

**Pornography Use and other Determinants of Risky Sexual Behaviour  
among Students in Assosa General Secondary School and College  
Preparatory, Western Ethiopia**

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Department of Sociology**

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## **Declaration**

The researcher, do hereby declare that this MA thesis is my original work except for the references duly acknowledged. This thesis paper was conducted by the researcher under close supervision of Mr. Nega Jibat and Mr. Amanti Baru from Jimma University, College of Social Sciences and Humanities, Department of Sociology during 2016/17 Academic year. This work has neither been submitted in whole nor in part for any degree in this University or elsewhere.

Signature: .....

Date: June 26, 2017

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## **List of abbreviations**

**AGSSCP:** Assosa General Secondary School and College Preparatory

**AOR:** Adjusted Odds Ratio

**BGRS:** Benishangul Gumuz Regional State

**BLA:** Binary Logistic Regression

**CI:** Confidence Interval

**COR:** Crude Odds Ratio

**EMH:** Ethiopian Ministry of Health

**FGD:** Focus Group Discussion

**HIV/AIDS:** Human Immunodeficiency Virus/Acquired Immuno Deficiency Syndrome

**MLE:** Maximum Likelihood Estimation

**MH:** Ministry of Health

**NAYRHSFDRE:** National Adolescents and Youth Reproductive Health Strategy of the Federal Democratic Republic of Ethiopia

**OR:** Odds Ratio

**PH:** Public Health

**STIs:** Sexually Transmitted Infections

**UN:** United Nations

**YP:** Youth Policy

## Abstract

*There has been a growing concern over the potential harms of pornography amongst young people as a result of the development and the expansion of new forms of social media and technology. Little has been known about the experience of in-school youths' usage of pornographic materials and associated risky sexual behaviour in Ethiopian context. This study investigated pornography use and other determinants of risky sexual behaviour among students of Assosa General Secondary School and College Preparatory. The study design was cross-sectional descriptive and analytical with quantitative dominant mixed research approach. 317 respondents participated in the survey, who were selected by using systematic sampling technique. Two FGDs (one with female & one with male students) and nine key informant interviews were conducted to collect qualitative data. FGD guide and interview check list were tools used to collect qualitative data. A structured self-administered questionnaire developed by the researcher was used after pre-test to collect quantitative data. Both data types were collected from February to March, 2017. Descriptive and inferential statistics for quantitative data analysis (using SPSS 20.0 version) and thematic analysis for qualitative data were used. 24.6 % of prevalence of pornography use was reported among the study participants. 31.2% of the study participants had started sexual intercourse and among them, 22.7% were started sex before age 18 years. In the Multivariate Logistic Regression analysis, sex (AOR [95% CI] = 3.2 [1.173, 8.734]), educational status of the students (AOR [95% CI] = 0.141 [0.025, 0.797]), religious education attendance (AOR [95% CI] = 0.259 [0.088, 0.765]), pornography use (AOR [95% CI] = 6.401 [1.788, 22.919]) and alcohol use (AOR [95% CI] = 3.449 [1.359, 8.754]) were significantly and independently associated with students risky sexual behaviour. The qualitative findings of this study revealed that peer pressure, exposure to western media and less communication about sex related matters between students and their parents have also influence on students' sexual behaviour. In sum, the study found that personal, interpersonal, behavioural and perceived social environmental factors strongly influenced students risky sexual behaviours; early sexual initiation, unsafe sexual intercourse and having sex with multiple sexual partners. Hence, there needs for urgent mitigation strategies of ameliorating the problems of risky sexual behaviour that in-school youth of the study area have encountered so far. Forthcoming researches should give prior attention for identification protective factors for risk behaviour among early young people in the study area.*

**Keywords:** Assosa, Pornography, Risky sexual behaviour and Students

## **CHAPTER ONE: INTRODUCTION**

### **1.1. Background of the Study**

Globally in 2015, there were 1.2 billion young people aged 15 to 24 years, with one-six share of the worlds' population, while 19 percent (226 Million) of them living in Africa (United Nations 2015). Health inequalities and environmental, structural and cultural determinants of risk taking among adolescents had become a growing concern in public health sector (Pound & Campbell 2012). UN (2015:2) stated that “inadequate investment in the health of young people limits their ability to reach their full productive potential”. Youth have been found to be the group at the highest risk for negative health consequences related to sexual risk taking behavior (Gurmesa, Fessahaye and Sisay 2012; Wondemagegn, Mulat and Bayeh 2014; Tadesse *et al.* 2016).

The term sexual health has become increasingly important in understanding and defining youth sexual health behavior and wellbeing. But, having a clear and precise definition for the term has been ambiguous (Kahlina 2012). Despite of this, literature on youth sexual behaviour has revealed the key pointers of risky sexual behavior among youths. These indicators of risky sexual behaviour contains: sexual initiation at early age, insufficient contraception use, failure to discuss risk topics about sex prior to it and sexual contact with an unknown partner, multiple partner and prostitution (Gurmesa *et al.* 2012; Imaledo, Peter-Kio and Asuquo 2012).

Sawyer *et al.* argues that the development and expansion of new forms of social media and technology has brought additional challenges to adolescents potentially leading to increased exposure to sexting and violent content (Sawyer *et al.* cited in Pound and Campbell 2015). Above and beyond, there has been a growing concern over the potential harms of pornography among young people which include: encouraging early sexual activity, acceptance of casual and extramarital sex, multiple partners, anal and oral sex, homosexuality, generate shame, guilt, anxiety, confusion, poor social bonds, addictions, undermine relationships and foster sexual violence (Bryant 2009).

According to the Ethiopian Ministry of Health (n.d.), young people in Ethiopia are faced with multiple and interrelated health and risky sexual practices like: high levels of teenage pregnancy, unsafe abortion and sexually transmitted infections (STIs). These problems are further complicated by limited access to reproductive health information and good quality adolescent reproductive health services in the country. As empirical evidence to this, the different studies ever conducted about sexual behavior of adolescents and young people in different regions of Ethiopia revealed that youths are engaged in risky sexual behavior because of different reasons: influence of alcohol and khat, poor parental attachment and age (Gurmesa *et al.* 2012; Deresse and Debebe 2014; Tadesse *et al.* 2016). Nevertheless, studies about risky sexual behaviour in Ethiopia have given little emphasis to study the prevalence of pornography use and its association with risky sexual behaviour among young people. Too, there needs more investigation about the influence of social, behavioural, and personal factors on risky sexual behaviour of young people in diversified contexts to deeply understand the issue and suggest possible solutions. Accordingly, the major purpose of this study was to investigate pornography use and other determinants of risky sexual behaviour among students in Assosa General Secondary School and College Preparatory.

## **1.2. Statement of the Problem**

Risky sexual behaviors among adolescents can lead to multiple negative health consequences such as: sexually transmitted infections (STIs) and teenage pregnancy. Particularly, adolescent and young adults are more likely than older adults to engage in risky sexual practice, to have multiple sex partners, to engage in unprotected sexual intercourse and to select higher risk partners (Asekun-Olarinmoye *et al.* 2014; Elias 2014). Nowadays, more frequent viewing of pornography is in some way associated with sexual behaviors that are potentially more risky like: permissive sexual attitudes, sexual preoccupation and earlier sexual experimentation (Abel and Fiseha 2014). Broadly speaking, adolescents who are more frequent viewers of pornography found to experience an array of negative health and wellbeing outcomes (Livingstone and Mason 2015).

While researches conducted in the world's different part have had difficulty replicating the results (Owens *et al.* 2012), different scholars in Ethiopia had shown their greater interest of uncovering risky sexual behaviour tendencies associated with risk factors among young people in the country. For instance, study conducted about risky sexual behaviors among female youth in semi urban area of Amhara region, TisAbay revealed that age, current marital status, drinking alcohol, chewing 'khat' and using any form of stimulant substances remained the predictors of risky sexual behavior (Gojjam and Bereket 2015). Another study conducted in Bonga, Ethiopia also reported that the majority of the students who were sexually active engaged in unsafe sexual practices; and hence, sex, year of study, income and ever use of 'khat' were independently associated with risky sexual behavior (Agegnehu *et al.* 2015).

Different researchers have also conducted similar studies on high school, private and public college and university students' in Ethiopia (Amsale and Yemane 2012; Gurmesa, Fessahaye and Sisay 2012; Abel and Fiseha 2014; Deresse and Debebe 2014). Those researches have enormously concentrated on the study of alcohol use, drug abuse and use of 'khat' as a common risky factor for numerous risky sexual behaviour outcomes, with little attention to consumption of pornography as a risk factor to risky sexual behaviour that could be potential area of novel study. Despite the fact that Tony, Zewdie and Serawit (2015) and Amanuel (2007) studied the magnitude of pornography consumption and associated factors among preparatory school youths in Hawassa city and the influence of exposure to pornography among the youths in Addis Ababa respectively, unlikely their studies were guided by social theories helpful to understand the issue and their findings also lack depth policy implications of the consequences of exposure to pornography on risky sexual behaviour outcomes. Moreover, studies conducted by Amsale and Yemane (2012), Gurmesa *et al.* (2012), Abel and Fiseha (2014), Deresse and Debebe (2014), Gojjam and Bereket (2015), and Agegnehu *et al.* (2015) were overemphasized on the use of quantitative research approach and were studied by professionals having background of Public Health and Psychology. With this, much investigation is worthwhile to deeply understand youth's sexual behaviour and factors contributing to risk taking as it is a phenomena to be enlightened from different perspective. To the best of the researchers' knowledge, no study has been conducted in Assosa Town regarding young people's exposure to pornographic materials and other risky factors factors for risky sexual behaviour. To conclude, the researcher argues, the

influences of pornography consumption and other determinants on risky sexual behaviour outcomes are not well investigated in terms of diversified social contexts, theory and research approach.

Hence, there needs more study about the types of risky sexual behaviour (early sexual initiation, unsafe sexual intercourse and sexual intercourse with multiple partners) and its association with pornography use and socio-demographic characteristics of youths in general and in-school youths in particular from sociological point of view by using mixed research approach. To this end, the study was conducted with the aim of filling the aforementioned gap by investigating the pornography use and other determinants of risky sexual behaviour among students in Assosa General Secondary School and College Preparatory.

### **1.3. Research Objectives**

#### **1.3.1. General Objective**

The general objective of this research was to investigate pornography use and other determinants of risky sexual behaviour among students in Assosa General Secondary School and College Preparatory.

#### **1.3.2. Specific Objectives**

The study addressed the following specific objectives:

- 1.** To analyze access to pornography among students in Assosa General Secondary School and College Preparatory.
- 2.** To describe sexual behaviour of the students in the study area.
- 3.** To determine relationship between pornography use and risky sexual behaviour among students in the study area.
- 4.** To examine factors related with risky sexual behaviour of students in the study area.

#### **1.4. Significance of the Study**

The findings of this study bring to fore, the issue of youth risky sexual behaviour and the use of pornographic materials and other behavioural factors among in-school youths in Assosa General Secondary School and College Preparatory. The study has a significance of initiating policy makers and researchers to consider and reconsider the growing adverse health and social effects of sexual explicit materials, socio-demographic characteristic, cultural factors and behavioural factors so that intervention strategies could be designed in addressing the problems that youth are confronted as a result of their exposure to those materials. Finally, the study contributes to Sociology literature as it employed different sociological concepts, theories and methods which are appropriate to investigate youth sexual behaviour and their exposure to pornography.

#### **1.5. Scope of the Study**

The main purpose of the study was to investigate pornography use and other determinants of risky sexual behaviour among students in Assosa General Secondary School and College Preparatory. The study was conducted in Assosa General Secondary School and College Preparatory. Students in all grade level (both sex category and age 15 to 24) were the specific targets of the investigation. The study focused on unsafe sexual practice, sex with multiple partners and early sexual intercourse as risky sexual behaviours influenced by different factors. This study was conducted from February to May, 2017.

#### **1.6. Conceptual and Operational Definitions**

**Risky Sexual Behavior:** Students having any one of the following characteristics:

- Unsafe sexual intercourse (ever had sex without condom, ever had sex without contraceptive use)
  - Ever had sex with multiple sexual partners (life time sex with more than two partners and
  - Ever had early sexual intercourse (had sexual intercourse before age 18).

**Multiple Sexual Practices:** the practice of sexual intercourse with two or more sexual partners among the students in their life time.



**Youths:** Students belonging to the age group between 15 to 24 years in the study area.

**Pornography Use:** Any form of sexually explicit material that could be accessed and consumed by the students to arouse their sexual feeling. And also:

- Type of exposure to pornography (accidental or volunteer)
- Age at first exposure to pornography
- Frequency of exposure pornography (seldom, frequently and always)

## **1.7. Strength and Limitation of the Study**

### **Strengths of the Study**

- Being a school based survey; the study was able to incorporate large sample size (317 participants).
- Despite the fact that the study addressed sensitive issues, data collected guaranteed the richness of the findings.
- This study was peculiar among many others studies conducted in Ethiopia for the reason that it considerable emphasized explaining students' risky sexual behaviour based on pornography and many other factors as independent variables and risky sexual behaviour as outcome variable.

### **Limitations of the Study**

Given cross-sectional nature of the study findings, this study cannot make causal inferences regarding the long term relationships between the predictors and the prediction.

## **1.8. Organization of the Paper**

The research paper was presented in six chapters'. Chapter one dealt with background, the statement of the problem, research objectives and significance of the study. Chapter two presented a review of the previous studies on different aspects of risky sexual behavior and associated factors including pornography. It also revealed the theoretical and conceptual framework that was used to guide the study. Chapter three presented the details of the study design and the specific methods used for data collection and analysis. Chapter four of this paper

emphasized on discussing the results obtained after data was analyzed by using qualitative and quantitative techniques. Chapter five presented discussion of the findings from the context of related literature. Finally, chapter six of this study deals with summary of the major findings, conclusions, and recommendations sections.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Adolescent's Risky Sexual Behaviour

Sexual intercourse and related practices are prevalent among young people in Ethiopia. For instance, life time sexual intercourse is prevalent among 25.8% of the students who had participated in a study conducted to assess the determinants of risky sexual behaviour among preparatory school students in Gurage Zone. The mean age at first sex for those participants was 16.4 years, 16.5 for male and 16.2 for female. This study had also reported that sexual initiation at first sexual debut was intentional for 36% of the respondent's and Sexual initiation was associated with the variable age and poor parental attachment (Tadesse *et al.* 2016). A study conducted to assess factors predisposing out-of-school youths to HIV/AIDS-related risky sexual behaviour in Northwest Ethiopia found that out of the 628 respondents, 64.2% the study participants had already experienced sexual intercourse at least once with 17.7 (+2) years mean age at first sexual commencement (Hibret *et al.* 2007).

In most recently conducted study in Jimma University to investigate risky sexual behaviour and predisposing factors among students, 26.9% of the respondents were found to ever have sexual intercourse. The mean age at first sexual intercourse for this participants was  $17.7 \pm 2.7$  years. Thus, Male respondents were about three times more likely to ever had sexual intercourse as compared to females (OR=3.31; 95%CI: 2.26, 4.86). Among those who ever had sexual intercourse, 75.6% (79.0% males and 54.5% females) had their first sexual intercourse during their secondary school and females were found more likely to have first sex with individuals who were about five years or older than them (P-value =0.001) (Gurmesa, Fessahaye and Sisay 2012). Lioul (2008) studied in-school youth's exposure to sexually explicit materials and other factors as predictors of sexual activity in Addis Ababa and found that 140 out of 786 participants had claimed to be sexually active with their mean age at first sex of  $16.2 + 2.022$  (mean for males=  $16.4 + 1.67$  and for females  $15.89 + 2.05$ ).

Andualem, Assefa and Chalachew (2014) conducted a study that assess substance use and risky sexual behaviour among Haramaya University Students and they found that Out of the total respondents of their study, 33.5% of them have had sexual experience 73.7% were males and 64 22.3% were females), while the median age at first sex for both sexes was 18 years. According to this study, the reasons why students were initiated to have had sex includes: personal interest or curiosity 42.4%, promising word from partner for marriage 23.9%, per pressure 52 21.4%, marriage 4.9%, sex for exchange of money 2.1%, forced sex 1.6%, to pass examination 1.2% and other reasons 2.5%.

According to a study conducted by Tadesse *et al.* 2016, Out of 108 sexually active study participants, 53.7% of them have committed multiple sexual practices. A total of 43.5% of the sexually active participants made sexual intercourse with only one partners in their life time. And about 226% had sexual practice with two partners and 30.5% had sexual intercourse with greater than two partners. In the same study, out of 70 male students who had practiced sex, about 28.6% of them had sexual intercourse with commercial sex workers in their life time (Tadesse *et al.* 2016). Having multiple sexual partners (2 or more) also prevailed among 28.3% (29.7% among males and 20.0% among females) Jimma university students as reported by Gurmesa, Fessahaye and Sisay (2012). The same study has revealed that among the sexually active students, 46 (18.9%) ever had sexual intercourse with non-regular partner for the sake of money. Hibret *et al.* (2007) also uncovered that 40.6% of the 320 males and 24.7% of the 300 females had intercourse with non-regular partners, suggesting that males tended to be about two times more likely to have sex with non-regular sexual partners than females (odds ratio [OR]=1.78, 95% confidence interval [1.16-2.73]. (Andualem, Assefa and Chalachew (2014) also found that among sexually active participants of the study, 11.5% had multiple sexual partners in the last three months, 44.3% respondents use condom inconsistently, 35.3% had started sexual intercourse before the age of 18 years and 16.3% of males had sex with commercial sex workers.

The overall condom use at first sexual debut was only 39.8% and 83% used condom regularly (Tadesse *et al.* 2016). According to Hibret *et al.* (2007), out of 112 participants of their study, 23% had never used a condom and 31% used a condom sometimes. From a study conducted by Lioul (2008) among 139 sexually active respondents, 66.2% of the respondents of the survey

questionnaire ever used condoms while 33.8% did not; males were found more users of condom as compared to their counterpart females and the difference was statically significant ( $p=0.000$ ).

About 75.2% of sexually active male and 3.9% of female students were reported as they were using substances like khat, alcohol and drugs. Five percent of the male students use alcohol for sexual arousal (Tadesse *et al.* 2016). A statistically significant association was observed between intake of alcohol and sexual behaviour of youths in Northwest Ethiopia (Hibret *et al.* 2007). The use of substances like Khat, alcohol, illicit drugs and cigarette smoking were found to be significantly associated with having sex among Haramaya University Students (Andualem, Assefa and Chalachew 2014).

Out of 38 female students who ever had sexual intercourse, 44.7% encountered unwanted pregnancy and 94% of them committed abortion and of which 25% experienced two and more abortion (Tadesse *et al.* 2016). Tadesse *et al.* 2016 reported that about 85.2% of the participants who practiced unprotected sex had history of sexually transmitted diseases. According to the data generated from the focus-group discussion and in-depth interview participants of Hibret *et al.* (2007) study, the key predisposing risk factors that putt out-of-school youths at an increased risk of HIV/AIDS is the increased consumption of alcohol and *khat* among this group.

## **2.2. Determinants of Risky Sexual Behaviour**

A study conducted to assess risky sexual behavior and associated factors among grade 9-12 students in Humera secondary school reported that 21.8% of the study participants have had ever sex prior to the study and exposure factors like sex, participation in religious education, living with parents, having peer pressure and looking pornographic films were significantly associated with risky sexual behavior (Abel and Fiseha 2014). Lioul (2008) reported that frequent use of alcohol and *Khat* were predictors of sexual experience among in-school youths in Addis Ababa with COR 9.9 (95% C.I. = 5.94, 16.48) and 14.14 (95% C.I. = 7.34-27.24) respectively. Moreover, this study has uncovered that more frequent exposure to sexual explicit materials increased probability of having sexual experience by fivefold COR 5.28, (95% C.I. =2.53, 11.01) for reading such materials and to nineteen times COR 18.54 (95% C.I. 9.17-37.47) for viewing such materials.

### **2.3. Pornography and Adolescents Risky Ssexual Behaviour**

A study conducted by Braun-Courville and Rojas (2009) to assess the exposure to sexually explicit web sites and adolescent sexual attitudes and behaviors found that exposure to Internet pornography is associated with high-risk sexual behaviors such as anal sex, multiple sexual partners and substance use during sex. A study which aimed at to investigate the influence of pornography on sexually experience and behaviour of young women in Sweden had found that women's sexual behaviour has been significantly influenced by pornography with higher prevalence of anal sex (47% as compared to another study among young people in Swedish studies (15%) (Rogala and Tyde'n 2003); this study also revealed that the older women which participated in the study had more experience of oral and anal sex, as one-third of the teenage girls had had anal intercourse and four out of five had given oral sex.

A funding of study conducted in Ethiopia, Western Zone of Tigray, Humera Secondary School to assess risky sexual behaviour and associated factors among grade 9 to 12 students found that exposure to pornographic movie put the study participants at higher risk of practicing risky sexual behavior, while students who reported exposed to pornographic movie were 2.77 times more likely to undertake risky sexual behavior (Abel and Fiseha 2014).

### **2.4. The Historical Overview and Definition of Pornography**

In India during the second century, the Kama Sutra was half sex-manual, half relationship-handbook. The people of ancient Peru painted sexual scenes on ceramic pottery, while the aristocracy in 16<sup>th</sup> century, Japan was fond of erotic woodblock prints. Erotic novels had been in print since at least the mid-1600s in, but the first full-length English-language pornographic novel, "Memoirs of a Woman of Pleasure," also known as "Fanny Hill" wasn't published until 1748. In the 1970s, and changing social mores opened the door for public showing of explicit films (Pappas 2010). Etymologically, the word pornography comes from the "Greek writing of prostitution" (Porne = prostitute and Graphein = to write), meaning a material with the extent to elicit erotic responses from the consumer (Malamuth and Billings 1984).

He “knew it when he saw it,” a famous statement would highlight the extent to which how it is problematic to define the concept pornography (Malmuth1993); Malmuth further insisted that the definitions provided about pornography by different researchers depict the beliefs about what it does and does not. However, Malmuth (1993) operational definition to the concept pornography can be revealed in the following statement, “a sexually explicit media designed primarily to arouse the audience sexually”. Peter and Valkenburg also defined pornography as, “content depicting sexual activities in unconcealed ways, often with genitals and of oral, anal or vaginal penetration” (Malmuth cited in Owens *et al.* 2012:103). Collins English Dictionary defines pornography, “writings, pictures and films etc. designed to stimulate sexual excitement and the production of such material” (Collins English Dictionary cited in FPA 2011:1).

According to the world most famous magazine, *The Economist*, pornography is a material which has been and being vastly consumed and pornography apparently has come to be the most important source sources of investment and profit in the world, off course with 72 million worldwide viewers of pornographic web sites annually (*The Economist* cited in Leonini 2012). Currently, pornography has become a global phenomenon in the economic industry through the production of product with human health and well-being implications. Besides, in the global supply chain, the process of production and consumption it is connected with the evils of human trafficking, child pornography, prostitution, drugs and other forms of violent world phenomena (Mcneil 2015).

## **2.5. Pornography: Types**

Depending on various previous empirical and theoretical based researches, Malmuth (1993) had categorized pornography in to four types: violent pornography, non-explicit sexual aggression, nonviolent, low degradation pornography and nonviolent, high degradation pornography.

Malmuth (1993) explains those categories of pornography in the following way:

The first category of pornography, violent pornography, usually depicts sexual coercion in a sexually explicit context. Such kind of pornography depicts a common feature what many researchers call it, “positive victim outcome” or rape. On the other hand, non-explicit sexual aggression, the second type of pornography, reveals male sexual aggression against women, which is more or less similar to the first one. Pornography that consists of the depiction of mutually pleasurable sexual acts between adults or pictures of nude women is said to be non-violent, low

degradation pornography. The final one is nonviolent, high degradation pornography, which uncovers degrading and dehumanizing of women through the depiction of women in subordinate positions, as being abused in some manner or over sexed or highly promiscuous. (P. 564-565)

## **2.6. Harms of Pornography**

From literature, various harms may result from exposure to certain types of pornographic media worldwide. For instance, Mcneil (2015) argued that violence, hostile attitudes towards women and gender inequality are the recognized effects strongly correlated with pornography; the author further insists that, “pornography also provides very high rates of violence against women and promotes a degrading and dehumanizing form of sexuality for boys.” A study conducted by Kheswa (2014) to assess the impact of pornography on adolescent males’ sexual behaviour in the Eastern Cape, South Africa, also revealed that the majority of the respondents were able to recognize the effect of pornography through their experience of treating the women by sexual coercion.

Referring to theories like conservative, liberal and feminist thinking and research, Malmuth (1993) argues that there has been no consensus among researchers about the effects of pornography. Bryant and Brown described adolescent’s exposure to pornography and its level of harm in following manner, “Exposure to pornography typically occurs at least by high school years and usually is facilitated by peers and hence, only small portions of people report no voluntary exposure at all” (Bryant and Brown cited in Malmuth 1993:565).

There has been growing concern that high rates of adolescent exposure to violent sexual information before they are developmentally capable of constructively dealing with it inundate them with unwanted risky sexual behaviours, more specifically for women’s (Rogala and Tyde’n 2003). This means, the information detrimentally transforms their sexual attitudes and behaviors. Thus, concerns across different parts of the world community regarding the potential harms of pornography may including, acceptance of casual and extramarital sex, encouraging early sexual activity and multiple partners and encourage other sexual practices that may not be considered appropriate by particular elements of the community (e.g. anal and oral sex, homosexuality), undermine physical, emotional and psychological wellbeing (e.g. generate shame, guilt, anxiety,



confusion, poor social bonds and addictions) and undermine relationships and foster sexual violence (Braun-Courville and Rojas 2009; Bryant 2009).

A research conducted to identify the Associations between online pornography and sexual behavior among adolescents has found that there is a statistically significant correlation between exposure to pornography and non-condom use among the study participants considerably letting them to risky sexual behaviour (Luder *et al.* 2011). A study conducted to assess exposure to internet pornography among early adolescent boys' and its impact on relationships to pubertal timing, sensation seeking and academic performance had found that using sexually explicit websites decreases boys' school performance (Beyens, Vandenbosch and Eggermont n.d.).

Adolescents using internet pornography were found less committed to their families, having fewer pro-social attitudes and less attached to school than their fellows which are not exposed to Internet pornography. Hence, adolescents who are exposed to internet pornography appear less socially integrated and more socially marginal as compared to their counter parts, adolescents who are not users of internet pornography (Mesch 2009).

## **2.7. Educative Functions of Pornography**

Despite of growing literature and research focused on the adverse effects of pornography over human sexuality, health and wellbeing, theoretically and empirically there has been evidence suggesting it has beneficial effects. Some scholars argued individuals could benefit fantasy, sex education and artistic expressions by consuming pornographic materials (Malamuth and Billings 1984). A study conducted by Cormack & Wignall (2016) to investigate the consumption of pornography among men with non-exclusive sexual orientations revealed that as majority of the study reported pornography was part of their ordinary early sexual experience and considered positively. Flood states that “regular and frequent exposure to sexual content in mainstream media produces greater sexual knowledge and more liberal sexual attitudes among young people” (Cormack & Wignall cited in Ndlala 2012). What has been studied about pornography in Ethiopia is primarily in terms of its negative health effects on adolescents and young people; and hence no literature has been found discussing the advantage of pornography and exposure to it.

## **2.8. Pornography and Sociological Perspectives**

Various scholars in the field of sociology had claimed that pornography is an issue that needs to be explained in terms of moral values, citizens' rights and privacy, and stability of society and maintaining the status quo. With this bold claim, different theoreticians in the mainstream field of study provided differing viewpoints and explanations about pornography. For instance, around 1960 and the mid of 1970s, pornography has come to be explained by sociologists against what it earlier was, it produced disruptive social change. Nevertheless, argued by many, as it is linked to social change and representing a cultural edge in the introduction of novel ideas with in the dominant or old culture (Malamuth and Billings 1984).

Feminists predominantly view pornography as a means or tool of women's subjugation by man through displaying man's power and dominance over women depending on nature. Thus, pornography is considered as creator and perpetuator of the idea of women's as an object to be used to serve the pleasure of a man. In pornography, women's are portrayed against the goal that they are liberated and more so, degraded, dehumanized and wiling and unwilling victims of abusive acts (Malamuth and Billings 1984).

According to Marxist view, pornography is an ideological tool to perpetuate the power of the dominant group by subordinating the lower class, of course uneducated and destitute women's (Malamuth and Billings 1984). McNall argues, "Pornography in its hard and soft core, presents women as animalistic in need of control" (McNall cited in Malamuth and Billings 1984:122).

## **2.9. Pornography and Growing Public Concern**

For McNeill (January 26, 2015), "there needs to be strong sexual education that includes discussion on the role of pornography in sexual health for youth students at middle, high school, and college." The plausible harmful consequences and the proliferation of enormous number of pornographic websites and materials have stimulated public concern over the issue. For instance, Maltz argued, "Pornography is moving from an individual and couples problem to a public health problem, capable of deeply harming the emotional, sexual and relationship wellbeing of millions of men, women and children" (Maltz cited in National Coalition to Prevent Child

Sexual Abuse and Exploitation 2011). Ample research and policy frameworks around the globe about pornography have had uncovered on moral, religious and legal sanction towards its proliferation in the belief that it may tend to degrade youths health and wellbeing.

## **2.10. Ethiopia National Adolescents & Youth Rreproductive Health Strategy**

According to the National Adolescents and Youth Reproductive Health Strategy of the Federal Democratic Republic of Ethiopia (2007-2015) which was formulated by the Ministry of Health giving much emphasis to issues such as: early sexual doubt, age at first marriage, early child bearing, unwanted pregnancy and abortion, HIV/AIDS and STIs, and etc. among adolescents and youth of the country is much important than any other time as this issues might be complicated with the rise of poverty, less access to education, and poor access to infrastructure and service utilities. The strategy acknowledges the importance of integrated social investment to address the diverse needs of young people in this developing country. This strategy was thought to advance the goal of the country to provide health services to all citizens and to achieve the objectives of the National Reproductive Health Policy and the health sector development plan. The strategy builds on notable initiatives undertaken before by the government: these initiatives include: The Youth Policy (2004), the policy on HIV/AIDS (1998), the revised family laws (2000) and the revised penal code.

The strategy envisioned enhancing reproductive health and wellbeing among young people in Ethiopia ages 10-24 as they may be empowered to access and utilize quality Reproductive health information and services. With this, the strategy sets four major goals to be accomplished within 10 years as of its formulation:

- 1.** To meet the immediate and long term Reproductive Health needs of young people.
- 2.** To increase awareness and knowledge about Reproductive Health issues among young people.
- 3.** To strengthen multi-sectorial partnership and create an enabling positive environment at all levels regarding Reproductive Health needs of young people in the country, and
- 4.** To design and implement innovative and evidenced based Reproductive Health programs addressing vulnerable young people in Ethiopia.

## **2.11. Theoretical and Conceptual Framework**

### **2.11.1. Theoretical Frame Work**

The theoretical framework provides orientation to the study, in which the researcher is working over. Hence, sexual script and problem behaviour theories were used in guiding and verifying the findings of the study.

Sexual script, a concept introduced by sociologists John H. Gagnon and William Simon in their 1973 book *Sexual Conduct*, is the most dominant sociological representation used frequently in understanding human sexuality as social behaviour and practice (Wiederman 2015). This theory brings sociological tools and concepts to the study of human sexualities. It basically assumes that all social behaviour including sexual behaviour is socially constructed and derived from shared belief among a particular social group. Moreover, the theory could be utilized and were appropriated by other researchers through interview data collection instrument in studying participant's sexual script while validating the existence of a particular sexual script at three distinctive scenarios: cultural, interpersonal, and intra-psychic scripts (Wiederman 2015). The current study appropriated sexual scripting theory in discussing student's sexual behaviour and access and usage of pornographic materials from peers, teachers and parent's perspective.

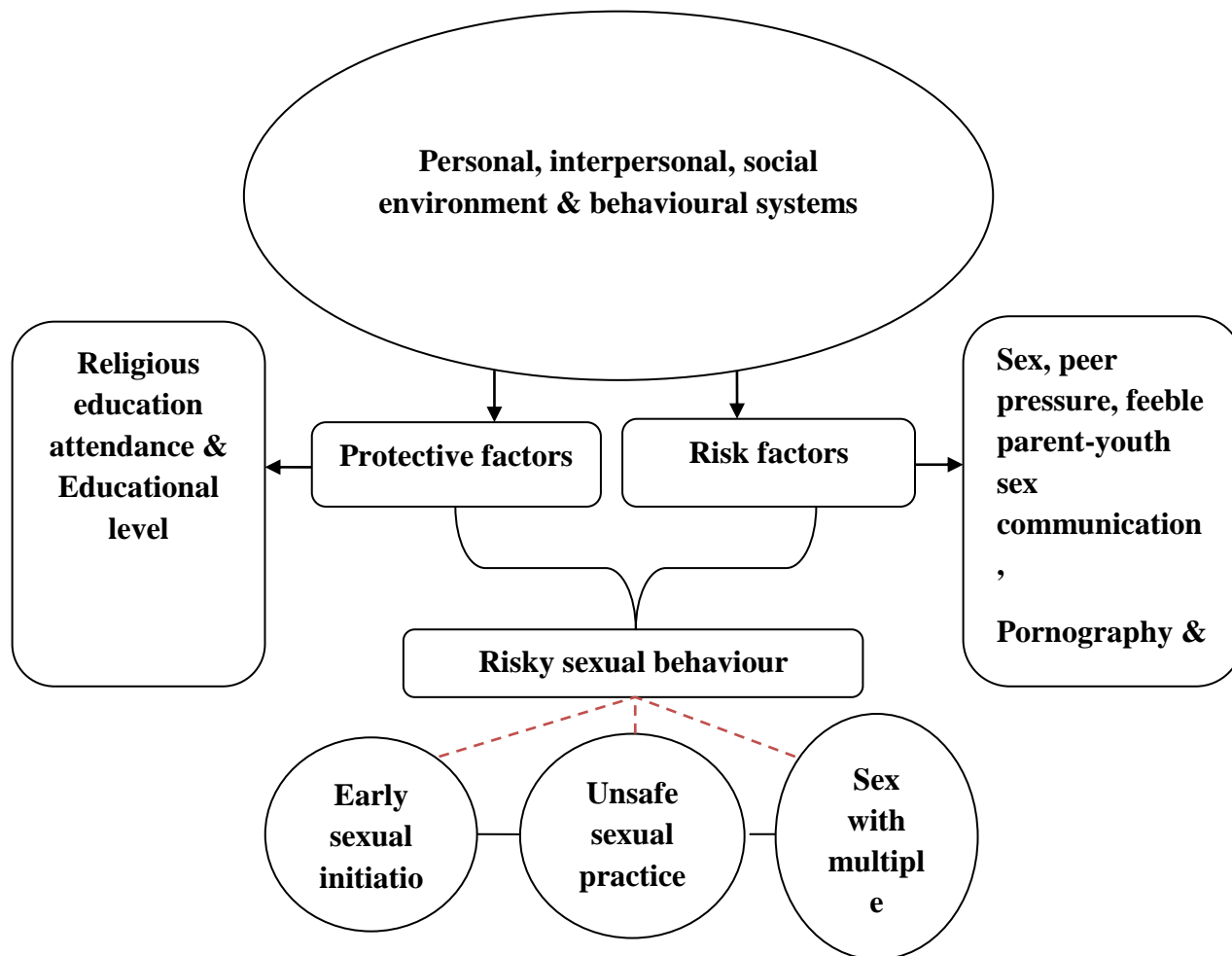
In addition to sexual script theory, problem behaviour theory was used to verify the findings of this study. Problem behaviour theory is a social-psychological theoretical framework developed by Richard Jessor and colleagues during the 1960s to explain adolescent's problem behaviour. Problem behaviour theory insists on the social and environmental formulation of determinants of risk behaviour by adolescents and young people. More so, the theory explains how the personal, perceived environment and behavioural systems cumulatively yield to a substantial account of problem behaviour variations among adolescents (Jessor 2014). This study appropriated the personal, perceived social environment and behavioural system concepts that could determine the overall existence of risky sexual behaviour among students.

### **2.11.2. Conceptual Framework**

There is no absolute definition for the term pornography. Numerous researchers depending on their field of study and institutional interests have defined the term pornography in different ways. However, it is beyond reservation that the majorities agree on it is sexually explicitness. For the purpose of this study, pornography is any sexually explicit material with sexual arousal effect. Literatures have indicated that more frequent viewing of pornography is in some way associated with risky sexual behaviors of young people, such as permissive sexual attitudes, sexual preoccupation and earlier sexual experimentation (Abel and Fiseha 2014; Livingstone and Mason 2015).

This study investigated pornography and other personal and social factors as an independent variables affecting youths sexual behaviour. Hence, risky sexual behaviours such as unsafe sexual intercourse, having sex with multiple partners, and early sexual intercourse were treated as outcome variables. The researcher presumed, as ample literature on consumption of pornographic materials is predominantly based on western populations, there needs more to know about the magnitude of pornography consumption and other determinants of risky sexual behaviour in Ethiopian contexts and this study found similar findings with other studies conducted in Africa and even in Ethiopia. This study provided new insight about the topic under investigation; hence useful for policy makers and research professionals working on adolescent's sexual health and wellbeing. The conceptual framework below (Figure 1.1) views the adolescents risky sexual behaviour as understandable within multiple contexts described above.

**Figure 1.1:** Conceptual framework for in-school youths risky sexual behaviour, adapted from Jessor, Richard 1991c, p. 602



## **CHAPTER THREE: RESEARCH METHODS**

### **3.1. Study Design and Approach**

The study was a school based descriptive, analytical and cross sectional design conducted by using primary data collected and analyzed from Assosa General Secondary School and College Preparatory students, teachers and parents of the students. The descriptive component of the study described the socio-demographic characteristics, sexual behaviour and use of pornographic materials of the students who had participated in this study. The analytical component of this study explained the association between pornography use and social and demographic characteristics and risky sexual behaviours among students.

The study employed mixed research approach. Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data and using distinct designs that may involve philosophical assumptions and theoretical frameworks (Creswell 2014). Specifically, the study used triangulation of theories, data, data sources, data collection tools, and data analysis. This in turn helps the researcher to get the benefit of more understanding the research problem than the use of either approach alone.

A quantitative dominant mixed method (concurrent nested design) was a specific form of mixed method approach, which was appropriated under this study to catch a comprehensive understanding of students' sexual behaviour and their exposure to pornography in the study area. Moreover, the use of qualitative method along with the quantitative one helped the research to fill the gap of social desirability bias that could potentially arise from survey method as the study dealt with socially sensitive topic of human sexuality. Table one below shows the summary of the methodological triangulation.

**Table 2.1.** Summary of methodological triangulation

Research approaches	Specific objectives	Data collection tools	Study participants	Sample size	Data analysis
Qualitative	To describe access & use of pornographic materials among students in AGSSCP	2 FGDs & 9 Key informant	Male & female students,	18 FGD discussants & 9 interviewees	Theme construction
	To describe sexual behaviour of the students in the study area.	Interview guides	Parents, & teachers		
Quantitative	To determine the relationship between pornography use & risky sexual behaviour of students in the study area	Survey questionnaire	Male & female students	317	Data summarization & description using frequency, %, graphs & tables), X <sup>2</sup> test, BLR
	To determine the relationship between socio demographic characteristic & risky sexual behaviour of students in the study area				
	To examine factors related with risky sexual behaviour of the students				

### 3.2. Study Site

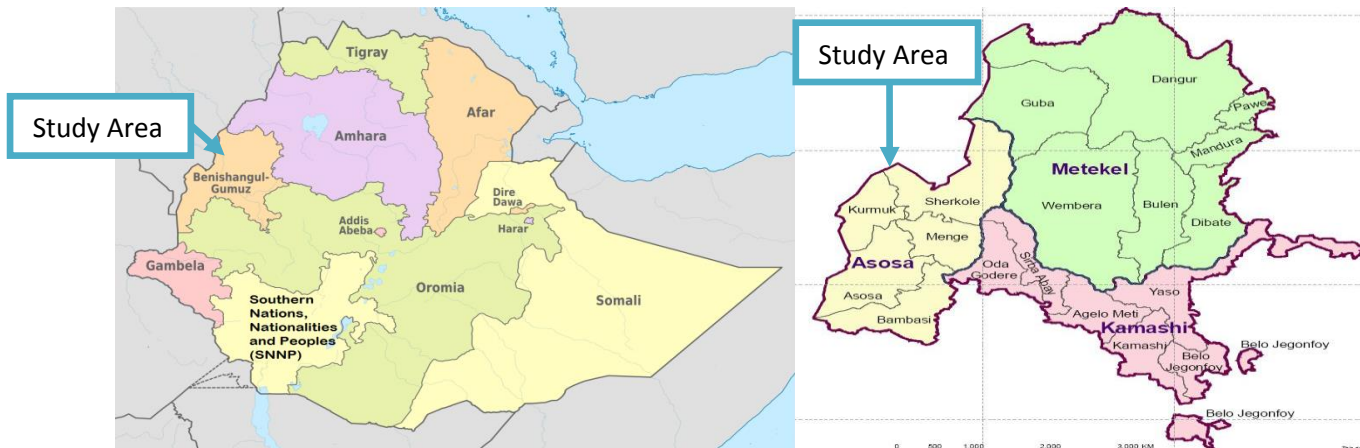
The Study was conducted in Assosa Town, the capital city of Benishangul Gumuz Regional State. According to the information obtained from Assosa town Administration, Assosa town is located in the Western part of Ethiopia at a distance of about 678 kilometers away from Addis Ababa. The town was founded in 1929. Assosa town is sub divided in to four administrative kebeles with 46,200 populations in 2015 as projected by Ethiopian Central Statistical Agency.



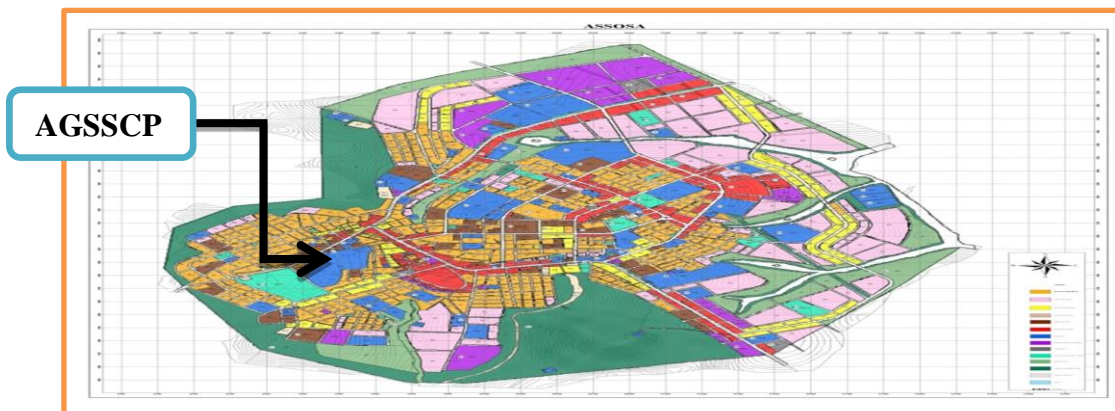
The town covers a total land area of 14.58 square kilometers. The town is surrounded by 74 rural kebeles of Assosa Woreda.

This study more specifically targeted students or in-school youths of Asossa General Secondary School and College Preparatory. This school was established in 1972 E.C. Still now, it's the only public or governmental General Secondary School and College Preparatory in Assosa town. According to data obtained from the school, student's intake of the school in 2009 Ethiopian academic year had reached 3,326. Currently, there are 117 teacher employees in the School, were 104 of them are male and 13 of them are female. Also, there are 16 (male 10 and female 6) administrative personnel's in the school to facilitate the teaching learning process. The study area particularly, the school was selected for the reason that no study has been conducted in the town which investigated the prevalence of pornography and other determinants of risk sexual behaviour among in-school youths.

**Figure 3.1:** Map of Ethiopia (Source: wikipedia) **Figure 3.2:** Map of BGRS (Source: wikipedia)



**Figure 3.3:** Map of Assosa Town (Source: Assosa Town Administration Office)



### 3.3. Source Population and Sampling Frame

To select respondents of the survey questionnaire, a total list of 3,326 students was obtained from the school. Hence, it was used as a sample frame for this study.

### 3.4. Inclusion and Exclusion Criteria

#### Inclusion Criteria

- Being a student at Assosa General Secondary School and College Preparatory.
- Those who volunteered to participate in the study were included.
- Students whose age is between 15 and 24 years were included.

#### Exclusion Criteria

- Students whose age categories below 15 and above 24 were also exempted from participating in the study.
- The students who were involved in the pretest were excluded from the main study.

### 3.5. Sample Size and Sampling Technique

Survey respondents were drawn from a total population (3,326) of students in Asossa General Secondary School and College Preparatory. However, by using the exclusion criteria 133 students were omitted from participating in the study. Hence, samples are drawn from a total population of 3,193 students from grade 9, 10, 11, and 12. Yemane (1967) formula ( $n = N / (1 + N(e)^2)$ ) was used to determine the sample size. A 95% confidence level, 5% non-response rate and  $P = 0.5$  was assumed. Where  $n$  is the sample size,  $N$  is the population size, and  $e$  (0.05) is the level of precision (Kasiulevicious, Sapoka and Filipaviciute 2006). Therefore, the total sample size of the survey participants was 373.

$$n = N / (1 + N(e)^2)$$

$$n = 3193 / (1 + 3193(0.05)^2) = 355$$

$$5\% \text{ non-response rate} = (355/100) * 5 = 18$$

Thus, the total sample size =  $(355 + 18) = 373$

Systematic sampling method was used to select the sample units from the sampling frame through the following steps. First step, the sample frame was numbered on the basis of class level from one to 3,193. Second step, the sampling interval (k) was determined by using a formula  $N/n$ , which is  $3,193/373 = 9$ . Third step, a random number two from one to nine was selected. Finally, every ninth units were selected added from the random start number, two (2) from the list. Systematic random sampling method was employed for the reason that it decreases sampling bias, it is easy to apply it, it extends the sample to all the population, it is less time consuming as compared to other non-purposive sampling methods and it is practical to use it if the source population is homogeneous (Lagares and Puerto n.d.).

On the other hand, a nonprobability sampling technique, purposive sampling was used to select 18 participants for the FGDs. Two FGDs were held with students of male (Eight participants) and female (Ten participants) categories in two separate sessions. Each FGD sessions approximately took 50 minutes of discussion and moderated by the researcher. Nine participants for the key informant interviews were selected from students, teachers in the school and parents of the students by using the same sampling technique. Purposive sampling was employed as it favored the incorporation of participants, which were volunteer and with ample understanding about students' sexuality and their exposure to sexually explicit materials. Participants of the FGDs and the key informant interviews were selected based on the criteria's of students' involvement in mini media and anti HIV/AIDS clubs and their voluntariness to participate in this study. Teachers working as school principals and in different responsibilities in the school were participated in the key informant interviews. Parents of the students who were members of the committee of parents for school affairs were participated in the key informants' interviews.

### **3.6. Variables Investigated**

**Outcome Variable:** the dependent variable under the study was risky sexual behaviour (early sexual intercourse, ever had unsafe sex and life time sex with multiple sexual partners) measured at nominal level.

**Exposure Variables:** the exposure variables for this study were socio-demographic characteristics of the students and pornography use. Thus, table two summarizes these variables and their level of measurements.

**Table 3.2.** Summary of exposure variables and level of measurements

S/ N	Variables	Indicators	Data type	level of measure ment
1	Sex	1: Male, 2: Female	Binary categorical	Nominal
2	Age	Age of the students in years (1: 15 -17, 2: 18 - 24)	Binary categorical	Nominal
3	Religion	Religious background of the students (1: Orthodox Christian, 2: Protestant Christian, 3: Catholic, 4: Muslim & 5: Others	Unordered categorical	Nominal
4	Attendance of religious education	students experiences of religious education attendance (1: Yes, 2: No)	Binary categorical	Nominal
5	Educational status	Current educational level of the students (1: 9 <sup>th</sup> , 2:10 <sup>th</sup> , 3:11 <sup>th</sup> & 4:12 <sup>th</sup> )	Ordered categorical	Ordinal
6	Ethnicity	Ethnic background of the students (1: Amhara, 2: Oromo, 3: Berta, 4: Shinasha, 5: Gumuz & 6: Others)	Unordered categorical	Nominal
7	Marital status	Students current marital condition (1: Single, 2: Married & 3: Others)	Unordered categorical	Nominal
8	Parental living status	Students parents life status (1: Both alive, 2: Only father or mother alive & 3: Both not alive	Unordered categorical	Nominal
9	Whom currently	With whom students are currently living (1:Father (or) and Mother), 2: relatives, 3:	Unordered categorical	Nominal

	students are living with	friends, 4: employers, 5: housebound or wife & 6: alone)		
10	Fathers Educational level	Educational achievement of fathers of the students: (1: illiterate, 2: Primary education, 3: Secondary education & 4: College level)	Ordered categorical	Ordinal
11	Mothers educational level	Educational achievement of Mothers of the students: (1: illiterate, 2: Primary education, 3: Secondary education & 4: College level)	Ordered categorical	Ordinal
12	Percived Parental income	Perceived income of the parents of the students in ETB (1: Low, 2: Medium, 3: High)	Ordinal categorical	Ordinal
13	Having cell (smart) phone	Students access to cell (smart) phone (1: Yes, 2: No)	Binary categorical	Nominal
14	Access to internet	Students access to internet services (1: Yes, 2: No)	Binary categorical	Nominal
15	Pornography use	Students exposure to pornography (1: Yes, 2: No)	Binary categorical	Nominal
15	Khat use	Students experience of chewing khat (1: Yes, 2: No)	Binary categorical	Nominal
16	Alcohol use	Students experience of drinking Alcohol (1: Yes, 2: No)	Binary categorical	Nominal
17	Drug use	Students experience of abusing drugs (1: Yes, 2: No)	Binary categorical	Nominal

### **3.7. Methods and instruments of data collection**

Qualitative (Focus Group Discussion, key informant interview) and quantitative (survey) data collection approaches were utilized to collect primary data.

Focus group discussion is important to generate thorough information on group dynamics and allow a small group of participants to be guided by a skilled moderator and to focus on the key issues of the research problem (Freitas 1998). Two FGDs were held with students of male and female categories in two separate sessions in an environment where no interruption was there (calm situation). Each FGD session took only 50 minutes and magnificent data was obtained from the hot and interactive discussions made with both male and female students. FGD guide was prepared and used to facilitate a coherent and smooth discussion with the FGD participants. The guide addressed major questions about student's access to pornography and existing awareness and interventions about pornography use and how it is related to their sexual practices. The researcher facilitated the discussions as moderator.

Key informant interview was another method that was used to collect qualitative data from the study participants. Nine key informants participated in the interviews. The participants were asked about student's sexual behaviour and their exposure to pornography and meticulously addressed all questions raised during the interview session. The interviews took an average of 20 minutes and were held in a smooth environment, where there was no external factor influencing participants' attention and thereby their ideas. A semi-structured interview guide was developed and used to facilitate the key informant's interview with students, parents of the students and school principals and teachers. The key informant interview guide incorporated questions about students' access and usage of pornographic materials and their sexual behaviour.

Survey questionnaire was used to collect quantitative data from the study participants. The questionnaire was prepared and used to collect data about student's socio-demographic characteristics, exposure to pornographic materials and sexual behaviour. The questionnaire was developed by the researcher based on available literature related to concepts under investigation. The questionnaire incorporated 46 items of questions and distributed for 373 respondents. The English version of the questionnaire was translated into Amharic for easy understanding by the

study respondents and back to English to ensure data quality and consistency. The validity of the instrument was checked by using pilot test and made ready for the actual data collection. The test was used for identifying any problems and omissions as well as to check time spent in responding and thereby improving the precision and reliability.

### **3.8. Data management and analysis**

Qualitative data collected from the focus group discussions and the key informants' interviews was transcribed from the tape recordings into electronic and print forms. The transcript was read thoroughly and descriptive summary was arranged in different categories of responses and themes. Quantitative data processing, cleaning and analysis were done using SPSS version 20.0. The aim of this analysis was to examine the association between pornography use and socio demographic characteristics and risky sexual behaviour. The analysis was manipulated in three succeeding steps. The first step was simple tabulation to describe the respondents' socio economic profile, exposure to pornography & sexual behaviour. The second step was a Univariate Logistic Regression analysis used to check crude effect of exposure variables by using Odds Ratio at 95% Confidence Interval. In the third step, Binary Logistic Regression analysis was used to fit a model and to check independent effect of selected exposure variables by using Adjusted Odds Ratio (Forward Stepwise Procedure) at 95% Confidence Interval. The third procedure was manipulated to determine how statistically significant exposure variables at the second step independently influenced the probability of engaging in risky sexual behaviours. Chi-square test of analysis was used and p-value less than 0.05 were taken as statistically significant.

### **3.9. Validity and reliability**

For Joppe, validity under the notion of quantitative research refers to whether the research truly measures what it was intended to measure or how truthful the research results are (Joppe cited in Golafshani 2003). Joppe defined reliability as: ... the extent to which results are consistent over time and an accurate representation of the total population under study (Joppe cited in Golafshani 2003). It's under this context that the current study ensured the validity and reliability data collected and analyzed. Thus, the use of several methods of data collection like key informants

interview and FGD helped the researcher to ensure the trustworthiness and credibility data. Moreover, probing questions were asked to lessen error arising from respondents' memory gap. The survey questionnaire was developed by reviewing pertinent literatures on the topic to ensure reliability. Experts having good knowledge and research experience in studying the issue at hand were also commented on the instruments of data collection to ensure the face and content validity. More so, Omnibus test of model coefficients for each models were estimated thereby the results ensured statistical significance (0.001, 0.001 and 0.000 for each three models respectively). Hosmer and Lemeshow tests were analyzed and the model fitted the data ensuring validity of the findings (0.86, 0.98 and 0.66 for each of the three models). Nagelkerke R-squared estimates for each models also ensured the reliability of data (0.28, 0.18 and 0.35 for each three models) being significant at statistically acceptable level. The researcher, hence, also adequately collected and analyzed the data carefully in facilitating consistency, precision and repeatability or transferability of the findings of the current study.

### **3.10. Ethical considerations**

Research ethical principles were followed as they served in safeguarding the dignity, rights, safety, and well-being of all participants in this study. Initially, ethical clearance was obtained from Jimma University, College of Social Sciences and Humanities, post graduates research coordinating office. Institutional written approved consent was also obtained from AGSSCP before the researcher encounters the study participants. The researcher had also secured the oral consent of the key informants of the interviews and FGD discussants and written consent from survey participants respectively. All participants were told about what the data collection process and dissemination of the findings would entail. Since the topic under this investigation was sensitive, the researcher had put efforts that the participants of the study did not experience any psycho-social discomfort during data collection process. The environment under which all interviews and FGDs were carried out was quite comfortable. All participants were told that data collected could be treated with confidentiality and that it shall be used only for the purpose of this study.

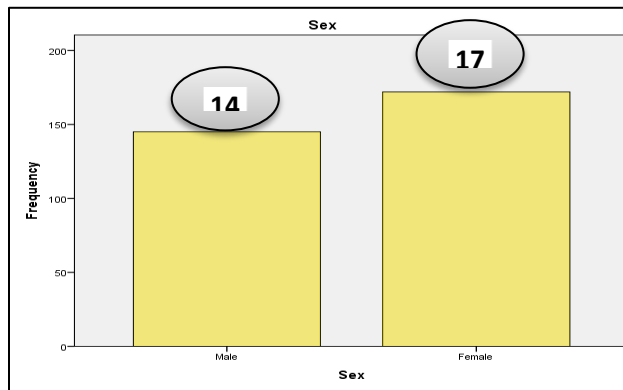


## CHAPTER FOUR: RESULTS

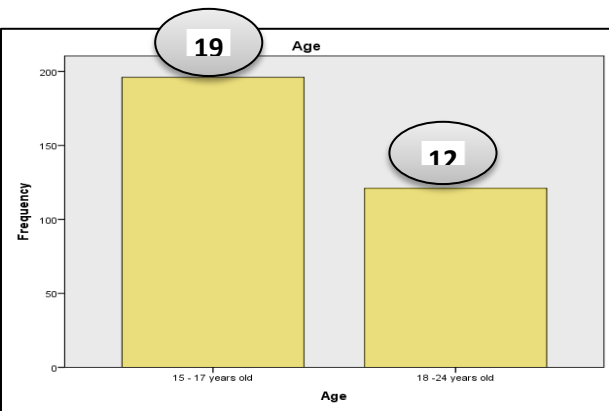
### 4.1. Respondents' profile

#### A. Sex and age of the respondents

**Figure 4.1.** Sex of the students (Survey, 2017)



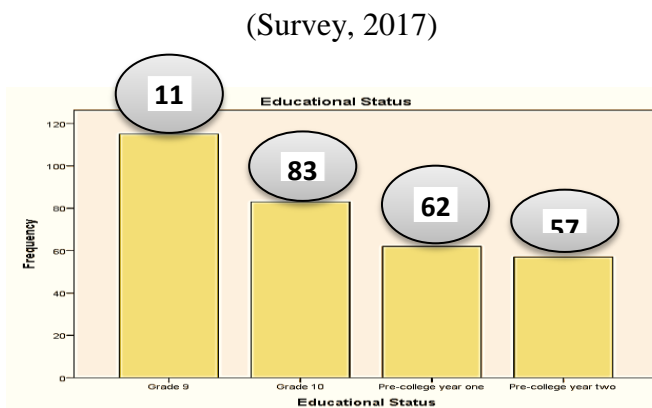
**Figure 4.2.** Age of the students (Survey, 2017)



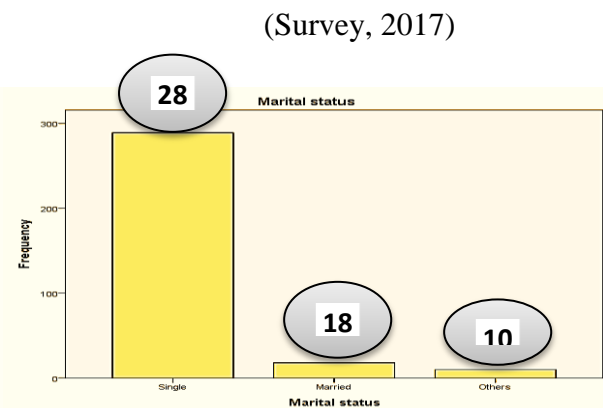
Out of the total 373 students participated in the study; questionnaires from 317 respondents were considered for analysis, making a response rate of 85%. From the total number of survey respondents (317), 145 (45.5%) were male and 172 (54.3%) were female students (Figure 4.1). As it is clearly depicted from figure 4.2, respondents whose age 15 up to 17 years old were 196 (61.8%) and age 18 up to 24 years old are 121 (38.2%).

#### B. Educational and marital status of the respondents

**Figure 4.3.** Educational status of the students



**Figure 4.4.** Marital status of the students



With respect to their educational status, 115 (36.3%), 83 (26.2%), 62 (19.6%) and 57 (18%) were from grade 9<sup>th</sup>, 10<sup>th</sup>, pre-college year 1 (11<sup>th</sup>), and pre-college year 2 (12<sup>th</sup>) respectively (Figure 4.3). As figure 4.4 clearly depicted, two hundred eighty nine (91.2%) of them were single, 18 (5.7%) of them were married, and 10 (3.2%) were neither single nor married (i.e. may be divorced, separated, or widowed).

### C. Religious and ethnic background of the respondents

**Figure 4.5.** Religion of the students

**Figure 4.6.** Religious education attendance

(Survey, 2017)

of the students (Survey, 2017)

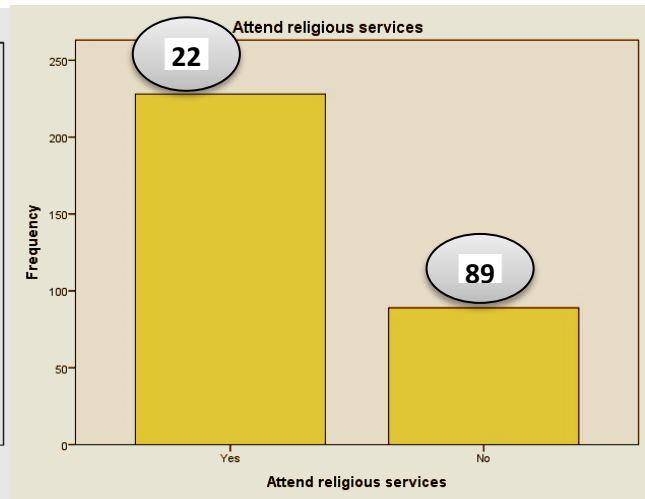
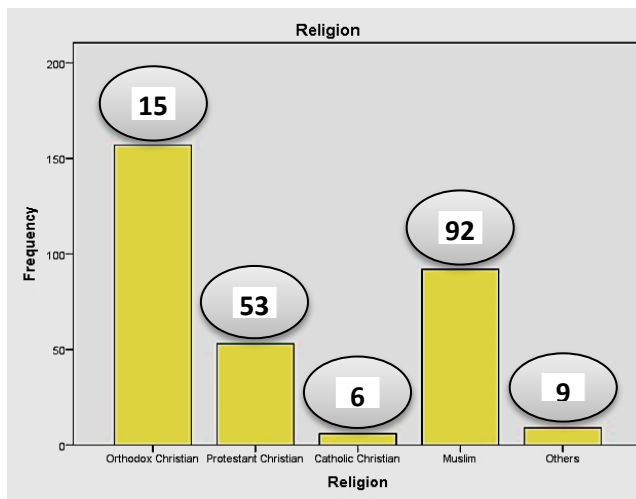
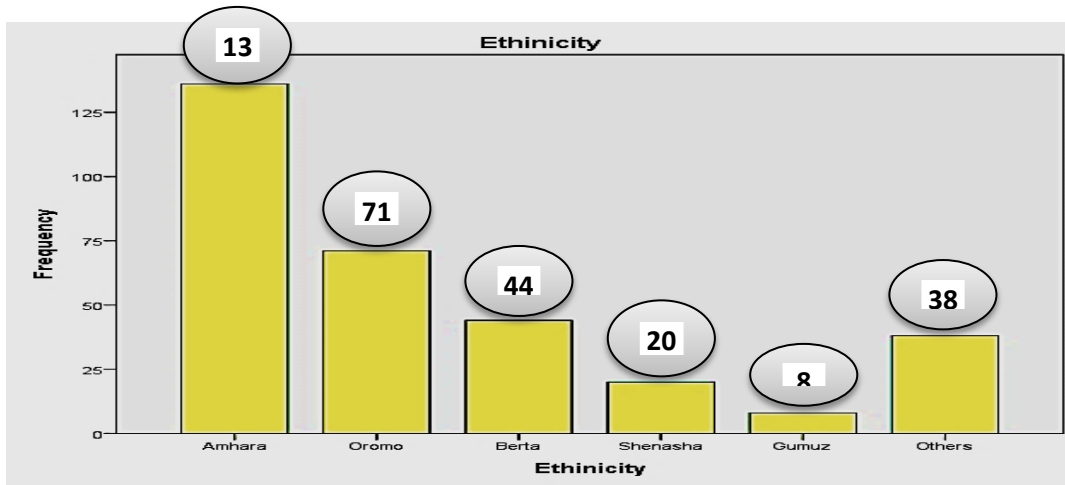


Figure 4.5 depicts that around half (157) of the respondents are Orthodox religion followers and 53 (16.7%), 6 (1.9%), 92 (29%), and 9 (2.8%) are Protestant Christianity, Catholic, Muslim, and other religion followers, respectively. From the total respondents (317), 228 (71.9%) of them were active attendants of religious education provided in their respective affiliated religion (Figure 4.6).

With respect to the ethnic background of the students, 136 (42.9%) of them were Amhara ethnic group and 71 (22.4%), 44 (13.9%), 20 (6.3%), 8 (2.5%) and 38 (12%) were Oromo, Berta, Shenasha, Gumuz, and other ethnic groups respectively (Figure 4.7).

**Figure 4.7:** Ethnic background of the students (Survey, 2017)

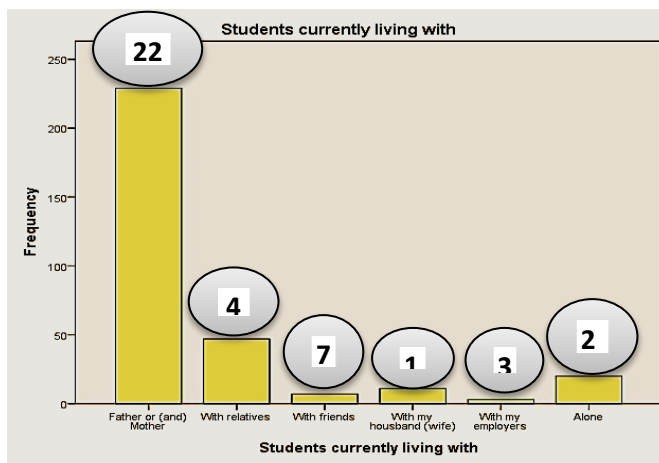


**D. With whom students are currently living and their parents living status**

Two hundred twenty nine (72.2%) of the students live currently with their fathers or (and) mothers and the remaining students live with relatives (14.8%), husbands or wives (2.2%), friends (2.2%), their employers (0.9%), and alone (6.3%) (Figure 4.8). Out of the total study participants (317), 246 (77.6%) of them have mothers and fathers alive, the remaining 56 (17.7%) and 15 (4.7%) have only fathers or mothers alive and both not alive respectively (Figure 4.9).

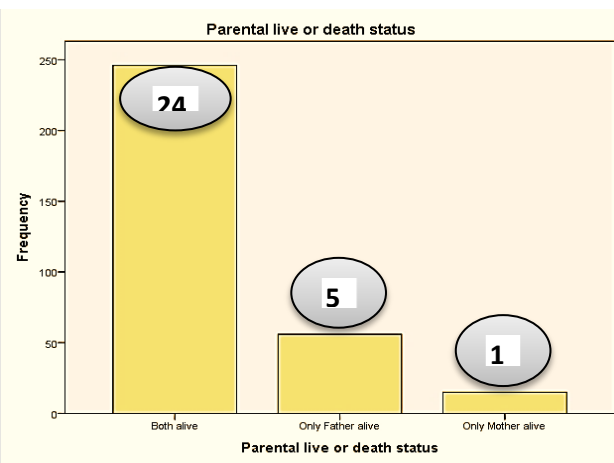
**Figure 4.8.** Students of AGSSPC currently

living with (Survey, 2017)



**Figure 4.9.** Students

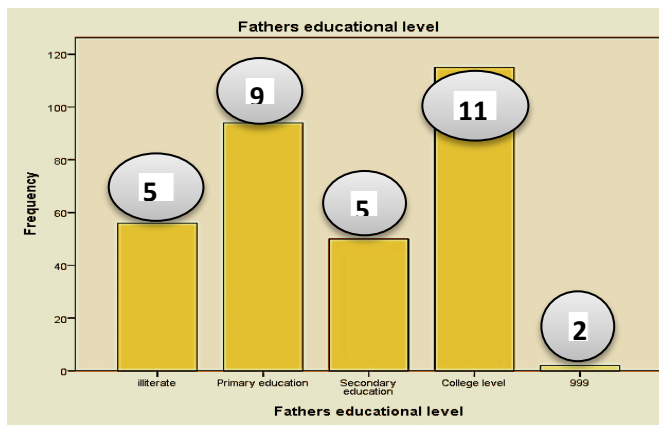
Parents' living (Survey, 2017)



## E. Parents educational and perceived economic status

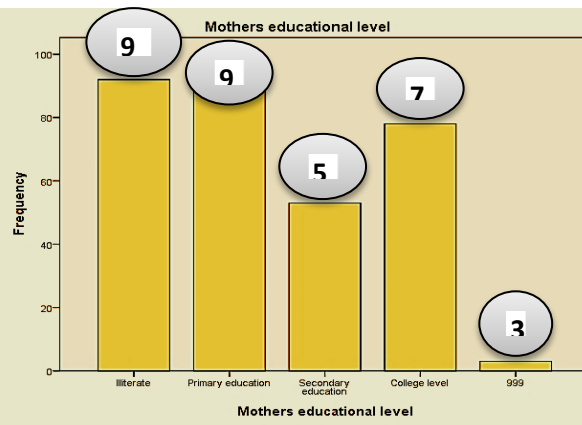
**Figure 4.10:** Educational status of students mothers

(Survey, 2017)



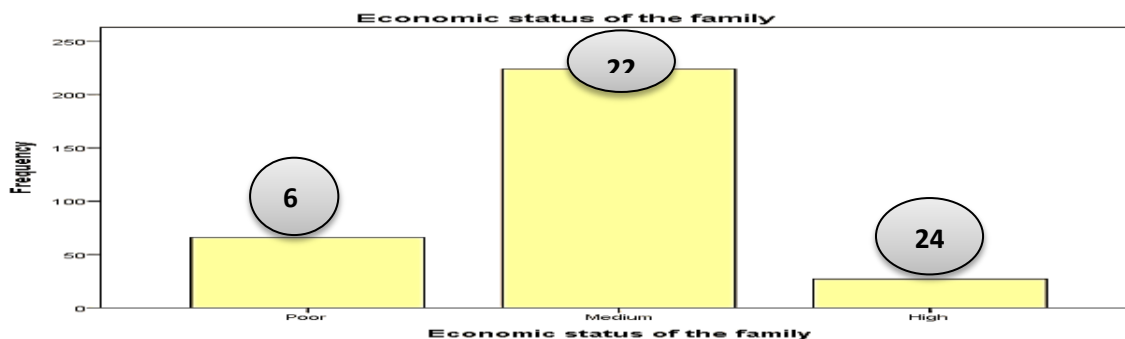
**Figure 4.11:** Educational status

Students mothers (Survey, 2017)



Fifty six (17.4%) of fathers of the students were illiterate and 94 (29.7%) of the fathers had attended primary education. The remaining 50 (15.8%) and 115 (36.3%) of the fathers have respectively attended secondary and college level education (Figure 4.10). On the other hand, ninety two (29%) of mothers of the students were illiterate and 91 (28.7%) of the mothers had attended primary education. The remaining 53 (16.7%) and 78 (24.6%) of the mothers have respectively attended secondary and college level education. Three of the students' fathers' educational status was missing (Figure 4.11). Most majorities of the respondents' (224) out 317 have reported that their parent (family income) was medium. 66 and 27 of the respondents have reported that their parent's income was poor and high respectively (Figure 4.12).

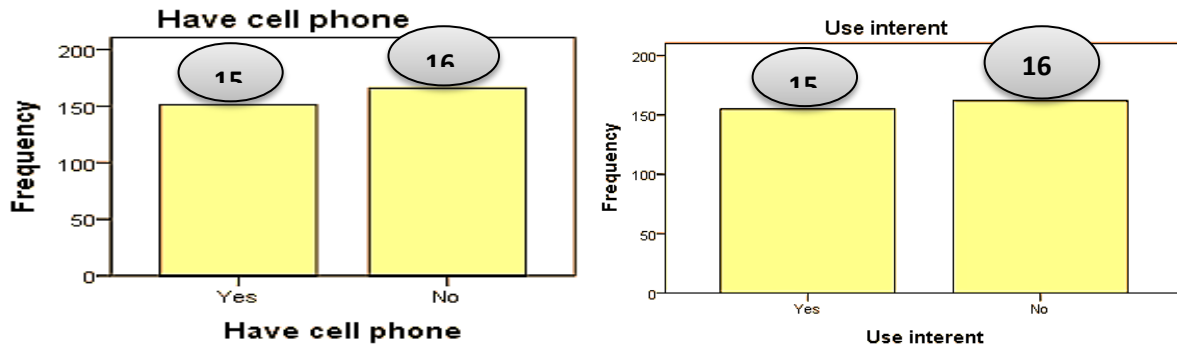
**Figure 4.12.** Perceived economic status of the families of the students (Survey, 2017)



## F. Students access to cell phone and internet use

**Figure 4.13.** Students' access to cell phone (Survey, 2017) **Figure 4.14.** Students' access to internet

(Survey, 2017)



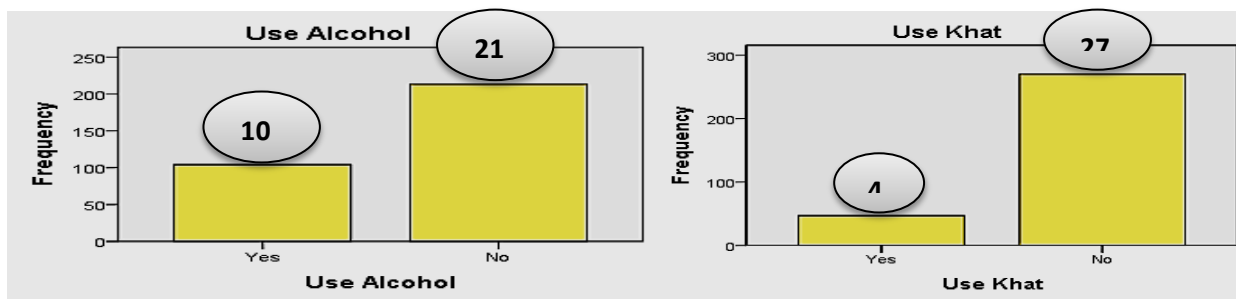
One hundred fifty one (47.6%) of the respondents have cell or smart phones, while more than half (166) the study participants do not have cell (smart) phone (Figure 4.13). 155 (48.9%) of the respondents were users of internet, the remaining 51.1% of them were non users of internet (Figure 4.14).

## G. Alcohol, khat, drug and pornography use among students

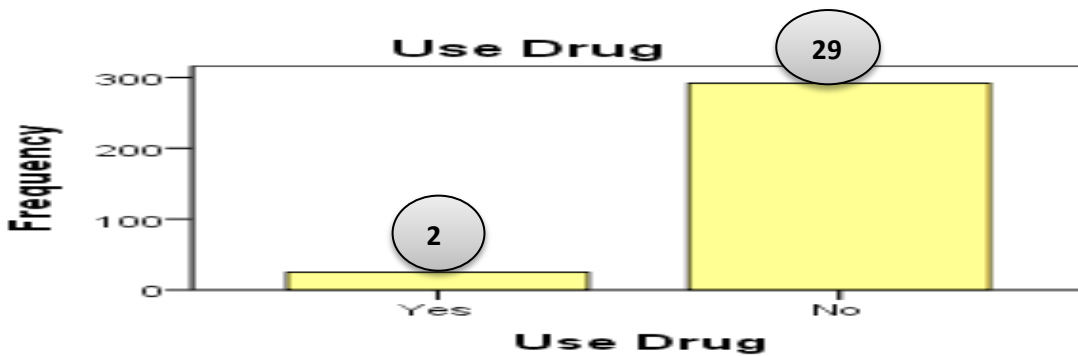
Around one third (32.8%) of the students have drunken alcohol or used alcohol previously (Figure 4.15) ever users of khat substance were 47 (14.8%) (Figure 4.16).

**Figure 4,15.** Alcohol use among students (Survey, 2017) **Figure 4.16.** Khat use among students

(Survey, 2017)

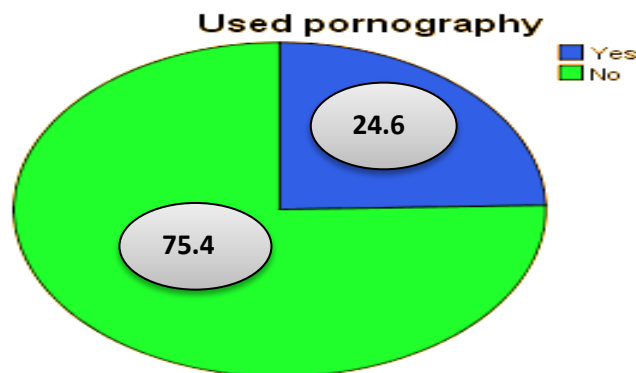


**Figure 4.17.** Drug use among students (Survey, 2017)



Only 25 (7.9%) of the students have had abused drugs in their life time from 317 total participants of this study (Figure 4.17). Finally, from 317 total respondents of this study, 78 (24.6%) of the students were exposed to pornographic materials (Figure 4.18).

**Figure 4.18:** Pornography use among students (Survey, 2017)



## 4.2. Students exposure to pornography

### 4.2.1. Students access and usage of pornography

From the total respondents of the survey questionnaire (317 students), 78 (24.6%) of them used pornographic materials (videos, images and music's). Among those exposed to pornography, 40 (12.6%) of them used pornographic materials intentionally at their first time. The remaining 38 (12%) were exposed to the materials accidentally. Those students were asked about how frequent they are exposed to pornography and the large majority (18.91%) of them replayed seldom, frequently (3.72%) and always (1.56%).

From the total 78 (24.65%) students who were exposed to pornography, 9.5% of them access the materials from internet online. While 8.2% of them access the materials from VCDs (DVDs), others also use lap (desk top) computers, and books and magazines to get and use sexually explicit materials. Age at first exposure to pornography is at early adolescent stage, where 54 (17%) from the total 24.6% of the students have accessed pornography before they are 18 years old. Those students who have consumed pornography alone were 26 (8.2%), with friends 39 (12.3%), with boyfriends (girlfriends) 7(2.2%), and with someone they do not know one (0.31%).

From the total respondents who had used pornography, Twenty seven (8.5%) of the respondents from pornography users, access pornography at their home. Others use these materials around the school (2.5%), in video houses (1.24%), in internet houses (2.19%), on the street (7.75%), and other places (2.19%). Using pornography for entertainment is reasoned among 26 (8.06%) students. Others use pornography to arouse their sexual feeling (3.72%) and to know what pornography looks like (4.7%). Others used pornography because of some told to them use it (3.1%) and other reasons (4.7%). Twenty five of pornography users were excited after they consumed it and 9 of them were turned disgusted. Those who have consumed pornography and inspired to try whatever they have seen (looked) accounted 23 (7.13%). The remaining 12 (3.72%) of them were motivated to learn what they could know about. Students who have ever discussed about issues related to pornography were 130 (41.3%).

The majorities of the participants in the female's focus group discussion argued that many students were exposed to sexual explicit materials through sex videos as there is access to internet (Wi-Fi) around the town (around Team cafeteria, around "Khat Tera", in front and behind of AGSSCP) or because of such materials are easily downloadable using smart phones everywhere. Yet, some of the female FGD participants mentioned that presence of higher exposure to pornography among in-school youths could not be confirmed as it is difficult to say these materials are widely consumed by students or not, since students do not discuss this issue except with their closer friends. Majority of the key informants said that it is easier more than any time to access pornography as it can be shared easily from mobile to mobile through Bluetooth or different file transfer applications among friends. An eighteen year-old, male and

grade 11<sup>th</sup> student said: *“Before it was band to bring mobiles in the school compound, our friends open sex films in the class and we talk about the issue. When we are out of the class for break we also watch and share those videos via bluetooth”*. Teachers and school principals in the school also expressed their worries that students are exposed to sexual explicit materials which could waste their precious time and in fact could affect their sexuality adversely. A teacher and coordinator for female students’ forum said:

Because of the influence of western media and culture, students were exposed to films with sexual arousal content and thereby they are highly endued with sexual activity. .... in the forum female students discuss the issue openly and through time many students were able to recognize the bad sides of merely accepting the western culture. Hence, they were much convinced and teaching their friends who are not members to the forum.

Parents of the students have also expressed their concerns that because of the opening shisha, khat and video houses around the school, students have become vulnerable to unpleasant situations where they miss classes and join those places to share whatever is there. Particularly, the use of sex films had become a common phenomenon among high school students as they visit those particular places frequently. For instance, one of the key informants (49 years old man and member of teachers-parents council at AGSSCP) said, “.... With concerned bodies we had patrolled areas where students go to access khat, shisha, and bad videos near the school compound and corrective measures were taken to ban those businesses. After few days, it is common to observe such business operating in other places of the town around the school compound.”

#### **4.2.2. Students knowledge and view towards pornography**

Students were asked about their attitudes towards pornography by using five questions with and responded as it is depicted in table below.



**Table 4.1.** Students' knowledge and view towards pornography (Survey 2017)

<b>Attitude towards pornography</b>	<b>Response options</b>	<b>F</b>	<b>%</b>
Availability of pornography	Should be available	43	13.6
	Should be available with certain restriction	136	42.9
	Should be legally restricted	138	43.5
	Total	317	100.0
Pornography improves relationship among sexual partners	Yes	85	26.8
	No	232	73.2
	Total	317	100.0
Pornography is culturally taboo In the community	Yes	190	59.9
	No	127	40.1
	Total	317	100.0
Pornography better informs about sex	Yes	138	43.5
	No	179	56.5
	Total	317	100.0
Pornography exposes to risky sexual behaviour	Yes	226	71.3
	No	91	28.7
	Total	317	100.0

As it is clearly depicted in table 4.1, the larger majority of the respondents opted pornography should be not be available (legally restricted) (43.5%) and those who had opted pornography should be available with certain restriction were 42.9%. Only 13.6% of the respondents' favored the availability of pornography. Only 26.8% of the respondents' had believed that pornography improves relationship among sexual partners, while the majority (73.2%) opted against pornography improves relationship among intimates. Respondents were asked about whether they believe or not that pornography is a culturally taboo phenomenon to their community and the majority (190) opted for "yes", pornography is an act that is against Ethiopian culture. On the other hand, 138 (43.5%) respondents' of the questionnaire had believed that pornography better informs about sex and sex related issues. Regarding whether pornography entails risky sexual

behaviour or not, 226 (71.3%) of the respondents' agreed that pornography use can potentially expose users for risky sexual behaviours.

### **4.3. Sexual behaviour of the students**

The study assessed the sexual behaviour of the students and found the following results. Among the total 317 respondents of the survey questionnaire, 99 (31.2%) of them have started sex. From 99 respondents who had practiced sexual intercourse 72 (22.7%) of them had their first sex before age of 18 years, while 27 (8.5%) of them had their first sex at age of above or equal to 18 years. Students had first sex for various reasons including peer pressure, to maintain relationship. With this, twenty nine of the students have started sex for the first time because of they had greater desire of having sex, while 27 (8.5%) had sex for the first time because of peer pressure. The remaining 19 (6%), 14 (4.4%), 5 (1.6%), and 5 (1.6%) started sex because of they wanted to maintain relationship, marriage, to get benefit, and for some other reasons respectively. Among those who have started sex (99), students who have had sex without condom were 46 (14.5%). From the above result, some personal and social factors played greater role in initiating students to start sexual intercourse.

Among those students who have had started sex (31%), sex under the influence of behaviour factors like having sex under the influence of alcohol, khat, drugs, and pornography is common among majorities. Hence, students who have said had sex under the influence of pornography, alcohol, khat and drug ('Shesha') were 39 (12.3%), 49 (15.5%), 33 (10.4%) and 20 (6.3%), respectively. On the other hand, among those students who have started sex (31%) and 29 (9.1%) reported that they have had unsafe sexual practices. Besides, students who have had multiple sexual partners were 65 (20.5%). Hence, this result showed that significant numbers of the students who have had sex were exposed to risky sexual behaviours in one or another way.

Communication about sex between students and their friends seems simple (easy) as compared to between students and their families. Thus, 119 (37.5%) of the students who had participated in the study reported that they have had ever communicated about sex related issues with their close friends or class mates. Only 76 (24%) of the study participants had reported ever

communicated with their families regarding sex related issues. The overmentioned percentage (24%) result may indicate that students are afraid of communicating sex related issues because of culturally related beliefs, communicating about sex is taboo in the community.

Students who have had not started sex were 218 (68.8%). Students have reported a number of reasons not to start sex up to now. Twenty four (7.6%) students reported that they have decided not start sex till now for the reason they fear HIV/AIDS and other STIs. To wait until marriage is another reason why 71 (22%) students never started sex. Three students decided not having sex for the reason they wanted to avoid unwanted pregnancy. To focus on education and afraid of having sex were reasons why 101 (31.3%) and 19 (5.89%) students went to avoid sexual intercourse up to now, respectively. Thus, focus on education has accounted the larger share from all reason why students exempted sex till now.

The finding of the qualitative study also supports what was obtained in the quantitative one. Key interview informants and FGD participants have similar views that sexual practice among the students is well-known. FGD discussants argued that students might start sexual intercourse before they join high school at age of 14 or 15. Majority of the male FGD participants expressed that peer pressure and accepting a boyfriend or a girlfriend as a fashion were among the leading reasons to start sexual intercourse among high school and preparatory college students. An 18 years old female student stated: *“Having a girl or boy friend is common among students; especially during party days being paired is the fashion of the day. It is a must to start sex among couples once they felt in love. Surprisingly, ladies did not went stay virgin and they say virginity is the manifestation of being one is backward”*. The following quote summarizes what male FGD discussants have said:

The way female students wear and their style inspire male students to have sex with them. We know students jumping over the fence of the school compound and join shisha and khat houses, where they meet Bajaj drivers and older people having automobile. We know these students experience sexual practice with this people after visiting night clubs in hotels and gust houses of the town.

#### 4.4. Chi Square test of association

##### 4.4.1. Early sexual initiation and associated variables

Table 4.2 shows that religious education attendance, educational status, with whom students are currently living, and using 'khat' and drug were significantly ( $P < 0.05$ ) associated with early sexual intercourse among the study participants. Other exposure variables like age, sex, marital status, alcohol, pornography use, having cell (smart) phone, using internet and other variables showed statistically insignificant relationship with age at first sex, one of the risky sexual behaviour treated as outcome variable in this study.

**Table 4.2.** Variables associated with age early sexual intercourse among students ( $p < 0.05$ ) in AGSSPC, West Ethiopia, 2017 (N =317)

Exposure variables	X <sup>2</sup>	Df	Sig.
Attendance of religious education	6.136	1	.013
Educational status	4.816	3	.028
With whom students are currently living	15.103	5	.01
Use of khat	6.372	1	.012
Use of drug	4.051	1	.044
Sex	0.11	1	.741
Age	1.192	1	.275
Religion	1.43	4	.75
Ethnicity	3.514	5	.621
Marital status	4.435	2	.11
Parents live status	2.504	2	.3
Fathers educational level	4.76	4	.313
Mothers educational level	2.1	4	.72
Percieved economic status of the family	1.7	2	.43
Having cell phone	0.042	1	.84
Using interenet	1.725	1	.19
Use of alcohol	0.002	1	.97
Use of pornography	0.2	1	.7

#### 4.4.2. Unsafe sexual practice and associated variables

**Table 4.3.** Variables associated with students unsafe sexual practice among students ( $p < 0.05$ ) in AGSSPC, West Ethiopia, 2017 (N = 317)

<b>Exposure variables</b>	<b>X<sup>2</sup></b>	<b>Df</b>	<b>Sig.</b>
Sex	6.22	1	.013
Age	6.35	1	.012
Religion	9.895	4	.042
Use of alcohol	7.99	1	.005
Attendance of religious education	1.2	1	.27
Educational status	4.13	3	.25
With whom students are currently living	5.13	5	.4
Use of khat	0.53	1	.46
Use of drug	0.35	1	.55
Ethnicity	5.5	5	.36
Marital status	3.94	2	.14
Parents live status	1.88	2	.39
Fathers educational level	3.65	4	.45
Mothers educational level	5.37	4	.25
Percieved economic status of the family	3.56	2	.17
Having cell phone	1.25	1	.3
Using interenet	0.73	1	.39
Use of pornography	0.027	1	.87

Among many other exposure variables treated in this study, table 4.3 depicted that only age, sex, religion and using alcohol have showed significant association with unsafe sex practice among the students having sexual experience, while other exposure variables like educational status, pornography, drug and khat use, having cell (smart) phone, using internet, perceived parental income, ethnicity and others showed statistically insignificant relationship.

#### 4.4.3. Sex with multiple sexual partners and associated variables

**Table 4.4.** Variables associated with sex with multiple sexual partners among students ( $p < 0.05$ ) in AGSSPC, West Ethiopia, 2017 (N = 317)

Exposure variables	$\chi^2$	Df	Sig.
Attendance of religious education	5.459	1	.019
Educational status	15.09	3	.002
Mother's educational level	14.854	4	.005
Use of khat	5.320	1	.021
Use of pornography	4.624	1	.032
Sex	0.91	1	.34
Age	1.1	1	.3
Religion	2.3	4	.67
Ethnicity	2.32	5	.8
Marital status	2.42	2	.3
Parents live status	0.64	2	.73
With whom students are currently living	6.84	5	.23
Fathers educational level	5.16	4	.3
Perceived economic status of the family	3.74	2	.15
Having cell phone	2.6	1	.11
Using internet	0.042	1	.84
Use of drug	0.01	1	.93
Use of alcohol	.013	1	.91

Table 4.4 shows, attendance of religious education, educational status, Mother's educational level and using khat and pornography have showed significant association with sex with multiple partners among the study participants having sexual experience. Other exposure variables like age, sex, drug and alcohol use, using internet, perceived parental income, ethnicity, religion and others showed statistically insignificant relationship.

#### 4.5. Factors associated with students risky sexual behaviours (The Bivariate analysis)

##### 4.5.1. Early sexual intercourse and associated factors

**Table 4.5.** Binary Logistic Regression indicating factors associated with early sexual intercourse among students in AGSSPC, West Ethiopia, 2017 (N = 317)

Factors	B	S.E.	Wald	Df	Sig.	Exp(B) (COR)	95% C.I. for EXP(B)	
							Lower	Upper
Religious education attendance	1.314	.514	6.519	1	.011	3.719	1.357	10.196
Constant	-4.129	.979	17.791	1	.000	.016		
a. Variable(s) entered on step 2: Religious education attendance								

As its clearly reveled in table above, despite the fact that religious education attendance, educational status, With whom students are currently living and using khat and drug were significantly associated with early sexual intercourse in Chi-square test, only religious education attendance [Exp (B): 3.719 (1.357, 10.196)] was found as factor for early sexual activity in the bivariate analysis ( $p < 0.05$ ). The relationship of this factor with the outcome variable as either independent risk or protective factor shall be determined in the next step of the stepwise Binary Logistic Regression analysis.

#### 4.5.2. Unsafe sexual practice and associated factors

Table 4.6 below depicts that, only sex [Exp (B): 0.312 (0.114, 0.853)], and alcohol use [Exp (B): 0.290 (0.114, 0.736)], were statistically significant factors for study participants unsafe sexual practice in the bivariate analysis conducted at the second steep. The independent influence and magnitude of these factors on the outcome variable (unsafe sexual practice) shall be explained in the stepwise binary logistic analysis. At this bivariate level of analysis, age and marital status of the study participants did not appeared statistically significant; despite the fact that statically significant relationships were detected in the first step of Chi-square test of association for both exposure variables.

**Table 4.6.** Binary Logistic Regression indicating factors associated with unsafe sexual practice among students in AGSSPC, West Ethiopia, 2017 (N = 317)

Factors	B	S.E.	Wald	Df	Sig.	Exp(B) (COR)	95% C.I. for EXP(B)	
							Lower	Upper
Sex	-1.163	.512	5.157	1	.023	.312	.114	.853
Use of alcohol	-1.238	.475	6.786	1	.009	.290	.114	.736
Constant	4.590	1.169	15.424	1	.000	98.538		
a. Variable(s) entered on step 1: Use of alcohol								
b. Variable (s) entered on step 2: Sex								

#### 4.5.3. Sex with multiple sexual partners and associated factors

Table 4.7 below depicts that, educational status [Exp (B): 1.816 (1.142, 2.889)], 'khat' use [Exp (B): 3.284 (1.058, 10.197)] and use of pornography [Exp (B): 0.277 (0.098, 0.783)] were statistically significant factors for sex with multiple sexual partners among the study participants in the bivariate analysis conducted at the second steep.

The independent influence and magnitude of those factors on the outcome variable i.e. sex with multiple sexual partners shall be explained in the stepwise binary logistic analysis. At this bivariate level of analysis, religious service attendance did not appeared statistically significant; despite the fact that statically significant relationships has been obtained in the first step of Chi Square test of association for the variable.



**Table 4.7.** Binary Logistic Regression indicating factors associated with sex with multiple sexual partners among students in AGSSPC, West Ethiopia, 2017 (N = 317)

Factors	B	S.E.	Wald	Df	Sig.	Exp(B) (COR)	95% C.I. for EXP(B)	
							Lower	Upper
Educational status	.597	.237	6.355	1	.012	1.816	1.142	2.889
Use of khat	1.189	.578	4.232	1	.040	3.284	1.058	10.197
Use of pornography	-1.284	.531	5.857	1	.016	.277	.098	.783
Constant	-1.734	1.352	1.645	1	.200	.177		

a. Variable(s) entered on step 1: educational status.  
b. Variable(s) entered on step 2: use of pornography.  
c. Variable(s) entered on step 3: use of khat.

#### 4.6. The Multivariate analysis (Determinants of risky sexual behaviour)

##### 4.6.1. Determinants of early sexual intercourse

**Table 4.8.** Binary Logistic Regression indicating determinants of early sexual intercourse among students in AGSSPC, West Ethiopia, 2017 (N = 317)

Factors	B	S.E.	Wald	Df	Sig.	Exp(B) (AOR)	95% C.I. for EXP(B)	
							Lower	Upper
Religious education attendance (yes)1	-1.351	.552	5.982	1	.014	.259	.088	.765
Constant	1.032	1.128	.837	1	.360	2.806		

a. Variable(s) entered on step 1: Religious education attendance  
b. Omnibus tests of model coefficients (Sig = 0.001), Overall model prediction success in percentage 77.8%, Model summary (Nagelkerke R Square: 0.28), Hosomer & Lemeshow test (Sig = 0.86)  
**Note:**  $\beta$ - regression coefficient constant, exp B-odds ratio

From table 4.8, religious education attendance was shown to decrease probability of being sexually active before age of 18 years old with AOR of 0.259 a 95% C.I.: (0.088, 0.765). Thus, attendance of religious services among the study participants remained the only factor, i.e. significant protective factor for not to start sexual practice earlier (Chi square = 21.56, p = 0.001 with df = 6). The equation of the first model is clearly depicted as follows:

$$\text{Logit (early sexual intercourse 2017)} = 1.163 - 1.351 \text{ Religious education attendance}$$

The model fitted the data (Hosmer & Lemeshow test is insignificant, p>0.05). Prediction success overall of the model is 77.8% and Nagelkerke adjusted R-squared estimate from table above is 0.28, indicating that the model fit the data at acceptable level meaning; approximately 28% of the variation of the outcome variable (age at first sexual intercourse) is explained by the fitted model.

#### 4.6.2. Determinants of unsafe sexual practice

**Table 4.9.** Binary Logistic Regression indicating determinants of unsafe sexual practice among students in AGSSPC, West Ethiopia, 2017 (N = 317)

Factors	B	S.E.	Wald	Df	Sig.	Exp(B) (AOR)	95% C.I. for EXP(B)	
							Lower	Upper
Sex (male (1))	1.163	.512	5.157	1	.023	3.200	1.173	8.734
Use of alcohol (yes (1))	1.238	.475	6.786	1	.009	3.449	1.359	8.754
Constant	-.212	.370	.328	1	.567	.809		
a. Variable(s) entered on step 1: sex, use of alcohol b. Omnibus tests of model coefficients (Sig = 0.001), Overall success percentage 73.7%, Model summary (Nagelkerke R Square: 0.18), Hosmer & Lemeshow test (Sig = 0.98 (p> 0.05))								
<b>Note:</b> β- regression coefficient constant, exp B-odds ratio								

From table 4.9, being male and alcohol use remained significant factors to increase the probability of making unsafe sexual intercourse (Chi square = 13.54, p = 0.001 with df = 2). Hence being male three times increased the odds of having unsafe sex with AOR of 3.2 a 95% C.I.: (1.173 - 8.734). Drinking alcohol 3.5 times more times increased the odds practicing unsafe

sex among the study participants with AOR of 3.449 a 95% C.I.: (1.359, 8.754). The equation of the second model is clearly depicted as follows:

$$\text{Logit (unsafe sexual practice 2017)} = -.212 + 1.163 \text{ Male} + 1.238 \text{ Alcohol use}$$

The model fitted the data (Hosmer & Lemeshow test is insignificant,  $p > 0.05$ ). Prediction success overall of the model is 73.7% and Nagelkerke adjusted R-squared estimate from table above is 0.18, indicating that the model fit the data at acceptable level meaning; approximately 18% of the variation of the outcome variable (unsafe sexual practice) is explained by the fitted model.

#### 4.6.3. Determinants of sex with multiple sexual partners

**Table 4.10.** Binary Logistic Regression indicating determinants of sex with multiple sexual partners among students in AGSSPC, West Ethiopia, 2017 (N = 317)

Factors	B	S.E.	Wald	Df	Sig.	Exp(B) (AOR)	95% C.I. for EXP(B)	
							Lower	Upper
Educational status (grade 9 (1))	-1.961	.885	4.912	1	.027	.141	.025	.797
Use of pornography ((yes)1)	1.856	.651	8.137	1	.004	6.401	1.788	22.919
Constant	-.408	.715	.325	1	.568	.665		
a. Variable(s) entered on step 1: Educational status, use khat, use porno. b. Omnibus tests of model coefficients (Sig = 0.00), Over all percentage 71.7%, Model summary (Nagelkerke R Square: 0.35), & Hosmer & Lemeshow test (Sig = 0.66 ( $p > 0.05$ )) <b>Note:</b> $\beta$ - regression coefficient constant, exp B-odds ratio								

From table above, being ninth grade 0.03 times decreased the odds of having sex with multiple sexual partners as compared to being grade 12th with AOR of 0.141 a 95% C.I.: (0.025, 0.797). Hence, being at lower grade remained slightly a protective factor from having sex with multiple sexual partners among the study participants in this study (Chi square = 29.25,  $p = 0.00$  with  $df = 5$ ). On the other hand, consumption of pornographic materials increased 6 more times the likelihood of sex with multiple partners with AOR of 6.401 a 95% C.I.: (1.788 - 22.919) as compared to the non-consumers of pornography. The equation of the third model is clearly depicted as follows:

$$\text{Logit (sex with multiple sexual partners 2017)} = - .408 - 1.961 \text{ Grade 9} + 1.856 \text{ Pornography use}$$

The model fitted the data (Hosmer & Lemeshow test is insignificant,  $p > 0.05$ ). Prediction success overall of the model is 71.7% and Nagelkerke adjusted R-squared estimate from table above is 0.35, indicating that the model fit the data at acceptable level meaning; approximately 35% of the variation the outcome variable (sex with multiple sexual partners) is explained by the fitted model.

## **CHAPTER FIVE: DISCUSSION**

This study aimed at investigating pornography use and other determinants of risky sexual behaviour among in-school youths of Assosa General Secondary School and College Preparatory, Western Ethiopia. Univariate and Multivariate analysis using Logistic Regression and Chi square test analysis were used to assess the relationships among the exposure and outcome variables by using three independent models. The study found that almost one third (31.2%) of the study participants have started sexual intercourse and the use of pornographic materials was reported among 24% of these groups and it was significantly associated with having sex with multiple sexual partners. Socio- demographic characteristics, particularly sex, educational status and religious education attendance were also found to independently influence sexual behaviour of the study participants who have already started sexual intercourse. Alcohol use among the students was also found as independent determinant of students' sexual risky behaviour. Peer pressure, feeble communication about sex related issues among parent-youth and the influence of western media were also reported to affect sexual behaviour of the study participants.

### **5.1. Pornography Use**

Overall prevalence of pornography use among the study participants was 24.6 % (30.3% among males and 19.5% among females). Lower rates of pornography use among females were reported under this study as compared to males. Prevalence rate of pornography use for this study was lower as compared to Humara Secondary School students in Northwestern Ethiopia, which was 75.9% (Abel and Fishea 2014) and Jimma University students with prevalence rate of 65.1% (Gurmesssa, Fessahaye and Sisay 2012). Still, prevalence of exposure to pornographic materials among the study participants for this study was lower as compared to 55.4% prevalence rate among adolescents in New York City, USA (Braun – Courville and Rojas 2009). The lower prevalence of pornography use was reported among the female study participants for this study and this may be because of socially desirable responses might have influenced the female students and significantly lowered the overall prevalence rate in the study area.

Early exposure (before age 18 years) to pornographic materials was prevalent among the majority (17% from the total 24.6%) of the study participants who have consumed pornography. Study participants obtained pornographic materials from major sources like from internet (Wi-Fi) and CDs (DVDs). Larger majority of the students opted using pornography at their home and around the streets through their cell (smart phones). The influence of peers in motivating initial exposure to pornographic materials shares the larger reason why study participants ever had consumed porno materials. Generally speaking, one fourth of study participants were exposed to sexual explicit materials as access to these materials largely remained easily available from internet and technologies that students avail on their hands like cell (smart phones) and desk (lap top) computers.

Participants of the FGDs and key informants interview also agreed that students in AGSSPC are intentionally and accidentally users of pornography because of its easily accessible through cellphones and online on internet. Participants of the key informant's interviews also informed that some video houses in Assosa Town usually reveal porno movies to their client's, were majority of them are adolescents attending secondary school. For example:

In-school youths access to porno videos and a photo is common because one can easily avail those materials on cell phone (smart) phones. .... to be frank with you, someone having no access to porno or less interest to be exposed would be referred as 'uncivilized' (locally "gija") by his/her colleagues" (Participant 022 (Student, Male, 9<sup>th</sup> grade & Single)).

The finding obtained from the FGD conducted with male discussants also consists with the findings described above. Majority of them expressed that students get sex films from their friends and internet and pornography consumption is high among students in grade 12<sup>th</sup> and 11<sup>th</sup> as compared to new comers to high school (grade 9<sup>th</sup> students). And some the participants have argued that senior students easily influence the newcomers to consume pornography materials; thereby effects sexual behaviour of these groups of the in-school youths.

## 5.2. Sexual Experience of the Study Participants

In this study, 99 (31.28%) of the respondents' were sexually active. This figure is much higher as compared to 17.8% prevalence rate of sexual active respondents' among in-school youth at Addis Ababa City (Lioul 2008) and almost similar with 33.5% and 30.2% prevalence rate of sexual experience among students of Haramaya and Axum Universities, respectively (Andualem, Assefa and Chalachew 2014; Hiwet, Wondwossen and Kidan 2015). The result (13.3% prevalence rate of sexual experience) was significantly higher than what was reported by a study conducted in Bullen Woreda, Benishangul Gumuz Region to asses' high school students' communication about sex and reproductive health issues with parents by Desalgne and Mesganaw (2010). Regarding sex differences of sexual initiation for this study, among sexually active respondents' of the survey, 43 (29.7%) were males and 56 (32.6%) were females. The above percentage indicates that females are more active to start sex than their counter parts, males. This result is contradictory to what was reported by a study conducted among Arba Minch University students that prevalence of sexual intercourse is much higher among males than females (Bikila and Gemechu 2015). Such variations might be due differences of socio-demographic characteristics among participants of the current study and that participants for the study conducted at Arba-Minch university.

Greater desire of having sex, peer pressure and maintain relationships were reported major reasons to start sex for the first time among the respondents' of this study. The findings from the FGDs of the present study also revealed similar ideas with the findings obtained from the quantitative explanation. All these reasons were reported among the students of Arba-Minch University in a similar manner to the current study (Bikila and Gemechu 2015). Moreover, other studies in Ethiopia about sexual behaviour of in-school youths also found that peer pressure, curiosity to have sex and eagerness to know sex were found reasons for initiation of sex at first time (Andualem, Assefa and Chalachew 2014; Fekadu and Alemayehu 2009).

Sex under the influence of behavioural factors like drinking alcohol and use of pornography, drugs and khat was reported by respondents with history of sexuality. For instance, 49 (15.5%) of the survey respondents' having history of sexual experience reported that they have had sex under the influence of alcohol use. Among 99 (31.3%) of study participants who had sex, next to

Alcohol, sex under the influence of pornography, drug and khat use were reported by 39 (12.5%), 33 (10.4%) and 20 (6.3%) respondents' respectively. This figures showed that respondents' had history of having sex under the influence of one or more behavioural factors at the same time. In line with this findings, parents of the students also reported that shisha and khat houses were major places where students were exposed to substances and pornographic films, which thereby influences their sexual behaviour. Literature revealed that substance like alcohol, khat and drugs has the potentials of arousing sexual feelings of adolescents. Hence, the finding of this study that respondents' had sex under the influence of those substances remained true.

Among total 317 (100%) respondents' of this study, 218 (68.7%) of them never had sexual intercourse till this study was conducted. One hundred one respondents' among those who did not start sex up to now argued that they wanted to avoid sexual intercourse for the reason they that emphasized on their education. Next to focus on education, to wait until marriage was another reason why 71 respondents delayed sexual intercourse. The two reasons were also prior options opted by respondents' for similar studies conducted in different parts of Ethiopia (Fekadu and Alemayehu 2009; Hiwet, Wondwossen and Kidan 2015). Fear of HIV/AIDS and other STIs, to avoid unwanted pregnancy and afraid of making sexual intercourse were also reasons opted by fewer majorities of the respondents not to start sex till now.

### **5.3. Sex Communication**

It was found that communication about sex related issues among students and parents was very low. Only 76 (24%) of the students who have participated in this study had reported ever communicated with their families regarding sex related issues. Majority of female FGD participants have also confirmed that communication about sex and sex related topic among students and their parents was limited as the prevailing culture in the community fosters the issue as a taboo. One of the key informants in this regard had stated:

*“This day's parents recognize that their children could probably or already start sexual intercourse and they never went wasting their time by teaching the bad sides of it. Rather, they say my children please keep your-self safe, locally ራስህን (ሽን) ጠብቅ (ቂ).”*



Devastatingly, some of the male FGD discussants have argued that parents less worry about where and with whom their children spent the whole day. They believe their children at high school level could do what is an advantage and expected from concerning sex and their life.

Thus, from the above explanations, communication about sex related issues among parents and adolescents of the study participants was reported to lower level than it is expected, as it could potentially save students from their engagement in unpleasant sexual activities. Similar with this study finding, a study conducted in Mekelle City to identify factors affecting parent adolescent communication on sexual and reproductive health issues among Secondary and Preparatory school students found that parent-adolescent communications on sexual and reproductive health issues were low (Zemenu et al. 2015).

Still, only 119 (37. 5%) of the students who had participated in the study have reported that they have had ever communicated about sex related issues with their friends. Female students who have participated in the FGD revealed that students only communicate about their sexuality for only closer friends or they keep everything secret to the maximum possible. However, these discussants further argue that they observe students having walk with opposite sexes around streets in the town displaying charters that they are in love with whom they are. Now it comes fortunate that sex communication among peers (female students) not much closer to remain low. Yet, some of the male participants of the FGD discussed that sex discussions prevail among peers both in the class and outside the school thereby what they call it peer pressure comes in real sense. The finding of a study conducted by Roman (2015) to examine the sexual socialization of adolescents in Addis Ababa indicated that adolescents preferred peer groups as a first source of sexual information. According Roman (2015), parents, particularly mothers were preferred as second source of information about sex related matters. Yadeta, Yemane and Alemayehu (2015) assessed parent-youth sexual and reproductive health communication in Eastern Ethiopia and they revealed that poor beliefs and norms of essentially communicating about sexual and reproductive health related information among youths with parents.

#### 5.4. Risky Sexual Practice

For this study, from the total respondents who had practiced sexual intercourse (31%), 72 (22.7%) of them had their first sex before age of 18 years that was more than double times higher than 8.5% of the respondents having history of age at first sex above or equal to 18 years old. This figure indicates early sexual initiation was prevalent among significant majority of the study respondents who had started sex (31%). This finding was consistent with studies conducted in Dessie Town (Fekadu and Alemayehu 2009), Bullen Woreda (Desalgne and Mesganaw 2010) and South Africa (Olufunmilayo 2009) and almost different from a study conducted in Axum, Axum University (Hiwet, Wondwossen and Kidan 2015).

Another outcome variable treated as risky sexual behaviour in this study was unsafe sexual intercourse. Unsafe sex practice was also reported among 29 (9.1%) of the study respondents who had sex before (31%). This finding was lower than 14% prevalence rate of sex without any protection among adolescents in Peru (Cueto and Leon 2016). This can be taken as another indication that students who had started sex were exposed to risky sexual behaviour. Beyond this, there was found a reason to argue that student's might be exposed to unwanted pregnancy, abortion and STIs. This rational was exactly supported from a qualitative finding obtained from informants of the interviews. One of the key informants argues:

As I am a health officer working in Assosa health center and dweller of Assosa Town, I knew adolescents at high school level attending medical services related to STIs and termination of unwanted pregnancy. Students encounter such problems because of they were drunken or peer pressure is there.

Most of the informants of the key interviews and FGD discussants argued that prevalence of sexual practice without condom among high school students due to sex under the influence of alcohol and drug use was common among those students attending night clubs and 'shisha' and 'khat' houses, thereby possibly forcing them to such practices. For instance, among those who have started sex (32.3%) for the current study, respondents who have had sex without condom were 46 (14.5%). Hence, significant numbers of the study respondents were exposed to sex without condom which was one of the risky sexual behaviour for youth health. However, the prevalence rate of sex without condom reported in this study is slightly lower as compared to

studies conducted in Axum University (Hiwet, Wondwossen and Kidan 2015) and Jimma University (Gurmesa, Fessahaye and Sisay 2012).

Respondents who had multiple sexual partners were 65 (20.5%) among those 99 (31%) who were started sex. The aforementioned proportions showed that larger majority of the students who have had sex were exposed to risky sexual behaviour. More than half of the sexually active respondents 65 (20.5%) reported as they had sex with more than one life time sexual partners and this was higher among female students (69.6%) than their counterparts (60.5%). This finding controversies with a study conducted in Gurage Zone, which reported higher proportion of male respondents were having more than one sexual partners as compared to their counterpart females (Tadesse *et al.* 2016).

### **5.5. Factors for Risky Sexual Behaviour**

In the Bivariate Logistic Regression analysis different exposure variables showed a statistically significant association with risky sexual behaviour of the study participants. For instance, religious education attendance and with whom students currently live with were associated with the practice of early sexual intercourse; sex and alcohol were associated with unsafe sexual practice; and educational status of the students, khat and pornography use were significantly associated with the practice of sexual intercourse with multiple partners. However, a Multivariate analysis for Logistic Regression was conducted to determine independent predictors of the three risky sexual behaviour typologies considered under this study by controlling the effect of confounding variables through forward stepwise analysis.

In the Multivariate Logistic Regression analysis religious education attendance was found as the only predictor which remained having statistical significant association with early sexual experience of the study participants. Thus, attendance of religious education among students was more likely to decrease to engage in early sexual intercourse with AOR of 0.259 (95% C.I.: 0.088 - 0.765). Therefore, attending religious education remained the only protective factor for dalliance of sexual intercourse among the study participants. This factor was also found as a protective factor among study participants in Axum University (Hiwet, Wondwossen and Kidan 2015). In other similar studies conducted in North East and South West Ethiopia, alcohol

drinking, khat chewing and watching pornography were reported as main predictors of early sexual initiation (Maregion and Gistane 2013; Fekadu and Alemayehu 2009). However, these important factors were found not significant predictors of early sexual intercourse for this study. This variation may be due the fact that the current study had used three different models to test the independent influence of many exposure variables on each outcome variables. Besides, alcohol use and exposure to pornography were found significant predictors in another models tested in this study.

With regard to unsafe sexual practice of risky sexual behaviour, male respondents three times [AOR= 3.2; 95% CI: 1.173, 8.734] more likely practiced unsafe sex than female students.

Drinking alcohol 3.5 times more times increased the odds of practicing unsafe sexual intercourse among the study participants [AOR= 3.45; 95% CI: 1.359, 8.754].

Educational status of the study participants and exposure to pornography were significantly associated with risky sexual behaviour implied by having sex with multiple sexual partners.

Being ninth grade 0.141 times decreased the odds of having sex with multiple sexual partners as compared to being grade 12<sup>th</sup> [AOR = 0.141; 95% CI: 0.025, 0.797]. Hence, being at lower grade remained slightly a protective factor from having sex with multiple sexual partners than relatively being at higher grade level (grade 12<sup>th</sup>) among study participants. On the other hand, users of pornographic materials were 6.4 times likely to had sex with multiple sexual partners than the counterparts [AOR = 6.401; 95% C.I.: 1.788 - 22.919]. In the current study, strong positive relationship was observed among increased exposure to sexually explicit materials and sex with multiple sexual partners and this was in line with the sexual script theory, which claims that adolescents can learn about sexual activity from media (Widerman 2015). Watching Pornography was reported to increase the likelihood of practicing risky sexual behaviour among Axum University students, which was similar finding with the current study (Hiwet, Wondwossen and Kidan 2015).

The findings of this study reaffirm the explanations made by theories of both sexual scripting and problem behaviour theories. For instance, in line with what theory sexual scripting contends; any behaviour is socially constructed and shared among particular social groups, with this exposure to sexually explicit materials could emanate from interaction with significant others and largely from exposure to media. Such experiences among the study participants in return

could have change the actual sexual behaviour to extent of adopting unreal sexual scripts displayed in those Medias (Widerman 2015; Livingstone and Mason 2015).

Unerringly, the findings of this study best fits with the theoretical explanations argued by Jessor 2014 in constructing problem behaviour theory through further development of concepts central to the theory. Hence, personal factors (sex, educational status and attendance of religious education) and behavioural factors (use of alcohol and pornography) were found major factors (determinants) of the overall existence of risky sexual behaviour among the study participants.

## CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The main aim of this chapter is to present the summary of major findings, the conclusions drawn from the results of the analysis of the survey questionnaire, key informant interviews and focus group discussions and then make recommendations for future research and policy initiatives.

### 6.1. Summary

The study assessed pornography use and other determinants of risky sexual behaviour among students of Assosa General Secondary school and College Preparatory. Hence, the major findings which were drawn from the discussion part were summarized as follows.

It was found that access to pornographic materials by students of the study area from internet and smart phone was easy and exposure to those materials was immense. Teachers in Assosa General Secondary School and College Preparatory and parents of the students were much concerned over the potential harms of exposure to pornography among the students. Significant numbers of the students were also exposed to substance use like, alcohol drinking, khat chewing and drug abuse.

Sexual practice was demonstrated among one third of the students in the study area. Among those who had started sex, higher numbers of the students were exposed to risky sexual behaviour. In the Univariate Logistic Regression analysis, statistically significant association between age, sex, educational status of the students, with whom students are currently living and religious services attendance of the study participants and risky sexual behaviour were reported. Significant association was also maintained between pornography use, alcohol drinking and khat use and risky sexual behaviour of the study participants.

'*Shisha*' and '*khat*' houses around the school compound were also identified as major places where students could easily access pornographic materials and thereby learn deviant behaviours including risky sexual behaviour. Teachers role in teaching topics related to sexual organs, sexuality and reproductive health issues has been found not satisfactory and to the point; embedded with full of shames and fears of uncovering facts and theories. Lack of coordination

among stakeholders (teachers, parents, representatives of the students, bureau of education and health, youth clubs, and police) in effectively dealing with problems related to students sexuality and associated factors in the study area was also another major finding of this study.

In the Multivariate Logistic Regression analysis, attending religious education and educational status of the students (being grade 9<sup>th</sup> or at lower grade at high school level) were remained an independent protective factors for risky sexual behaviour among in-school youths of Assosa General Secondary School and College Preparatory. The same fashion, sex, alcohol use and pornography use were found independent risk factors for risky sexual behaviour among students of the study area. Particularly, being male and user of alcohol and pornography were found to increase the odds of risky sexual practice among the study participants. Finally, from the qualitative findings, less open communication about sex related issues between students and parents, peer pressure and growing media influence (the influence of western culture) were also found as risk factors for risky sexual behaviour among the students.

## **6.2. Conclusions**

The overall objective of this study was to investigate pornography use and other determinants of risky sexual behaviour among in-school youths of Assosa General Secondary School and College Preparatory, Western Ethiopia. The study provides worthwhile baseline evidence that benefits various stakeholders to understand how and why students of Assosa General Secondary School and College Preparatory engage in risky sexual behaviours such as early sexual intercourse, unsafe sexual intercourse and sex with multiple sexual partners that perhaps puts them at risk of contracting STIs, unwanted pregnancy and other health related problems.

Finally, this study proclaims that in-school youth's sexual behaviour remains significantly affected by the personal, interpersonal, behavioural and social- environmental factors in which they are embedded with. In more precise terms, the use of pornography and alcohol, sex, peer pressure, media influence, and feeble parent- children communication about sexuality are risky factors for risky sexual behaviour among in-school youths of Assosa General Secondary School and College Preparatory. Proper parent-children communication at early stage of a person is a way-out from the multifaceted risky sexual behaviours observed at later age of young people, as

human sexuality is a socially constructed reality interpreted from the power of self and meanings apprehended at broader community level.

Hence, the researcher deduces that the multifaceted risky sexual behaviour problems existed among significant number of in-school youths of the study area and mandate pressing mitigation strategies; otherwise, the hitches reported under this study may perhaps exacerbate and potentially resulting increment in STIs, unwanted pregnancy, and abortion incidence rate and other associated health problems among those group of people. Finally, the researcher presumes that the cumulative effect of all these problems could result an overwhelming problem on the overall socio-economic condition and environs of young people which were addressed in this study and others in similar settings.

### **6.3. Recommendations**

Based on the findings and the conclusions of this study, the following recommendations were recommended to minimize students' risky sexual behaviour and higher exposure to the influencing factors. The recommendations of this study will have also implications for future research undertaking and policy development in the areas of adolescents sexual behaviour and reproductive health agendas; besides of the limitations duly acknowledged by the researcher.

Prevalence of behavioural factors like pornography, alcohol and khat among students of Assosa General Secondary School and College Preparatory was high, thereby adversely influencing their sexual behaviour. Sex of the students was other significant socio-demographic factors that influenced students' sexual behaviour in unpleasant way. Environmental factors like exposure to western media and peer pressure were also found to influence risky sexual behaviour among the students. In view of this, were there was found relationship between those factors and risky sexual behaviour, there needs for a new, innovative and youth friendly approaches towards addressing risky sexual behaviour as well as factors that fuel those groups of people towards risk behaviour and negative health outcomes.



This study insists on the adoption of need-based and informative ways of teaching in-school youths about risky sexual behaviour both in Academics and Medias. Parents should also give greater emphasis to address in-school adolescents risk sexual practices through enhancing straight forward and creative communication with their children than hardly communicating the issue. On the other hand, students should sidestep essentially peer pressure that could negatively influence their sexual behaviour by limiting their contact with friends that could influence them in spiteful manner and perhaps focusing on their life long objectives and dreams. Local authorities and civil societies (Like: Police, Human Rights Agencies, Justice Offices, Kebele Administrations and etc.) concerned with youths wellbeing and working towards their rights also should take serious corrective measures on institutions (like shisha and khat houses) reinforcing youths exposure to risky sexual practice in Assosa town.

School mini Medias, youth clubs and forums established in school compounds and elsewhere should advocate and disseminate massive information about youth sexual behaviour so that the culture of vibrant discussion about the issue surpasses and risky sexual behaviour could be reduced to higher level possible among young people. Teachers of Biology and Civic courses at high school level also could play an important role in facilitating open and productive discussions as well straight forward lecture delivers about youths reproductive health issues and most importantly generally accepted ethics and behaviour in the community, thereby to minimize the incidences of youth's exposure to risk factors.

Future researches and policy initiatives within the country should consider as well adopt pragmatic approaches of addressing youth sexual behaviour. Most particularly, future researches on adolescents and youths sexuality should give prior attention for identification protective factors for risky sexual behaviour among these sections of the community. Despite of previous efforts made by Ethiopian government, policy makers should put ways of strengthening institutions like religious organizations and others who were positively contributing towards protecting young people from engaging in activities that would adversely affect their health and over all wellbeing. Finally, both local and international non-governmental organizations should focus on effectively designing and implementing community based programs that possibly will address in-school youth needs about reproductive health matters.

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## **Appendix 1: Interview guide prepared for students**

**Jimma University: College of Social Sciences and Humanities, Department of Sociology,  
MA Programme in Sociology and Social Policy**

### **Key informant Interview guide prepared for students in Asossa General Secondary School and Preparatory Collage**

This is an interview guide prepared by candidate graduate of masters of art in sociology and social policy in Jimma University, department of sociology. The guide is prepared for the purpose of investigate the prevalence of pornography use and magnitude of risky sexual behaviour and its association with pornography use among students in Assosa General Secondary School and Preparatory College. The study helps to recommend research, project, program me and policy based interventions by different concerned bodies so that the problems emanating out of risky sexual behavior could be sustainably addressed. Hence, you are kindly requested to give your genuine response in this regard. Feel free to provide any information, since the information you give will be kept confidential. **Thanks in advance!**

1. Do you think in-school youths around you are exposed to sexual explicit materials?
2. Do you explain when and where in-school youths are exposed to pornography?
3. What do you tell me about the sources of such materials for the students (where did they get those materials)?
4. Do your friends discuss with you about what pornography is and the information it contains?
5. What do say about your experience regarding exposure to pornographic materials? If you are exposed to such materials, where and with whom you have used it?
6. Did your exposure to pornographic materials influence your life? If yes in what way?
7. Would you explain to me the advantages and disadvantages of using pornography?
8. Do you have boyfriend or girlfriend?
9. If yes for question number 5, do you discuss sex related issues with your partner?
10. Do you openly communicate about sex related issues with your class mates, parents, and teachers? If no why?
11. What do you say about in-schools sexual activity or involvement?

12. Did you think in-school youths are exposed to negative consequences of having sex (like: sex with multiple and unknown partners, no or inconsistent condom use and unsafe sex)?
13. What do say about your understanding of risky sexual behaviour?
14. Do you describe about some risky sexual behaviour influenced by pornography consumption among in-school youths?
15. What do you think is a possible way of minimizing the effect of pornography on adolescent sexual health?
16. Do you have anything else to add about what we have discussed right before?

## **Appendix 2: Interview guide prepared for teachers and school principals in AGSSCP**

**Jimma University: College of social sciences and humanities, Department of sociology, MA  
Program me in Sociology and Social Policy**

### **Key informant interview guide prepared for school principals and teachers in Asossa General Secondary School and Preparatory Collage**

This is an interview guide prepared by candidate graduate of masters of art in sociology and social policy in Jimma University, department of sociology. The guide is prepared for the purpose of investigate the prevalence of pornography use and magnitude of risky sexual behaviour and its association with pornography use among students in Assosa General Secondary School and College Preparatory. The study helps to recommend research, project, program me and policy based interventions by different concerned bodies so that the problems emanating out of risky sexual behavior could be sustainably addressed. Hence, you are kindly requested to give your genuine response in this regard. Feel free to provide any information, since the information you give will be kept confidential. **Thanks in advance!**

1. What do you say about your student's exposure to pornographic materials?
2. What reasons do you think could expose your students to access pornography?
3. Does access to pornography has been a debating issue in the school compound?
4. Have you ever encountered a situation where students accessing pornographic materials in the school?
5. What do say about the negative and positive consequences of using pornography among in-school youths?
6. Are there Medias and technologies that students could use as a means to search pornography?
7. Are there some reported risky sexual behaviour tendencies among students in the school?
8. Is there any club or concerned body working on students reproductive health issues?
9. Had there been any intervention so far about the issue of reproductive health of students? If yes what body took the initiative? Had it been successful?
10. What do think is a critical issue that needs more attention about pornography usage and risky sexual behaviour among students of Asossa General Secondary and College Preparatory School?

11. Do you have anything else to add about what we have discussed right before?

### **Appendix 3: Interview guide prepared for parents of the students**

**Jimma University: College of social sciences and humanities, Department of sociology, MA  
Program me in Sociology and Social Policy**

#### **A. Key informant interview guide prepared for parents of students in Asossa town**

This is an interview guide prepared by candidate graduate of masters of art in sociology and social policy in Jimma University, department of sociology. The guide is prepared for the purpose of investigate the prevalence of pornography use and magnitude of risky sexual behaviour and its association with pornography use among students in Assosa General Secondary School and College Preparatory. The study helps to recommend research, project, program me and policy based interventions by different concerned bodies so that the problems emanating out of risky sexual behavior could be sustainably addressed. Hence, you are kindly requested to give your genuine response in this regard. Feel free to provide any information, since the information you will give be kept confidential. **Thanks in advance!**

1. What do you say about youth student's exposure to pornographic materials in Assosa town?
2. What reasons do you think could expose youth students to access pornography?
3. Does access to pornography by school youths has been a debating issue or concern in your society?
4. What do say about the negative and positive consequences of using pornography among in-School youths?
5. Are there Medias and technologies that students could use as a source to search for pornography in Assosa town? How did youth access to that?
6. Are there some reported risky sexual behaviour tendencies among youth students as a result of their exposure to pornography?
7. What do think is a critical issue that needs more attention about pornography usage and risky sexual behaviour among youth students in Asossa town at Secondary school level?
8. Is there anything else you could add?



## **Appendix 4: Focus group discussion guide**

**Jimma University: College of Social Sciences and Humanities, Department of Sociology,  
MA Programme in Sociology and Social Policy**

### **FGD guide prepared for students in Asossa General Secondary School and Preparatory Collage**

This is an FGD guide prepared by candidate graduate of masters of art in sociology and social policy in Jimma University, department of sociology. The guide is prepared for the purpose of investigate the prevalence of pornography use and magnitude of risky sexual behaviour and its association with pornography use among students in Assosa General Secondary School and College Preparatory. The study helps to recommend research, project, program me and policy based interventions by different concerned bodies so that the problems emanating out of risky sexual behavior could be sustainably addressed. Hence, you are kindly requested to give your genuine response in this regard. Feel free to provide any information, since the information you give will be kept confidential. **Thanks in advance!**

1. Are pornographic materials easily available to in school adolescents like you?
2. Where do you think is in-school youths are exposed to pornographic materials?
3. Did students discuss about pornographic materials in a class or school compound with their peers?
4. If your friends ask you about sexually explicit materials what do you tell them?
5. What do you tell us about the influence of using pornographic materials on student's daily life and wellbeing?
6. Do you have anything you would like to tell us about in-school adolescent's sexual activity?
7. Now, just tell us some concluding ideas about what we have discussed before?

## Appendix 5: Survey questionnaire

### Jimma University: College of Social Sciences and Humanities, Department of Sociology, MA Programme in Sociology and Social Policy

Dear respondent, my name is Zenaw Alem. I am a student of master of Sociology and Social Policy in Jimma University. The purpose of this study is to investigate the prevalence of pornography use and magnitude of risky sexual behaviour and its association with pornography use among students in Assosa General Secondary School and College Preparatory. The research is done for partial fulfillment of master's degree in Sociology and Social Policy. The study is being conducted through respondents/self-administered questionnaire. Please provide an answer which best fits your situation for all questions. Feel free and relaxed to provide your responses as it will be kept confidential. Thanks for your cooperation in advance.

#### Part I. Questions on socio-demographic characteristics of the study respondents

**Instruction:** circle on the best option that fits your status or best explains your current situation

S/N	Questions	Response options	Skip
1	Sex?	(1) Male (2) Female	
2	What is your age?	(1) 15 - 17 years (2) 18 - 24 years	
3	What is your religion?	(1) Orthodox Christian (2) Protestant Christian (3) Catholic Christian (4) Muslim (5) Others (Specify) .....	
4	Did you attend religious services provided in your religious organization?	(1) Yes (2) No	
5	What is your ethnicity?	(1) Amhara (2) Oromo	

		(3) Berta (4) Shinasha (5) Gumuz (6) Others (Specify) .....	
6	What is your marital status?	(1) Single (2) Married (3) Others (specify) .....	
7	What is your educational status?	(1) Grade 9 (2) Grade 10 (3) Pre College year one (4) Pre college year two	
8	What is your parent's life status?	(1) Both are alive (2) Only father/mother alive (3) Both are not alive	
9	With whom are you currently living?	(1) Either with Father or Mother (2) Relatives (3) Friends (4) With my wife or husband (5) With my employes (6) Alone	
10	What is your father's educational level?	(1) No education (2) Primary school (3) Secondary school (4) College level	
11	What is your mother's educational level?	(1) No education (2) Primary school (3) Secondary school (4) College level	
12	What is your parents perceived average monthly income	(1) Low	

		(2) Midium (3) High	
13	Do u have cell phone (smart phone)	(1) Yes (2) No	
14	Did you access (brows) internet	(1) Yes (2) No	
15	Have you ever used alcohol?	(1) Yes (2) No	
16	Have you ever used Khat?	(1) Yes (2) No	
17	Have you ever used drugs?	(1) Yes (2) No	

**Part II. Questions on magnitude and experience of exposure to pornography**

<b>S/N</b>	<b>Questions</b>	<b>Response options</b>	<b>Skip</b>
18	Do you use pornographic materials?	(1) Yes (2) No	
19	What do you say about your first exposure to pornographic materials?	(1) Intentional (2) Accidental	
20	How frequent you use pornographic materials?	(1) Seldom (2) Frequently (3) Always	
21	What is your source of pornographic materials?	(1) Internet (2) VCD/CD/DVD (3) Cell phone (smart phone) (4) Computer (Lap top/Desk top)	

		(5) books/magazine	
22	What age you were at first exposure to pornographic materials?	(1) Below 18 years (2) 18 and above 18 years	
23	Whose whom you ever consume pornographic materials?	(1) Alone (2) With friends (3) With sexual partner (s) (4) With someone I don't know (5) Others (specify) .....	
24	Where did you first consume pornographic materials?	(1) At home (2) At school (3) In video houses (4) Internet room (house) (5) On the street (6) Others (specify) .....	
25	What was your reason to consume pornographic materials?	(1) For fun or entertainment (2) To sexually arouse myself (3) To know what pornography looks like (4) Because someone told me to consume porno materials (5) Because I was there when someone using (6) Others (specify) .....	
26	What influence do you think pornography has on you?	(1) Turns me excited (2) Discussing (3) Make me want to try why I saw, read or listen (4) Motivates me to learn what I can do or learn (5) No influence on me	
27	Have ever discussed freely about pornography with your	(1) Yes (2) No	

	friends?		
28	How do you rate your attitude towards pornography?	(1) Pornography should be easily available (2) Pornography should be prohibited by Law (3) pornography should be available with certain restriction	
29	Does pornography use improve relationships among couples?	(1) Yes (2) No	
30	Do you think pornography has Advantages?	(1) Yes (2) No	
31	Do you think viewing pornography is culturally taboo in your locality?	(1) Yes (2) No	
32	Do you think that pornography betters informs about sex?	(1) Yes (2) No	
33	Do you think that pornography promotes unusual sexual behaviour?	(1) Yes (2) No	

### Part III. Questions on respondent's sexual behaviour and practice

No	Questions	Response options	Skip
34	Have you ever had sexual intercourse?	(1) Yes (2) No	
35	What was your reason to have had first sex?	(1) My desire to had sexual intercourse (2) Peer pleasure (3) To maintain relationship (4) Because I was raped (5) Because of marriage (6) To get money (benefit) (7) Others (specify) .....	

36	What was your reason for not having sex till now?	(1) Fear of HIV/AIDS or STDs (2) Need to wait until marriage (3) To prevent unwanted pregnancy (4) To focus on education (5) A faired to have sex	
37	How old were you when you had sexual intercourse for the first time?	(1) Less than 18 (2) 18 and above	
38	Did you have had sexual intercourse under the influence of pornography?	(1) Yes (2) No	
39	Did you have had sexual intercourse under the influence of alcohol?	(1) Yes (2) No	
40	Did you have had sexual intercourse under the influence of khat?	(1) Yes (2) No	
41	Do have had sex under the influence of substance use?	(1) Yes (2) No	
42	Did you have had sexual intercourse without condom use?	(1) Yes (2) No	
43	Did you have had unsafe sexual intercourse?	(1) Yes (2) No	
44	Did you have had sex with multiple partners?	(1) Yes (2) No	
45	Did you ever made communication about sex with your class meets?	(1) Yes (2) No	
46	Did you ever made communication about sex with	(1) Yes (2) No	

	your parents or guardians?		
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## **Appendix 6: Consent form for survey respondents**

My name is Zenaw Alem. I am a student of master of Sociology and Social Policy in Jimma University. The purpose of my study is to explore the use of pornography and associated risky sexual behaviour among in-school youths at Asossa General Secondary School and College Preparatory. The research is done for partial fulfillment of master's degree in Sociology and Social Policy. The study will be conducted through self-administered questionnaire and i am asking you to spend about 25 minutes of your time to fill the questionnaire.

The finding of the study will be made available for policy makers and relevant bodies so that they can use it for better planning & intervention on risky sexual behaviour and violent pornography in Ethiopia. The study involves some general and particular or depth personal questions. Your answers will be entirely kept confidential. You have also a full-fledged right either to participate or with draw from the study at any time. No direct benefit/s you will get by participating in the study. No potential harms you will encounter because of your participation in this study. Finally, I would like to express my appreciation and righteousness for your participation and help in responding to the questions.

Would you be willing to participate in the study? (Tick on your option)

If yes \_\_\_\_\_ (1) continue                      No \_\_\_\_\_ (2) stop

Researchers Address: Tel. 0913399308 and E-mail [zenawfantastic@gmail.com](mailto:zenawfantastic@gmail.com)

## Appendix 7: Statistical analysis results

### A. Early sexual intercourse

#### Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Step	21.558	6	.001
Step 1 Block	21.558	6	.001
Model	21.558	6	.001

#### Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	94.461 <sup>a</sup>	.196	.283

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

#### Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	1.324	4	.857

#### Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Rlgserv(1)	-1.351	.552	5.982	1	.014	.259	.088	.765
S Livewit			12.303	5	.031			
t Livewit(1)	-2.000	1.121	3.180	1	.075	.135	.015	1.219
e Livewit(2)	-1.226	1.178	1.084	1	.298	.293	.029	2.950
p Livewit(3)	-1.351	1.671	.654	1	.419	.259	.010	6.852
l Livewit(4)	.572	1.225	.218	1	.641	1.771	.161	19.539
a Livewit(5)	20.171	40192.970	.000	1	1.000	575795860.6	.000	.
Constant	1.032	1.128	.837	1	.360	2.806		

a. Variable(s) entered on step 1: Rlgserv, Livewit.

## B. Unsafe sexual practice

### Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Step	13.542	2	.001
Step 1 Block	13.542	2	.001
Model	13.542	2	.001

### Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	106.199 <sup>a</sup>	.128	.182

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

### Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	.034	2	.983

### Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Sex(1)	1.163	.512	5.157	1	.023	3.200	1.173	8.734
Step 1 <sup>a</sup> UsAlc(1)	1.238	.475	6.786	1	.009	3.449	1.359	8.754
Constant	-.212	.370	.328	1	.567	.809		

a. Variable(s) entered on step 1: Sex, UsAlc.

### C. Multiple sexual partner

#### Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Step	29.248	5	.000
Step 1 Block	29.248	5	.000
Model	29.248	5	.000

#### Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	98.123 <sup>a</sup>	.256	.353

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

#### Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	4.993	7	.661

#### Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Edustats			13.939	3	.003			
Edustats(1)	-1.961	.885	4.912	1	.027	.141	.025	.797
Edustats(2)	.700	.823	.724	1	.395	2.014	.401	10.108
Step 1 <sup>a</sup> Edustats(3)	-.056	.874	.004	1	.949	.946	.170	5.247
UsKhat(1)	-1.149	.612	3.533	1	.060	.317	.096	1.050
UsPorno(1)	1.856	.651	8.137	1	.004	6.401	1.788	22.919
Constant	-.408	.715	.325	1	.568	.665		

a. Variable(s) entered on step 1: Edustats, UsKhat, UsPorno.

### Appendix 9: List of FGD discussants and key informants interview participants

Profile of male FGD participants (Field survey, 2017)

<b>FGD male participants ID</b>	<b>Sex</b>	<b>Age</b>	<b>Class</b>	<b>Occupation</b>
01	Male	19	12 <sup>th</sup>	Student
02	Male	18	11 <sup>th</sup>	Student
03	Male	19	12 <sup>th</sup>	Student
04	Male	19	12 <sup>th</sup>	Student
05	Male	18	12 <sup>th</sup>	Student
06	Male	18	12 <sup>th</sup>	Student
07	Male	19	12 <sup>th</sup>	Student
08	Male	20	11 <sup>th</sup>	Student

Profile of female FGD participants (Field survey, 2017)

<b>FGD female participants ID</b>	<b>Sex</b>	<b>Age</b>	<b>Class</b>	<b>Occupation</b>
09	Female	17	11 <sup>th</sup>	Student
010	Female	18	12 <sup>th</sup>	Student
011	Female	18	12 <sup>th</sup>	Student
012	Female	18	12 <sup>th</sup>	Student
013	Female	15	9 <sup>th</sup>	Student
014	Female	17	9 <sup>th</sup>	Student
015	Female	17	11 <sup>th</sup>	Student
016	Female	17	11 <sup>th</sup>	Student
017	Female	15	9 <sup>th</sup>	Student
018	Female	17	11 <sup>th</sup>	Student

Profile key informants (Field survey, 2017)

<b>Participants Id</b>	<b>Sex</b>	<b>Age</b>	<b>Occupation</b>	<b>Academic achievement</b>	<b>Responsibilities</b>
019	Female	18	Student	(12 <sup>th</sup> grade)	Member of female students forum at AGSSCP
020	Male	18	Student	(11 <sup>th</sup> grade)	Member of mini-media at AGSSCP
021	Male	19	Student	(11 <sup>th</sup> grade)	Member of red cross society
022	Male	19	Student	(11 <sup>th</sup> grade)	-----
023	Male	49	Civil servant	BA degree in Management	Member of teachers & partners council
024	Female	39	Civil servant	Nurse	Member of teachers & parents council at AGSSCP
025	Male	52	Civil servant	MA in English	Planer of education information at AGSSCP
026	Female	33	Civil servant	MSc in Biology	Female students forum coordinator at AGSSCP
027	Male	32	Civil servant	MSc degree in chemistry	Academic vice director at AGSSCP