15 teachers involved in this study, whereby the first group had age range of between 25-35 (86.6%), followed by two groups from comprising respondents with the age range of between 35-45 and 45-60+ which had the same percentage 6.7%. Moreover, as table 4.2 above reveals the first group of students had age range of between 18-19 52.8%, while the second group

consisted of students with the age between 19- 20 26.9%, followed by the third group with the age of between 20-22 19.4% and the last group aged between 22-25 0.9%. Hence, the sample population of students was represented by the required expected age of at least 18 years old. According to these findings, it means that the majority of students ranged in the age of 18 to 19 years old. Also, the population of teachers was represented mainly by teaching staff of the age between 25-35 old, which implies that majority of the teachers engaged in this study were of youthful age. Therefore, the information provided by the respondents were accurate due to the fact that most of the youth are familiar with the uses of technological materials, therefore, they are aware about students' access and use of TSEM.

4.2.3 Level of Education of Respondents

The students' class level was sought so as to determine whether the students in the same level had the same experience on exposure to sexual explicitly materials

Table 4. 3. Students class level

Class level	Frequency	Percent
Form four	34	31.5
Form five	52	48.1
Form six	22	20.4
Total	108	100.0

Source: Field data (May, 2017)

Majority of respondents were form five students who constitute 48.5%, followed by form four students who accounted for 31.5%, and lastly form six students formed 22.4% of the total number of students respectively. The researcher aimed to have equal number of respondents in all levels, but the situation did not allow, due to national form six examinations that were taking place.

4.2.4 Teachers' Working Experience

In this question, respondents were required to reveal about their working experience. This question aimed to gather information that would help determine whether junior and senior teachers had similar or different views or ideas about students' exposure to sexual explicit materials.

Table 4. 4. Teachers work experience (N=15)

Experience	Frequency	Percent
1-4 years	9	60.0
6-10 years	4	26.7
10-31 years	2	13.3
Total	15	100.0

Source: Field data (May, 2017) Key: N= number of respondents

According to the findings as shown in the table 4.4 above, teachers involved and possessed 1-4 years of working experience constitute 60%, followed by those with 6-10 years who formed 26.7%, and lastly those with 10- 31 years of experience who made 13.3%. The experience of teachers at school indicates the level of experience one has in teaching professional as well experience of dealing with students. Thus, in that length of experience one might have encountered number of students who uses TSEM. Hence, the information provided by experienced teachers reflects the truthful information regarding the extent of students' access and use of technological materials. This was different from inexperienced teachers who are not familiar with the influence TSEM have on students learning at school.

4.3 Students Using Technological Sexually Explicit Materials

The findings obtained through the questionnaire, interview and focus group discussion generally revealed that most students use technological sexual explicit materials. The table 4.5 below summarizes the findings on the extent which students in Dodoma municipality use technological sexual explicit materials.

Table 4. 5. Students using technological sexual explicitly materials

	Frequency	Percent
Disagree	2	13.3
Agree	7	46.7
Strong agree	5	33.3
Not applicable	1	6.7
Total	15	100.0

Source: field data (May, 2017)

As it can be observed in table 4.5 above the findings of the study indicate that 7(46.7%) of the respondents agreed and 5(33.3%) strong agreed that majority of students access and use technological sexual explicit materials, whereas 2(13.3%) disagreed and argued that students do not use technological sexual explicit materials. However, 1(6.7%) of the respondents argued that knew nothing concerning students access and using technological sexual explicit materials.

The findings obtained from the focused group discussion held in school A with students, revealed similar answers from the questionnaires, as student 1 argued that it is true that they access and use technological sexual materials during holiday time when at home. Likewise, this is supported by similar argument made by students 2 in school 'A' who argued that, most day students access and use technological materials right after school hours. This is because they spend only eight hours at school, while they are at home for the remainder of day. Following that, it becomes easier for them to spend their time using internet, phones and computers and mostly they use such devices to access sexual related materials. As one of the students from focused group discussion admitted that, they do so mostly during the night time when they are in bed, believing that nobody can see them because they are alone, hence using whatsapp groups to share pornographic pictures and videos.

In the same way scholars argue that majority of adolescent students like to access and use technological sexual explicit materials especially during the night time when their parents or guardian are not around them (Tarimo, 2016). Therefore, such revelation reflects with what has been revealed by the findings of this study, that a majority of students access and use computers, internet or Smartphones at night when they believe that their parents are asleep to access prohibited websites such as pornographic ones. Hence, from this finding it can be concluded that majority of students do access and use TSEM at home or after school hours, compared to school hours. This might be attributed by the fact that the school authorities prohibit students from using phones at school, and if they use computer in the library they do so under teachers' supervision in order to stop them from accessing TSEM through the internet or other social media.

Moreover, the findings from interview session conducted in school B by the discipline master revealed a related situation to what has been revealed by questionnaires and focused group discussion. The discipline master interviewed

face to face by the researcher with semi-structured interview asserts that, most of the student's access and use of technological sexual explicit materials are happening at home or at school. The discipline master in school B had the following to say:

"...Last time a boy student was caught using a phone in the classroom, and after teachers' inspection it was found that the phone contained pornographic pictures and video in the phone memory..."

Another discipline master interviewed said the following:

Nowadays both girls' and boys' students do not even have a fear of God, as they confidently view pornographic materials thinking that doing so means they are modernized and civilized (educated), hence calling those who do not like viewing such materials as "washamba" (uneducated or illiterate ones) ..."

Another discipline masters in school C quoted saying the following:

"It's true that students view technological sexual explicit materials by downloading them from different websites, the fact is they are attracted to these pornographic materials. It becomes easier for students to view them nowadays, since internet connectivity and accessibility is everywhere..."

From the voice raised by the discipline teachers from different schools, it was revealed that majority of students do use social media and there are considerable number of students who come to school with phones despite being prohibited to carry and use cell-phones at school. In most cases, those phones are used to access and share pornographic materials among themselves, teachers reported.

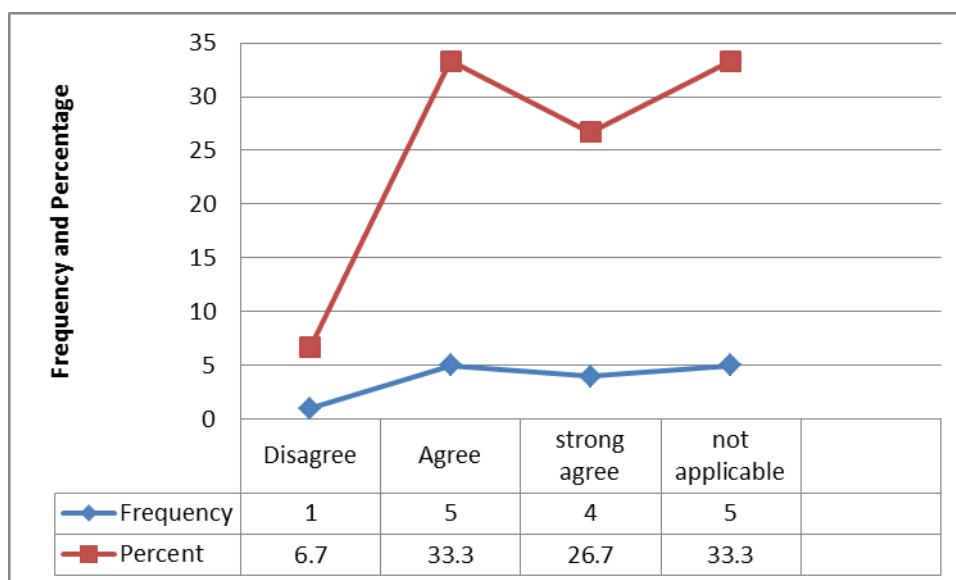
In the same vein, Mayden (2005) asserted that students spend about three to five hours of television a day viewing about 2000 sex acts each year, especially during the night when going to bed. However, Wanajak (2011) agreed that students in secondary schools do access and use technological sexual materials, but the author pointed out that parent need to be closer to their youth since young and educating them on the side effect of accessing technological sexual explicit materials through the internet. Since, doing so will be a means of rescuing larger number of adolescent students in secondary schools to engage in accessing and using TSEM.

The findings show that students view these sexual explicit materials online and the reason why students' view such materials is mainly due to their adolescent age, which influences them to wish to know and test everything out of curiosity. Parents'

reluctance to prohibit them from using phones, computer or iPad and the encouragement they provide to their kids by buying them such devices (e.g. buying for them every new phone-model that comes out), exacerbates the situation

Furthermore, the researcher distributed questionnaire to 15 teachers with statement: *students lie about their age just to view pornography through the internet*. The findings indicate that most of students lie when required to reveal their true age on the internet, so that they can access age-restricted websites that shows pornography through the internet. Figure 4.1 below prove the results from 15 teachers.

Figure 4. 1. Students Lie Age to view Pornography through Internet Websites (N=15)



Source: Field data (May 2017), Key: N = number of respondents

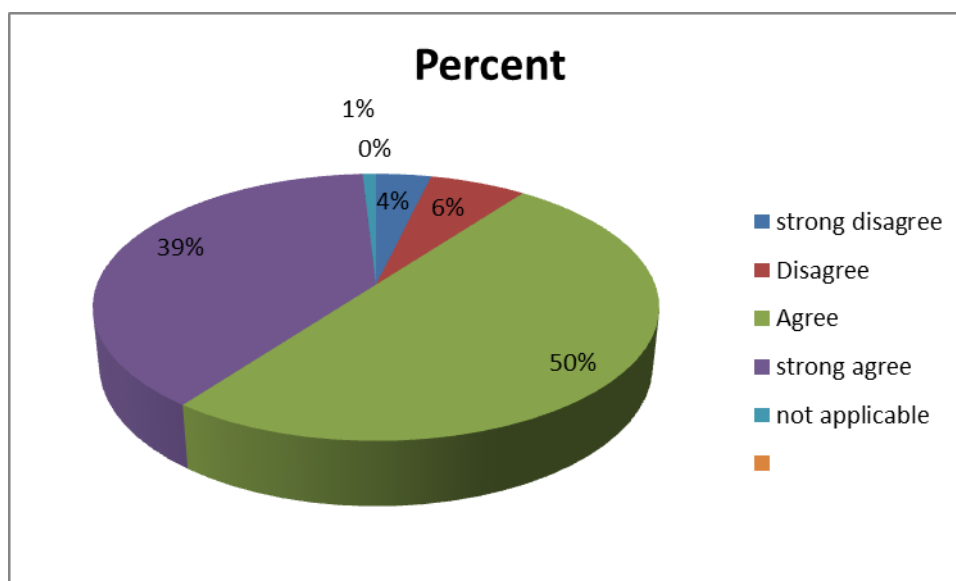
As it is illustrated in figure 4.1 above the findings show that 5(33.3%) of teachers who answered that questions agreed that students lie about their age, while (26.7%) strongly agreed to the fact that most students lie about their age to get access to pornographic websites that are age-restricted. On the other side 5(33.3%) of teachers who answered that question indicated that they were unaware if students really lie about their age in order to access pornographic website through the internet. This implies that majority of teachers were aware of students lying about their age in order to access restricted websites which contain pornographic materials. However, only single teacher disagreed on students' lying about their age just to get access to websites that contain pornographic materials.

The findings of this study coincide with that of Mattebo (2014) study in Sweden which depicted that about 82% of adolescents use internet for their own private matters. Furthermore, Mahega (2014) conducted a study on secondary schools in Arusha where he argued that, students access the internet to explore sexual explicit materials such as pornographic films, romantic pictures and chatting with known and unknown friends about love affairs online. The act of students lying about their age on age restricted websites as findings revealed is what is what enables adolescent students to access and use TSEM when at home and at school. It's argued that to restrict students from accessing these materials both at school and home, computers should be located in the areas where students can be easily monitored and thus be afraid to access pornography. Also they should be installed with programme such as filter, ant-virus, anti-spyware and firewalls for screening or blocking offensive content like pornographic materials (Wanajak, 2011)

4.3.1 Students Access to Technological Materials (Computers and Mobile Phones)

This sub theme was elicited from the first category of research question, which focused on examining the extent at which secondary school students in Dodoma municipal access and use technological materials, such as computer and phones. The findings indicated that majority of students use computer and mobile phones as the figure 4.2 below presents the findings of the study:

Figure 4. 2: The Extent Students Uses Computer and Mobile Phone (N=108)



Source: Field Data (May, 2017) Key: N= number of the respondents

As illustrated from figure 4.2 above the findings show that the majority of students were found using technological materials such as computer and mobile phones as presented with the highest percentage of 50% who agreed to using computer and phone, while 39% strongly agreed using the technology. The findings also revealed that 6% of respondents disagreed, while 4% strongly disagreed to using computer and mobile phones. In addition to that it was noted that during the focus group discussion students admitted using smartphones, ipad and computer when at home.

The semi-structured interview between the head of school B revealed similar response that most students access and use computer and phones mostly when at home. As he was quoted saying the following:

“...The problem of students viewing technological sexual explicit materials cannot be easily eradicated among students. We at school have been trying harder to ensure that no student comes with cell-phone at school, but the question remains is, do parents do the same?...”

The findings further show that, some parents are the ones who buy phones, cassettes or CDs for their children to watch at home. Normally, they do buy these CDs by merely looking at the cover page without understanding the content of the materials inside. Therefore, when children watch them at home sometimes they encounter plenty of sexual explicit materials.

Another discipline master in school C added by saying that:

“..Due to advancement in digital technology most of families in Tanzania use digital decoders (Kingamuzi) which contain a lot of channels. Some of these channels show pornography at night time, which entice students to sneak and watch them beyond their parents’ knowledge...”

The findings match with that of Thompson (2007) who argues that most secondary school students’ access and use digital technological material such as smart phone, laptop and other technological materials so that they can easily access these sexual explicit materials. The study by Muia (2016) in Kenya contends that students use four social media sites. Respondents agreed that 93.5% of students use whatsApp daily, 39.3% agreed using Facebook and 52.4% uses Twitter daily. This was similar to what was found in this study, since majority of students around 50%

agreed to be using computer and other social media. However, the study shows that most of students use these media after school hours. Therefore, cooperation between both parents and teachers is highly needed to ensure that students do not access these materials as they influence the change of behaviour among students, which in turn affect their learning at school due to the wastage of time and sometimes sexual addiction

4.3.1.1 Students Use Technological Materials for Academic Purposes

This sub theme is elicited from the first research objective; the purpose was to examine the extent of students' use of technological materials for academic purposes and personal issues. The information pertaining to this sub theme was obtained through the questionnaires, focused group discussion and interview session. The general findings reveal that students were found using technological materials for both academic and personal issues. The table 4.6 summarizes the findings as obtained from the likert scale provided to students:

Table 4. 6. Students using social media for academic and personal purposes (N=108)

	Frequency	percent
Strong disagree	14	13.9
Disagree	17	15.7
Agree	52	48.1
Strong agree	22	20.4
Not applicable	2	1.9
Total	108	100

Source: field data (May, 2017) Key: N= Number of the respondents

Table 4.6 above shows that about 52(48.1%) of students agreed that they do use social media (technological materials) for academic and personal issues, while 13.9% strongly disagreed on using technological materials for academic and personal issues. The findings show that only 2 (1.9%) of students were unaware on students' use of technological materials for academic or personal issues. Also during the focus group discussion in school C with students, it was revealed that students use technological materials for academic and refreshments purposes. This was similarly revealed in the interview conducted in school A, where one of the discipline masters had the following to say:

“...It is true that students utilize internet for academic purposes and for personal issues. For example I personally do encourage them to use internet for searching academic materials when at home rather than spending most of their time for refreshment or chatting with friends on face book or whatsApp...”

This was the same to what the discipline master of school B was quoted saying that:

“Most students do access and use social media applications, through their devices such as smart-phones, and they do share these applications through flash share, flash disk and Bluetooth...”

The findings show that through those applications there are others who share academic materials, while most of them share personal information. As the discipline master from school B argued by saying that:

“Most of students do use technological devices such as phone and computer for accessing academic materials; however, there are others who use them for viewing pornographic materials...”

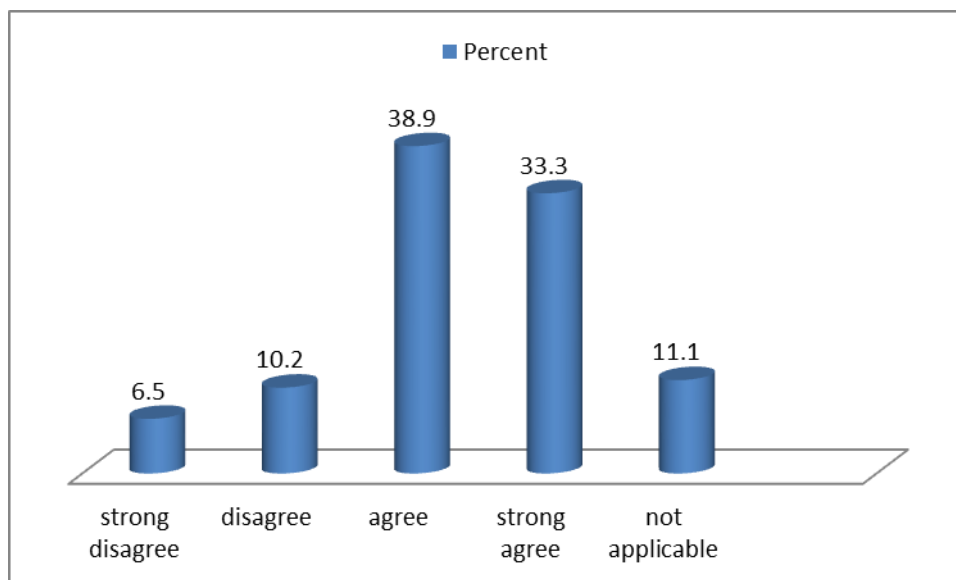
The findings agree with the study done by Wanajak (2011) in Thailand on “internet use and its impact on secondary school students in Chiang Mai, Thailand”. The study, reported that technological materials such as internet have been beneficial for learning among secondary school students. On the other side the study by Lenhart, Madden and Hitlin (2005) found that adolescents today spend much time on the internet for communication, educational and for entertainment purposes, including exploring sexual explicit materials. Therefore, one can argue that students use technological materials for numbers of issues including socialization, academic and for even other uses such as for exploring pornographic materials. The study reveals that majority of students are reported to be accessing technological materials not for academic purposes rather for viewing TSEM and spend much of their time chatting and sharing pornographic pictures and videos. If that time would have been spent on academic issues alone, probably they would have higher achievement in their academic learning.

4.3.1.2 Students Use of Technological Materials for Non-Academic Matters

The data concerning this sub theme was obtained from both students and teachers. Questionnaires, focused group and interview were used to obtain data concerning students’ use of technological materials for non-academic matters. The findings

revealed that majority of students agreed to use technological materials for non-academic matters. The findings of their responses are presented in figure 4.3 below:

Figure 4. 3. Students Using Technological Materials for Non-Academic Matters (N=108)



Source: field data (May, 2017) Key: N= Number of respondents

As it can be observed in figure 4.3 above, the responses of students show that about 38.9% used technological devices such as computer, phones and internet for non-academic matters. However, only 6.5% strongly disagreed on using them for non-academic matters, while 11.1% were not familiar with technological devices. The findings of the focus group discussion reveal similar responses as given by students from school A said the following:

“Most students do not spend time on accessing and using academic materials from the internet, rather they often go online to access materials unrelated to academic matters, they normally go online to view new fashion trends, especially girls who spend most of their time on Instagram just for viewing gossiping and fashions...”

Another student added that:

“Most students use technological materials for refreshment, whereby they use them for viewing comedy videos, viewing celebrities, and fashion trend setters. Also the findings show that girls some sometime use these materials to learn about ways or strategies for abortion...”

Furthermore, the findings from semi-structured interview responded by the discipline masters indicates the similar situation. As one of the discipline masters from school B narrated the following:

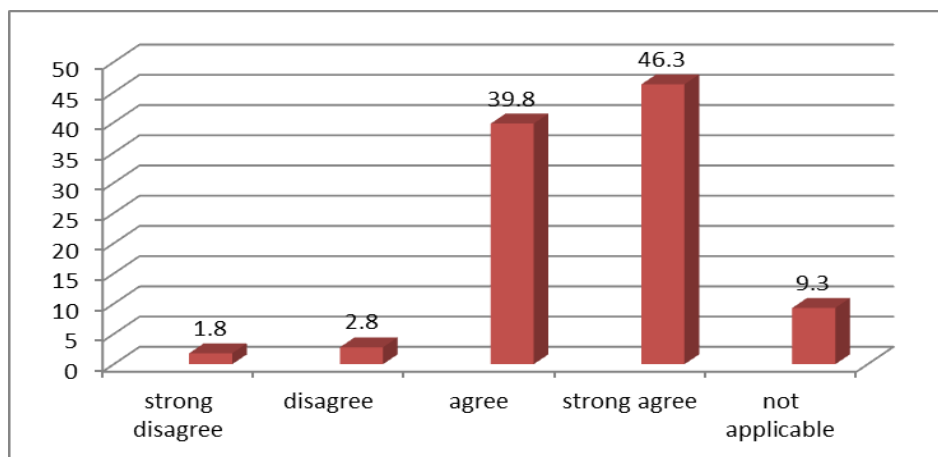
“It is true that most students use technological materials for non-academic matters, for instance during holiday time you can meet with students in the internet café just chatting online with friends via facebook or instagram instead of using that time for searching or reading materials related to academic matters...”

This resonates with what was commented by one of the heads of schools from school C, who argued that:

“One of the reasons for students’ poor performance in their academic activities is that they spend too much time on accessing technological materials. Since, most of the families in Tanzania neither regulate their children, nor have strict timetable for them regarding watching TV or using phones. Therefore, they spend most of their time watching channels which mostly depict sexual explicit contents...”

In addition, the researchers distributed questionnaires to students that asked the question which intended to measure to what extent students use technological materials for chatting with their friends on line. The results are summarized in the figure 4.4 below.

Figure 4. 4. Most Adolescent Students Use Social Media in Chatting with their Intimacy and Casual Friends (N=108)



Source: Field data (May, 2017) Key: N= number of respondents

From figure 4.4 above, the findings demonstrate that majority of students who were asked in the questionnaires on whether they use technological materials for

charting with intimacy and causal friends (86.1%) had either strongly agreed or agreed, while 6.6% had either strongly disagreed or disagreed with the statement, as presented to them based on the Likert scale measurements. On the other hand, 9.3% of students reported to be not familiar with the statement.

From the findings, it was found that students do use technological devices for different purposes such as academic and personal issues. The personal issues might include the exploration of sexual explicit materials. This agrees with the study done by Jeckoniah and Paul (2015) on access to social media and sexual behaviour among secondary school students in Morogoro Tanzania, which found that 94% of student, had access to social networks through mobile phones and computer modems. However, accessing these social networks without proper guidance of either their teachers or parents put them into the risk of exploring contents that may contain sexual materials.

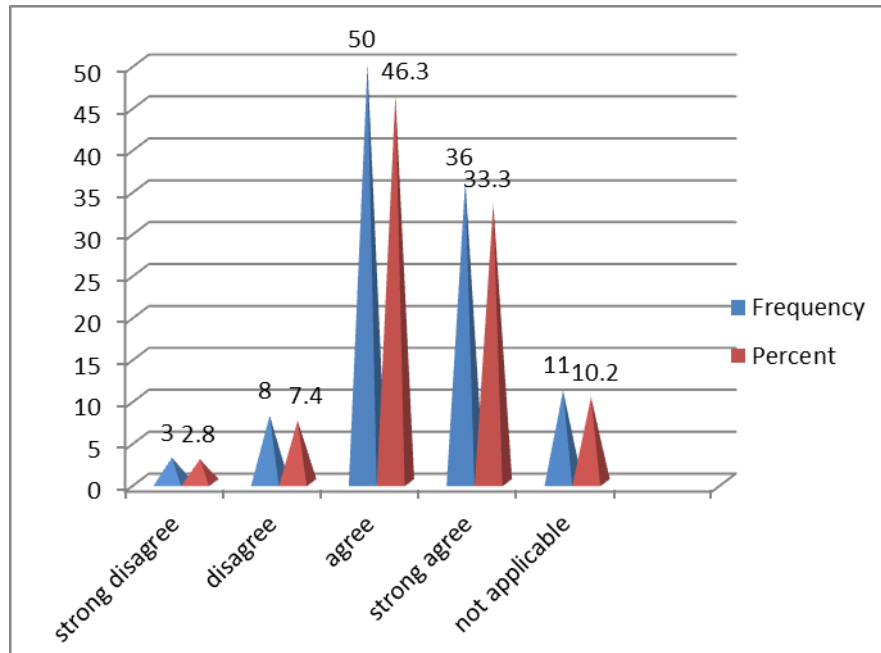
4.4. Attitudes towards the Effects of Technological Sexual Explicit Materials on Students' Learning

The information pertaining to this theme was obtained to satisfy the second research objective, which intended to explore students' attitudes towards the effects of technological sexual explicit materials on their learning. The researcher developed questionnaires, semi-structured interview and focused group discussion in order to explore attitudes towards this phenomenon from both students and teachers. The results on students' attitude are presented below.

4.4.1 Students Attitudes on Technological Sexual Explicit Materials

The findings reveal that, students' attitudes towards the effects of pornography on their learning are based on two sides, which are positive and negative ones. The figure 4.6 below summarizes the findings on students' attitudes towards academic learning and pornographic materials' viewing:

Figure 4.5. Students Attitudes towards the Effects of Technological Sexual Explicit Materials (N=108)



Source: field data (May, 2017) Key: N= number of respondent

As presented in figure 4.6 above the results show that 50(46.3%) of students who responded to this question agreed that most students have been negatively affected academically by viewing pornographic materials, while the findings show that 3(2.8%) of students strongly disagreed to be negatively affected academically by viewing pornographic materials, while 11(10.2%) were not familiar with the attitudes of students toward the effects of technological sexual explicit materials on their learning. The findings from focused group discussion from school C revealed similar situation on the attitudes of students towards the effects of pornographic viewing on their learning at school. As one of the students said the following:

“Students who engage in viewing technological sexual explicit materials drop in their academic performance since they lose their ability to concentrate on academic issues...”

This is because most of the time their minds are occupied by the images or the movies they have watched previous night. For example, you find the teacher is teaching, but some students are making stories about pornographic, romantic or movie series shown on different channels on TV. Therefore, this is one of the challenges which teachers encounter during class hours and most likely students with this kind of behaviour are likely to drop academically. This is substantiated by findings as presented in the figure above which show that 46.3% of them agreed

that students spend much of their study time on viewing pornographic related materials on the media.

In addition, another student from focused group discussion from school A was quoted saying the following:

“... it is easy to recognize students who are viewing pornography, for example, for the case of girls they manifest changes in appearance such as starting wearing makeup, wearing short skirts and often use language with sexual references when communicating with others...”

Moreover, one of the discipline masters from school A narrated the following:

“Most students who access and use technological sexual explicit materials apart from deteriorating in their learning ability viewing such sexual contents cause them to adopt bad attitudes.....”

In addition, the head of school A said the following:

“Students who view these pornographic materials change in their attitudes and behave inappropriately, since they are always thinking or imagining about practicing what they have observed from the pornographic materials, which ultimately affect their learning capability...”

The finding of the study stressed that sometimes students, tend to compare teachers while in front of the class teaching, or their fellow students with what they have viewed previous nights, something which makes those students lose focus and concentration in the classrooms and eventually perform poorly academically. The findings of this study matches with that of Brand et al (2011) who maintain that student's addiction on internet exploration may cause daily problem in social relationships and academic learning processes as they spend much time watching or listening to pornographic materials, thus consuming unwisely their precious learning time. Similarly Mingle (2015) in his study on social networks and its effect performance on senior high schools in Ghana, reveals that there is highly negative correlation of the time spent by students on facebook and academic performance. This means that students who spend much time on social media found themselves performing poorly in academic learning in school. This goes in line with the findings of this study as shown in figure 4.6 that majority of students agreed that they had negative attitude with these technological sexual materials, as they affect them negatively in their academic learning. Therefore, there is a need for both teachers

and stakeholders in general to cooperate on restricting students from accessing these TSEM.

4.4.2 On whether or not, Students have any Positive Attitudes Regarding the Effects of Technological Sexual Explicit Materials on Learning

This sub category was obtained based on the second research objective which intended to explore student’s attitudes towards the effects of technological sexual explicit materials on their learning. The data were obtained through the questionnaires. The results are obtainable in table 4.7 beneath.

Table 4. 7. There are positive impact of secondary school students viewing sexual explicitly materials (N=108).

	Frequency	Percent
Strongly disagree	69	63.9
Disagree	25	23.1
Agree	5	4.6
Strongly agree	3	2.8
Not applicable	6	5.6
Total	108	100

Source: Filed data (May, 2017) Key: N= Number of the respondents

As it can be observed in table 4.7 above, the findings indicate that majority of students 69 (63.9%) strongly disagreed that viewing pornography has any positive impacts on students learning, while 3(2.8%) strongly agreed that viewing pornography has positive impact on their learning, and 5.6% were not aware if viewing pornography has any positive effects towards their learning process or otherwise. Furthermore, other findings were from interviews, where the head of school C had this to say on the impact of students viewing pornography:

“We have received several cases related to students’ pregnancies in our school. For example, one student (form six) was transferred here from one district and was found to be pregnant. When we asked her who is responsible, she claimed it was one medical doctor where she came from. Another o-level student was impregnated by A-level student”.

However, students involved in the focus group discussion affirmed that viewing technological sexual explicit materials increases students’ social intimate relationships. Still this is not a positive effect as increasing knowledge in intimacy

may influence students to engage in sexual intercourse, something which may lead to unwanted pregnancies to girls. In the same way Mingle (2015) pointed out that only 15.8% of students use social media to discuss academic matters with friends, while majority use whatsApp for chatting with friends and share some pornographic materials. The findings are similar to this study which found that majority of students accepted using phones for chatting with friends through facebook, whatsApp and other related social media instead of discussing academic issues.

Furthermore, computers and internet have become crucial in everyday life of all people in the world, whereby both students and family use them for different purposes, something which has created addiction on using them. As various studies indicate that internet addiction has created negative effect over both students and families. Among the effects realized include students' failure in schools and deteriorating family relationships due to the time spend on the internet (Brian & Peter, 2005). The reality is that if students are carefully handled and directed on proper use of digital technological devices, they are likely to be good students at schools, because through e-learning students can access a lot of materials related to learning. However, if no intervention is taking place these students are likely to be addicted on internet usage for exploring offensive materials, which lead to change in their behavior and poor performance at school.

4.5 Teachers' Perceptions on Technological Sexual Explicitly Materials and their Effects on Students' Learning

The information pertaining to this objective was obtained through the questionnaire, interview, focus group discussion and documentary review. The objective intended was to find out teachers' perceptions towards students use of technological sexual explicit materials and their effects on students learning. The findings are presented as follows:

The study indicates that, generally teachers have negative perception on students who view technological sexual explicit materials, and agreed that they cause higher negative effects on those students' academic performance and learning. These effects have been examined as follows in table 4.8 hereunder:

Table 4. 8. Students accessing and using technological sexual explicitly materials are highly affected in academic learning (N=15)

	Frequency	Percent
Strong disagree	1	6.7
Disagree	1	6.7
Agree	6	40.0
Strong agree	6	40.0
Not applicable	1	6.7
Total	15	100.0

Source: Field data (May, 2017) Key: N= number of respondents

As seen from Table 4.8 on top, generally teachers perceived students who view pornographic materials in unfavorable terms (negatively) and perceive such students to be highly and negatively affected academically. This is substantiated with the findings above whereby majority of teachers 80% either strongly agreed or agreed that students who view such materials are affected academically. Meanwhile, only 1(6.7%) of teachers strongly disagreed and contend that students are not affected academically by viewing pornographic materials.

Basically, teachers perceived students' effects into three categories, which are; wastage of the studying time, negative change in behavior and drop in academic performance among students who engage in viewing technological sexual explicit materials. The findings show that there are no clearly defined benefits acquired by students by viewing pornography, rather negative effects have been mostly observed among students who access and use such materials. It is evident that they result into sexual practices among students, leading to unwanted pregnancies to students and sometimes students' dropping out from schools.

The findings concur with what many scholars such as Urassa (2012), Kihwele and Bali (2013) and Kafyulilo (2012) maintain that teachers perceive students who are accessing and using different social media such as phones, internet, Facebook, WhatsApp as negatively affected, with most teachers reporting that students who possess mobile phones perform poorly and misbehave more often badly than students without mobile phone.

4.4.2 Teachers Perception towards Students' Time Management

The findings reveal that teachers perceive students who normally access and use technological sexual explicit materials to be wasting much of their crucial studying time. According to teachers responses as found in this study, these students often stay overnight watching movies, browsing websites, chatting on WhatsApp, facebook and other social networking instead of using such precious time for academic preparation, such as doing homework and assignments. Table 4.9 below presents the findings from 15 teachers who responded to the questionnaires provided.

Table 4. 9. Students using technological sexual explicitly materials consume much of their study time. (N= 15)

	Frequency	Percent
Disagree	2	13.3
Agree	4	26.7
Strong agree	9	60.0
Total	15	100.0

Source: Field data (May, 2017) Key N= Number of respondents

As illustrated from table 4.9 above, the findings reveal that 9(60%) of teachers strongly agreed and 4(26.7%) agreed that students who are viewing technological sexual explicit materials consume much of their study time, while 2(13.3%) disagreed with the statement. The findings are akin to what was found during the focus group discussion with students in school B. One of the students argued that:

“Most students’ do access and use technological sexual explicit materials at night time, which is causing them to be very tired and sleepy in the morning, therefore losing focus and concentration in the classrooms.....”

Moreover, the discipline master in school B had the following to say regarding the effects faced by students who indulge in accessing and using pornography.

“...For example the form one students who were caught with a cell-phone after being reported by their fellow students, after the follow up was made about their characters, it was found that they were among the most stubborn students in the classroom and performed poorly academically...”

Another discipline master from school A said the following:

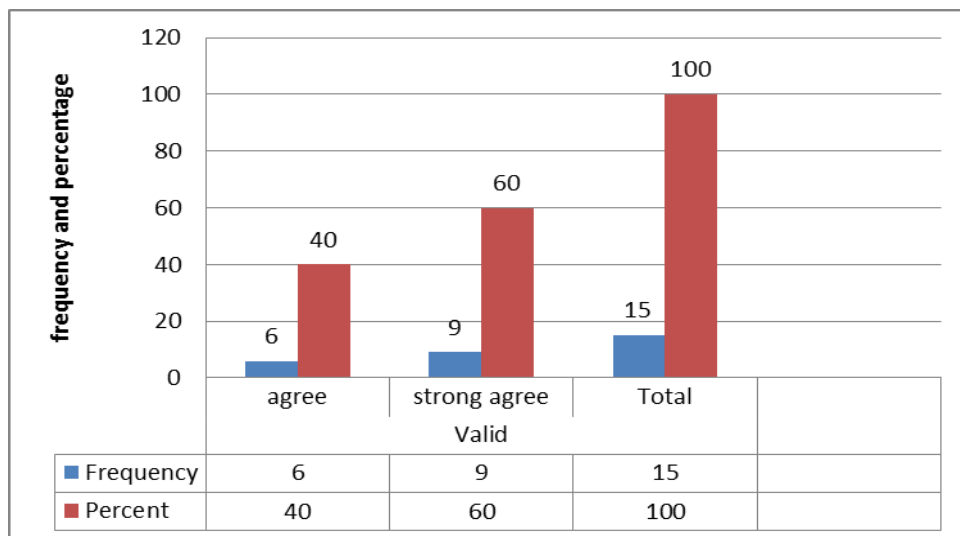
“Students fail to perform well in their studies and their academic progress deterred as a result of being too much exposed to pornographic materials. This is due the facts that watching such materials waste much of their time that could otherwise be used for academic preparation...”

Therefore, the findings are basically exposing the fact that the digital technology in communication, has led most students to a state where they fail to relax and concentrate on their learning. This is because such technology has revolutionized communication and made easy and possible for students to access unwanted materials anywhere at home or after school hours. Meanwhile, it has made possible for them to share with their friends such technological materials easily. That is why nowadays the majority of students are much more aware about social media. The results of this study corroborate with the findings by Mingles and Adams (2015) in which respondents agreed by 70% that students who engage in exploring sexual explicit materials are negatively affected academically, as they waste majority of their study time watching pornography.

4.5.2 Change in Behaviour

The findings from teachers reveal that, they perceive students who access and use sexual explicit materials to eventually incur a change in their behaviors. The figure 4.7 below presents the findings from teachers who responded to that question.

Figure 4. 5. Students who view TSEM Change in Behaviours (N=15)



Source: field data (May 2017) Key; N= number of respondents

Figure 4.7 above, indicates that, about 9(60%) and 6(40%) of teachers who answered the question strongly agreed and agreed that majority of students who view sexual explicit materials do change in their behaviors. Furthermore, no one disagreed with the statement. The findings confirm what discipline teachers said during the interview session, that students change in behavior when engaging in accessing and using sexual explicitly materials. Among the behaviours identified by discipline teachers are presented below in table 4.10:

Table 4. 10. Behaviours change in students

Engage in sexual relationship
Create addiction in sexual intercourse
Results students drug addiction
Have indiscipline at school
Lose faith in God

Source: Field data (May, 2017)

This is similar to what one of the head of schools from school B quoted, by saying that:

“Pornography watching have high effects on students as it affects them psychologically, for example it may influence them to engage into early age sexual intercourse. Since, this becomes a catalyst for them to engage into intimate relationships as they want to practice what they have observed through the movies or video clips showing pornography...”

The findings coincide with the study by Matimbwa and Anney (2016) in Tanzania, which reveals that teachers had negative perception towards students who possess and use accessing technological devices such as smart phone. Since, teachers believe that they easily access pornographic materials as they use those devices while unsupervised by their parents.

4.5 Measures Taken in Governing Students Using Technological Sexual Explicit Materials

The information concerning this theme are meant to fulfill the research objective four, which intended to examine the role played by the school in controlling students' exposure and access to technological sexual explicit materials. The data in this objective was obtained through the questionnaires, interview and documentary reviews. The research found that there are number of measures taken

by the school administration at large in preventing students from accessing and using technological sexual explicit materials either at school or at home.

4.5.1 School Computers' Protection against Porn Hosting Websites

This sub theme was developed from responses of the questionnaire through a likert scale posed to teachers and intended to examine if the given schools have computer laboratories, and how do they ensure that students cannot access and use technological sexual explicit materials while in the computer laboratory. Table 4.11 below displays the responses:

Table 4. 11. School computer laboratory is protected from websites containing sexual explicit materials (N=15)

	Frequency	Percent
Strongly disagree	1	6.7
Disagree	1	6.7
Agree	1	6.7
Strongly agree	4	26.7
Not applicable	8	53.3
Total	15	100.0

Source: Field Data (May, 2017) Key: N = number of respondents

The findings indicate that, 8(53.3%) of teachers had no knowledge if computers in schools are protected from websites containing pornographic materials or not, while 26.7% strongly agreed with the statement, and only one teacher which is equal to 6.7% strongly disagreed with the statement. Despite the fact that most school was found with no computer laboratory, but teachers admitted that students still access and use technological sexual explicit materials.

4.5.2 Students are Prohibited from Watching Pornographic Materials at School and at Home

The statement also was posed to teachers in which they were asked to rate the statement and it read as, '*Students are not allowed to watch pornographic materials at school or at home*'. The responses were shown on table 4.12 beneath:

Table 4. 12. Students are not allowed to watch pornographic materials at home and at school. (N=15)

	Frequency	Percent
Strong disagree	2	13.3
Disagree	2	13.3
Agree	4	26.7
Strong agree	6	40.0
Not applicable	1	6.7
Total	15	100.0

Source: Field Data (May, 2017) Key: N= number of respondents

The findings from table 4.12 above show that 40% of teachers strongly agreed that one of the measure to ensure students are not accessing and using technological sexual explicit materials is to prohibit them both at school and home to use these materials. However, 13.3% of the respondents strongly disagreed with the statement. The findings confirm with what was revealed in the interview session between the Heads of school and discipline masters. They all admitted that there are school rules and regulations that prohibit students from accessing and using digital technology at school. Among the heads of schools and discipline masters interviewed argued that schools do not allow students to use phones at school. Also one of the head of school added by saying that the current ministry of education science and technology have announced that all school should not allow students to use phones at school.

Moreover, school administrations use different strategies to ensure that students do not access and use pornographic materials either at school or at home. As one of the discipline masters from school B had the following to say:

“One of the measures that we do use in our school to ensure that students are not accessing and using pornographic materials is through parent-teachers meetings; these are conducted at school whereby teachers present a lot of issues concerning students’ academic affairs and discipline related matters, touching among other things the consequences of students’ exposure to sexual related materials...”

The findings revealed that during the meeting parents are asked to assist teachers to ensure that students when at home do not engage in using phones and social

media that can make them easily access pornographic materials. This is due the reason that teachers spend few hours with students at schools, while parents are the one who spend much time with them at home. Therefore, parents need to direct them regarding the effects of accessing these materials on their learning at school. One of the head of school B said that:

“...parents need to ensure that their children do not access phones that would allow them to access videos and pictures via internet and social-networking sites like whatsApp groups, in case parents decide to buy their children phones, they should buy them basic phones or monitor their uses and educate them on the side effects of using phones...”

The findings revealed that, in order to eradicate this problem among students, both schools and parents must work together to prevent students from the temptations of accessing and using these materials. While, at school level there are rules set to control students' exposure to such materials, yet the question remains at home. As one of the discipline master from school A said the following:

“The school does play its role of ensuring that students do not view pornography and other related materials, but when they are at home it is the responsibility of the parents to prevent these children against this phenomenon. Ironically, it is the parents themselves who buy them these expensive phones that enable them to access and use different social media ...”

Other discipline master added that:

“Also there are parents who buy CDs without understanding that they contain sexual explicit contents...”

Also another head of school A responded this question by saying that:

“Although at school student are banned from possessing and using mobile phones, still while at home and under their parent's care no one stops them from using them, therefore efforts need to be put on educating parents as well about the side effects of allowing their children to use phones and computer...”

The findings also show that another measure taken by school to prevent students from accessing and using technological sexual explicit materials is the establishment of the Guidance and counseling Department within schools. This department plays great role at school on guiding and counseling students whenever

they are found to be engaging on that habit or using phones at school. One of the discipline masters commented by saying that:

“As you have observed the parent has just left here, we have been discussing the case of her child who was found using phone at school...”

Furthermore, the findings show that some school have established programs which focus on providing awareness to students on the side effects of digital technology in general. These programs intend to create more awareness among students in order to rescue them from accessing and using pornography and other materials which could potentially lead them to engaging in criminal and other unlawful acts. As one head master was quoted saying that:

“We have different programmes which aim at preventing students from accessing these pornographic materials. For instance we have got life skills programmes, as well as topics concerning life skills in general, which are taught in civics and biology subject...”

In addition, another head of school added by saying that:

“...We have in our school a programme called “my body my life” where teachers and students come together and share ideas on various matters including the effects of viewing pornography...”

4.5.3 Students found Watching Pornography are Disciplined

The researcher intended to know what happens when student is found using sexual explicit materials at school. The results show that teachers do take action and among the action taken is together with punishing students who are found watching pornographic materials. The findings are presented hereunder in table 4.13

Table 4. 13. Students found watching pornography at school are provided with Punishment (N=15)

	Frequency	Percent
Strong disagree	1	6.7
Agree	2	13.3
Strong agree	11	73.3
Not applicable	1	6.7
Total	15	100.0

Source: Field data (May, 2017) Key N= number of respondents

The findings show that 11(73.3%) of teachers strongly agreed that students found watching pornography at school are given punishment, 1(6.7%) strongly disagreed with the statement. As discussed earlier, the findings indicate that schools prohibit students from using phones at school. Thus, if they are found using phones they face severe punishment from school’s administrators. This is substantiated by the evidence given by the head of school A while responding to question about the ways used to handle students who are found using pornographic materials, where he said this:

“...students are not allowed to have phones. When one is caught with phone, it is destroyed in front of other students. Following increased cases on this issue, we met with parents and agreed together that any student caught with cell-phone containing sexual explicit materials will be expelled from school.....”

Therefore, it is evident from the findings obtained that schools are active in taking initiatives to prevent the use of mobile phones among students, and protect them from being exposed to unethical materials. That is why parents were invited to discuss the ways to overcome the problem and discuss on the punishment to be applied to students who defy the rule.

In addition to that, the researcher developed an open-ended question to teachers that intended to measure their opinion on the measures to be taken to prevent students from accessing and using technological sexual explicit materials. The findings are summarized below in table 4.14:

Table 4. 14. Teachers' views on measures to be taken to prevent students viewing pornography

The government should prohibit and restrict websites contains pornographic materials.	2
Teachers should ensure that education is provided to students on pornographic effect.	2
The whole society should be educated on the effect of pornography	4
Enacting the laws that strictly prevent people showing pornography in the streets.	4
Provision of punishment to those who found using pornography	3

Source: Field data (May, 2017)

The findings harmonizes with that of Overaa (2014) in the study conducted in USA, which revealed that schools need to protect both primary and secondary school students from accessing inappropriate materials through the internet, which include pornographic materials. Similarly, Wanajak (2011) reveals similar situation that home or school computers should be placed in a place where when students are using them they can be easily observed or supervised by teachers, or in the home environment by the parents. Likewise, they should also be installed with programmes that block pornographic materials.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to explore the influence of technological sexual explicit materials on students learning in Dodoma municipal's secondary schools. This chapter presents summary of the study, conclusion, and recommendations for policy and action, as well as suggestions for future study.

5.1.1 Summary of the Study

The present study was inspired by the growing concern and debate on the impacts of social media and sexual explicit materials over students learning in secondary schools. The purpose of this study was to explore the influence of technological sexual explicit materials on students learning in Dodoma municipality secondary schools. The study adopted four research objectives and four research questions, which were: 1) To find out the extent of use of technological sexual explicit materials among students in Dodoma municipal's secondary schools, 2) To explore students' attitudes toward the effect of technological sexual explicit materials on their learning, 3) To find out teachers' perceptions towards students' usage of technological sexual explicit materials and their effects on students' learning. 4) To examine the role played by the schools in controlling students' exposure and access to technological sexual explicit materials.

The researcher conducted a review of related literature about the problem from global to local context, which discussed about the influence of TSEM on students learning in secondary schools. The purpose of reviewing was to develop awareness and broaden understanding of the study at hand in order to have clear direction on how to go about the study. From the literature reviewed, the researcher discovered that the problem is severe in both developed and developing countries. As from the literature reviewed, it was found that 74% of students in developed countries view pornography. Likewise, the similar situation was found in developing countries, as the review indicated. Thus, the study is vital as it increases awareness and understanding to all stakeholders in the education sector to deal with students and address the challenges revealed pertaining to the use of sexual explicit materials and how it affects students' academic performance. It also broaden the understanding about the role played by the schools' administration in addressing

and preventing students from accessing and using TSEM, eventually rescuing them from the effects caused by the use of these materials at school or even at home. The study was guided by two theories which are social learning theory and use-and-gratification theory as put forward by Albert Bandura and Lasswell's respectively. The theories in association with other element enabled the researcher to develop a conceptual framework. The study adopted mixed approach where the researcher employed sequential exploratory design, which helped to collect both qualitative and quantitative data from three (3) secondary schools by using questionnaire, interview, focus group discussion and documentary review as data collection tools. During data collection, the priority was given to the first phase, which involved interview session and focus group discussion, while in the second phase researcher collected quantitative data. A total of 129 respondents were involved in the study, whereby simple random selection method was employed to select the sample of 108 students and 15 teachers to be involved in the study. In addition, three (3) heads of schools and three (3) discipline teachers were purposively selected based on the researcher's judgment.

The researcher conducted a pilot study four days prior to embarking on the actual field data collection and this pilot study was undertaken involved one private school in Dodoma Municipality. The purpose was to ensure the reliability of the instruments. The pilot study helped the researcher to cross check difficult terminologies and restructuring the questions which were found to be ambiguous to the respondents during the pilot study.

The data in this study were analyzed both qualitatively and quantitatively. Qualitative data were analyzed by content analysis and presented into unities and sub-unities. Quantitative data were analyzed using descriptive statistics by entering data into computer software (SPSS version 20.0) for computation, which give out data into frequency, percentages and mean. Tables, pie charts and bar graphs were used to present the findings of the study.

The findings of objective one, which was to find out the extent of the use of technological sexual explicit materials among students in Dodoma municipal's secondary schools, it was found that, the majority of secondary school students access and use technological sexual explicit materials. The majority of the respondents who participated in the study agreed that, a large number of students use TSEM. It further revealed that most of the students view and use TSEM when

at home, since the hours spent at school are less compared to the time spent at home. Moreover, it was found that adolescent youth resort to lying about their age in order to get access and use websites which are age-restricted and contain pornographic materials. However, it was also found other students use social media such as internet for academic and personal purposes (such as chatting) when at home.

In light with objective two, the study noted that students' attitudes towards the effects of pornography on their learning are based on two sides, which are positive and negative ones. It was found that, 50(46.3%) of students agreed that most of students have been affected academically by viewing pornographic materials. While the findings show that 3(2.8%) of students strongly disagreed to be affected academically by their viewing of pornographic materials. This implies that, majority of students accept the fact that viewing and using TSEM has negative effects in their academic performance and learning at school. The findings revealed that the act of using TSEM consumed much of students' time, and since they view such materials mostly during the night they tend to lose concentration, feeling dizzy and sleepy in the classrooms which affect their learning. However, few students accepted that viewing TSEM have positive impact on them, as they claim that it helps them to develop social intimacy with their friends and increases their friendship.

Furthermore, the study found that most teachers have negative perception regarding students who are viewing and using TSEM whether at home or at school. Students who are viewing such materials are viewed to be affected psychologically and even become vulnerable to sexual addiction, school dropout, and unwanted pregnancies and sometime acquire HIV/AIDS. All these have impediment to learning process of students at school that is why the majority of teachers had total negative perception of students who use TSEM. As study found, teachers have gone far and dislike students' use of phones whether at home or at school, hence advising parents to be selective about what type of phones they should buy their children if it is necessary to do so, and recommended those which won't allow access to the internet, means that they should buy them simple phones. This goes in hand with one of the measures taken by school management in prohibiting students from accessing and using TSEM. The study reveals that students are not allowed to use phones at school and if found with it, it is destroyed in front of other

students and responsible student be punished including possible suspension from school. All these are done focusing at prohibiting students from viewing TSEM.

5.2 Conclusion

The study examined the influence of TSEM on students learning in secondary schools. Students are the future human resources for any country. These are precious resources extremely depended upon to drive forward socio-economic and development agenda for the nation. This is the reason why most governments around the world spend trillions of dollars in setting up required infrastructure and create better learning environment for children to acquire better education. Therefore, it is imperative for all stakeholders (government, parents and teachers) to closely monitoring and safeguarding them from engaging into all activities which could take them off the right track, eventually affecting their learning process at schools. Accessing and using pornographic materials is among factors which have been proven by numerous researches including this study, to have negative impacts on students' learning. It is arguably one of major causes that lead to poor academic achievement among students. Failure to perform better at schools has severe impacts on the future life of youths and a nation. Since, education not only prepares students to acquire essential skills for life, but also equip the nation with skilled manpower who become the economic force for economic advancement of the nation and reliable supplier of well-trained human resources.

Therefore, strict measures need to be taken by all concerned stakeholders to ensure that students are safeguarded from exposure and the use of TSEM when at school or at home. This could be achieved among other measures by enacting strict laws which prohibit youth from accessing and using these materials when at school or even at home. Likewise, the government ought to review and strengthen the law on social Media's access and use over young people at adolescent stage, who are the most vulnerable to TSEM and come up with a definitive mechanism that will prevent students and youth in general from exposure, access and use of TSEM. This should include enacting strict laws and severe penalties for those who show movies in the streets without regard to the children's ethical and moral welfare. The measure should also include strengthening the power of Tanzania's media and communication watchdog in monitoring and controlling the contents aired by television stations to the public, and take rigorous action against those stations which show pornographic related materials, without regard to the welfare of the children.

5.3 Recommendations

5.3.1 Recommendation for Policy and Action

In light of the research findings and resulting conclusion, the study has the following recommendations for policy and action as well as for further research.

Firstly, the government need to enact strict law that seriously prohibit students' exposure, accessing and using TSEM. Also, stakeholders need to ensure that home and school computers are protected with programmes that block pornographic materials. Some common ways to protect computers from such websites are such as configuring the HOST file in a computer drive to block selected websites, installing ready-made website blocker software example Barracuda web blocker, stayfocused, Nanny, k9 web protection and also blocking selected websites on individual web browsers.

Secondly, the lesson on social ethics must be strengthened in all schools in order to educate children about moral and ethical standards, which are expected and compatible with Tanzanian culture. Thus, the government under the ministry responsible need to strengthen this subject at schools to help students build awareness on the effects of TSEM.

Thirdly, religious studies ought to be revived and seriously taught in schools. This will help in increasing students' fear of God and behave with good manners, including avoiding the exposure to porn materials. Researcher recommends as well, that the grades attained by students in these subjects must be officially recognized and included in the passing cut-points like it was before, in order to encourage students to opt to take these subjects. Since, youth without religious and moral guidance can easily drift to bad behaviours and immoral acts.

Finally, there is a need of strengthen guidance and counselling department in schools by training or employing trained teachers on counselling to take care of students who need counselling on various issues including educating them on the effects of using TSEM, and how to get themselves out of that trap of immoral behaviour which seriously affect their learning.

5.3.2 Recommendation for Further Studies

This study was conducted in Dodoma municipal council and involved both public and privately owned secondary schools with just 129 respondents. Therefore, the findings obtained cannot be generalized to other regions. Following that, it is recommended by the researcher that another study needs to be carried out on the same region covering a large area, so that the findings can be generalized regionally.

Meanwhile, the study investigated on this phenomenon by including both private and public secondary schools within the Municipality. Therefore, this provides the opportunity for another researcher to investigate on similar case by separating the schools, in order to find out whether there is any significant difference on the extent of usage of these materials between public schools and private schools.

In addition, a follow up study could be conducted on the same subject by selecting respondents from different schools in different regions of Tanzania in order to obtain the findings which could allow researchers to make countrywide generalization.

Finally, this study employed mixed approach and adopted sequential exploratory study design, with 129 respondents as a unity of analysis, therefore another study could be conducted on similar topic, but with different approaches and different design that can employ large sample, which could include parents. Since, the allocated time, space, research methods and design can provide different results.

APPENDICES

Appendix A: Questionnaires for Teachers

Researcher Information sheet to Teachers

Dear Sir/Madam.....

I am a student pursuing Masters of Arts in Education in St. John's University of Tanzania hereby requesting your cooperation. The purpose of this questionnaire is to explore the influence of technological sexual explicit materials on students learning among secondary school students in Dodoma. So, you are kindly requested to give genuine and appropriate response.

The researcher would like to assure you that the information you give would be kept confidential and used only for academic purpose. The researcher is interested to thank you in advance for your cooperation and kindness.

General Direction:

- You are not required to write your name.
- Read the statement carefully.
- For the general background information, respond by putting a “√” mark in the blank space beside your choice.
- This questionnaires comprises three sections which are A, B and C

SECTION A: Teachers Personal Information

Please, give your answer by putting a tick (V) in the appropriate space or write your answer in the space provided.

1. Gender

Male	
Female	

2. Age

1	18-25	
2	25-35	
3	35-45	
4	45-60	

3 What is your highest level of education?

1. Diploma in Education	
2 Advanced Diploma in Education	
3. First degree level	
4. Second Degree Level	
5 Other specify	

5. How many years have you been teaching?

6. Do you have any professional training as a teacher counselor? Yes/No.....

SECTION B: Teachers' Perception

The following statements are descriptions which shows the uses, attitudes and perceptions on students using technological sexual explicitly materials and its effect in learning. Indicate the extent to which you agree the statement describes perception, effects and attitude on students' usage of technological sexual explicitly materials in your school by putting a tick (V) against the number that best reflects your opinion. The response options range from 1= Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. Use the "NA" (Not Applicable) response if the item does not apply to you or you do not know.

Scale for measures students using sexual explicit materials in public secondary schools.

S/N	Statements	SD	D	A	SA	NA
1	Students accessing and using technological sexual explicitly materials are highly affected in academic learning					
2	There is clearly defined benefits of viewing pornography among students					
3	There is negative effects of students viewing pornography and learning					
4	Students who view sexual explicitly materials change in terms of behaviours					
5	Students viewing sexual explicitly materials are unstable academically					
6	Students using technological sexual					

	explicitly materials consume much of their study time.					
7	Most of adolescent students access and use technological sexual explicitly materials					
8	Students viewing sexual explicitly materials enhance their sexual relationship					
9	School computer laboratory is protected from websites containing sexual explicit materials					
10	Students are not allowed to watch pornographic materials at home or at school.					
11	Students found watching pornography at school are provided with punishment					
12	To sign in Website containing pornography need a password and only adult can access and use the website					
13	Sometime pornographic website are easily reached or accessed by students even at home or at school					
14	Students lies their age in order to access pornographic pictures through the internet					

Section C: Suggestions

What are your suggestions on preventing students to use technological sexual explicit materials?

- i).....
- ii).....
- iii).....
- iv).....

Appendix B: Questionnaire for Students

Dear Respondents.....

I am a student pursuing Masters of Arts in Education in St. John's University of Tanzania hereby requesting your cooperation. The purpose of these questionnaires is to explore the influences of technological sexual explicitly materials on students learning among secondary school students in Dodoma. So, you are kindly requested to give genuine and appropriate response.

The researcher would like to assure you that the information you give would be kept confidential and used only for academic purpose. The researcher is interested to thank you in advance for your cooperation and kindness.

General Direction:

- You are not required to write your name.
- Read the statement carefully.
- For the general background information, respond by putting a “√” mark in the blank space beside your choice

A. Students’ personal information

Please put a tick where necessary

- 1) What is your sex? M.....F.....
- 2) Your age
- 3) Which class are you?

The following statements are descriptions show the extent, attitude and perception on students using technological sexual explicitly materials and its effect in learning. Indicate the extent to which you agree that the statement describes extent, perceptions, effects and attitudes on students’ uses technological sexual explicitly materials in your school by putting a tick (V) against the number that best reflects your opinion. The response options range from 1= Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. Use the "NA" (Not Applicable):

	STATEMENT	SD	D	A	SA	NA
1	Most of students use computer and mobile phones.					
2	Most of students use social media for academic purposes and personal issues.					

3	Students are aware of technological sexual explicit materials					
4	Students access technological sexual explicit materials					
5	Viewing pornographic frequently result to addiction in sexual arousal among students					
6	There are positive impacts of secondary school students viewing sexual explicit materials.					
7	There are students affected in emotional and psychological behaviour in viewing sexual explicit materials.					
8	There is negative impact in academic learning among students who view technological sexual explicit materials.					
9	Most of students use their study time in access and using sexual explicitly materials.					
10	Most of students use social media in non-academic matters.					
11	It's true that most adolescent students use social media in charting with their intimacy friends and causal friends.					
12	Most of students are affected academically by using pornographic materials.					
13	Teachers advice students in accessing and using social media in non-academic matters.					

B. What is your opinion on the Impact of technological sexual explicitly materials on students' academic learning?

- i).....
- ii).....
- iii).....
- iv).....

Appendix C: Swahili Version of Questionnaire for Students

Dodoso la wanafunzi

Ndugu wanafunzi

Kwa majina naitwa.....mwanafunzi wa Shahada ya Uzamili ya Elimu katika chuo kikuu cha St. John cha Tanzania. Lengo la dodoso hili ni kutafiti juu ya athari za teknolojia zinazoonesha wazima tendo ya ngono na utupu katika masomo kwa wanafunzi wa shule za sekondari katika wilaya ya Dodoma. Hivyo unaombwa kutoa taarifa sahihi. Napenda kuwahakikishia kuwa taarifa mtakazotoa zitakuwa ni siri na zitatumika kwa ajili ya utafiti wa kielimu tu. Napenda kutanguliza shukurani za dhati kwa ushirikiano wenu.

Maelekezo yaj umla:

- Usiandike jina lako kwenye dodoso hili
- Soma maelezo ya kila sentensi kwa umakini.

Kwa taarifa za mwanzo jibu kwa kuweka tiki kwenye nafasi au kisanduku pembeni ya jibu sahihi.

Taarifa binafsi za wanafunzi

A. Weka alama ya vema sehemu husika

1. Jinsia yako ni ME..... KE.....
2. Umriwakoni
3. Je una soma kidato cha ngapi?

B. Sentensi/kauli zifuatazo ni maelezo yanayoonesha kiwango, mwelekeo na mtazamo kuhusu mwanafunzi kutumia teknolojia zinazoonesha matendo ya ngono na utupu na madhara yake katika kujifunza. Onesha kiwango unachokubaliana au kukataa sentensi/kauli inayoeleza kiasi, mtazamo, madhara na mwelekeo kuhusu wanafunzi kutumia teknolojia zinazoonesha wazi matendo ya ngono na utupu kwa kuweka vema (v) mbele/sambamba na namba ya kauli inayoafikiana na mawazo yako. Majibu ya uchaguzi yamepangwa kutoka 1.Sikubaliani kabisa = SK, 2. Sikubaliani = S, 3. Nakubaliana = N, 4. Nakubaliana kabisa = NK, 5. Sifahamu= F

	SENTENSI	SK	S	N	NK	F
1	Wanafunzi wengi hutumia kompyuta na simu za mkononi					
2	Wanafunzi wengi hutumia mitandao ya kijamii kwa madhumuni ya kuperuzi mambo ya masomo na mambo binafsi					
3	Wanafunzi wanafahamu juu ya teknolojia					

	zinazoonesha wazi picha za ngono na utupu					
4	Wanafunzi huingia katika mitandao inyoonesha wazi matendo ya ngono (X)					
5	Kuangalia picha au matendo ya ngono mara kwa mara husababisha mtu kuwa mlevi wa ngono					
6	Kuna manufaa kwa mwanafunzi wa sekondari kuperuzi katika mitandao nakuangalia picha za ngono na utupu					
7	Wapo wanafunzi walioathirika kitabia na kisaikolojia kutokana na kuangalia picha za ngono na utupu.					
8	Kutazama picha za ngono na utupu kuna madhara katika ujifunzaji wa mwanafunzi katika masomo yao ya shule					
9	Wanafunzi wengi hutumia muda wao mwingi wa kimasomo kutizama au kuperuzi mitandao yenye picha za utupu au ngono					
10	Wanafunzi wengi hutumia mitandao ya kijamii kwa mambo yasiyo ya kitaaluma					
11	Ni kweli kwamba wanafunzi walio katika umri wa kubalehe hutumia zaidi mitandao ya kijamii kuwasiliana na wapenzi wao au marafiki kuliko kitaaluma					
12	Wanafunzi wengi huathirika kimasomo kwa kutizama picha za ngono na utupu					
13	Walimu huwashauri wanafunzi juu ya matumizi ya mitandao ya kijamii kwa mambo yasiyo ya kitaaluma					

C Una maoni gani juu ya madhara ya teknolojia zinazoonesha wazi picha na matendo

ya ngono kwa wanafunzi na ujifunzaji wa masomo

i).....

ii).....

iii).....

iv).....

Appendix D: Interview Guidelines to Heads of Schools

1. How students' learning at school is affected by the access and use of sexual explicit materials?
2. How do you perceive students who use pornographic materials?
3. What does your school do to ensure that students do not access pornographic materials?
4. In what ways, if any do you handle students at school who access and use pornography.
5. How are your students affected academically in viewing pornography every day, if any?
6. What are your actions or way forward in addressing this problem of pornography viewing among students at home or at school if any?
7. How do you find that students are affected emotionally, behaviourally or academically in viewing sexual explicitly materials?
8. How do you teach students to avoid viewing sexual explicit materials at home or at school?

Appendix E: Interview Guideline to Discipline Teachers

- 1 Do you receive students discipline cases related to pornography watching or listening at school? How do you handle it?
- 2 Why and how are students exploring sexual explicit materials affected in their academic learning at school?
- 3 What attitude do you think students have on the impact of sexual explicit materials at school?
- 4 How do you deal with cases concerning with involvement of students in sexual behaviours?
- 4 To what extent are students affected academically after engaging in exploration of sexual explicit materials?
- 6 What is your advice on students using technological sexual explicit materials?

Appendix F: Focus Group Discussion Guidelines to Students

1. How do you access and use social media?
2. What do students mostly explore online?
3. How long do students spend online and Offline?
4. What are the effects for students' usage of social media which display sexual explicit materials in learning?
5. What are your views on students' exploration of social media which show pornography?
6. What time do students use in surfing sexual explicitly materials?
7. What are the effects of watching pornography on students' academic learning?

Appendix G: Focus Group Discussion Guidelines to Students

Swahili Version

1. Huwa unapataje na unatumiaje mitandao ya kijamii?
2. Je mara nyingi wanafunzi huwa wanachunguza au kutafuta nini wakiwa kwenye mitandao?
3. Ni muda gani wanafunzi hutumia wakiwa mtandaoni na wasipokuwa mtandaoni?
4. Ni madhara gani huwapata wanafunzi wanapotumia mitandao ya kijamii inayoonesha wazi matendo ya ngono na utupu?
5. Ni wakati gani wanafunzi huutumia kuperuzi na kuangalia picha za ngono na utupu?
6. Nini madhara ya kutazama picha za ngono kwa wanafunzi katika kujifunza kitaaluma?
7. Nini maoni yako juu ya wanafunzi wanaotumia mitandao ya kijamii inayoonesha wazi picha za utupu na ngono

Appendix H: Consent Forms

For students' focus group discussion/For students' questionnaire/For teacher's questionnaire and interview.

Please tick in the check boxes:

I have read the information sheet and understand what will be required of me if I participate in this study.

I understand the group discussion will be audio-taped and the recordings will be wiped after completion of the study.

I understand that the study will be kept confidential by the researcher and her supervisors. Also, the published results will not use my name or my school and I will not be identified in any presentation or publications that draw on this research.

I understand that my participation is voluntary and I have right to withdraw from the study at any time without consequences.

I understand that I can receive the feedback on the findings of the study. I have written my e-mail/postal mail address below for the report to be sent to.

I understand that I can get more information about this study from the researcher, and that I can contact St John's University of Tanzania if I have any complaints.

I consent / do not consent (delete one) to be involved in this focus group discussion.

Full name of Student/Teacher.....

School

Signature

Date

E-mail

Postal mail address

Appendix I: Permit Letter – Dodoma Municipal Council

JAMHURI YA MUUNGANO WA TANZANIA
HALMASHAURI YA MANISPAA DODOMA
(Barua zote zipetekwe kwa Mkurugenzi wa Manispaa)

Original

KOA WA DODOMA
P: 2324817/2321550
K: 2324817/2354817



Ofisi ya Mkurugenzi wa Manispaa
S.L.P.1249
DODOMA
E.mail:dodcmunicipality@yahoo.co.uk

Unapojibu tafadhali taja:

Kumb Na. HMD/T.40/6/VOL.11

Tarehe. 28/04/2017...

MKUU WA CHUO;
CHUO CHA S.T. JOHN'S UNIVERSITY
SLP: 47
..... DODOMA

YARI: KUFANYA MAZOEZI KWA VIPENDO / UTAFITI

Tafadhali rejea somo hapo juu.

Napenda kukujulisha kuwa ombi lako la Mwanachuo/Wanachuo
wako PERPETUA HERANAN: MUKU: kinakubalika.

Mtejwa afike Ofisi ya Dodoma, Jamhuri na Meruwa S.S kwa
ajili ya kuanzaa mazoezi hayo/ kufanya utafiti huo kwa tarehe
husika. Aidha Manispaa haitakuwa na fungu lolote la kumlipa/
kumlipa Mwanachuo/ Wanachuo huyo/hao.

Nakutakia kazi njema.

MKURUGENZI WA
MANISPAA DODOMA

Kny: MKURUGENZI WA MANISPAA,
DODOMA.

Nakala : Mkuu wa Idara/Kitengo U.TAWALA
: Mwanachuo Ndugu PERPETUA H. MUKU
: Mtendaji wa Kata/Kijiji/Mtaa.....

Appendix J: Permit Letter ST John's University of Tanzania

ST JOHN'S UNIVERSITY OF TANZANIA

Directorate of Research, Consultancy and
Postgraduate Studies

Tel: +255 26-2390044
Fax: +255 26-2390025
Website: www.sjut.ac.tz



PO Box 47
DODOMA
Tanzania

Date: 25th.03.2017

TO WHOM IT MAY CONCERN

Graduate Student's Research Clearance

This letter serves to introduce PERPETUA HERMAN NJIKU (Registration Number M.2014/5054), who is a bona fide student of St John's University of Tanzania in the Faculty of Humanities and Education.

She is currently in the research stage of her Masters studies and is required to collect data. She has already obtained ethical clearance from SJUT Internal Review Committee

Her approved research topic is:

THE INFLUENCE OF TECHNOLOGICAL SEXUAL EXPLICITLY MATERIALS ON STUDENT LEARNING IN SECONDARY SCHOOLS

I request that you grant this student all possible assistance to facilitate the completion of her research study.

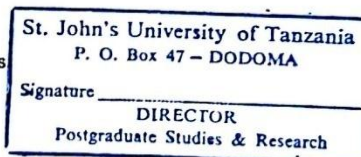
Should you need further clarification please contact my office.

I wish to thank you for your kind assistance for this student.

Yours sincerely

A handwritten signature in black ink, appearing to be "F. Bwagalilo".

Dr F. Bwagalilo
Ag, Director of Graduate Studies
Email fbwagalilo@sjut.ac.tz



Appendix K: Ethical Clearance



ST JOHN'S UNIVERSITY OF TANZANIA

DIRECTORATE OF GRADUATE STUDIES

INTERNAL REVIEW COMMITTEE

RESEARCH CLEARANCE CERTIFICATE

FOR MASTER'S AND DOCTORAL STUDENTS

Date of Review: 24th APRIL, 2017

Project title: **THE INFLUENCE OF TECHNOLOGICAL SEXUAL EXPLICITLY MATERIALS ON STUDENT LEARNING IN SECONDARY SCHOOLS.**

Researcher: **PERPETUA HERMAN NJIKU**

Supervisor: **Dr. ZAWADI RICHARD**

Faculty / Institute / School: **Faculty of Humanities and Education**

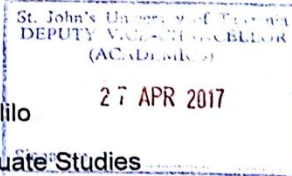
Degree being studied for: **Masters of Arts in Education**

This is to certify that the research proposal herein detailed has been examined and approved by the Internal Review Committee of St John's University of Tanzania

Handwritten signature of Dr. Fadhili Bwagalilo.

Dr. Fadhili Bwagalilo

Ag, Director Graduate Studies



Handwritten signature of Prof. C. Rubagumya.

Prof. C. Rubagumya

DVCA

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