

**EXPERIENCE IN PREMARITAL SEXUAL INTERCOURSE
AMONG UNMARRIED YOUTH IN INDONESIA
: AN ANALYSIS OF IDHS 2012**

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EXPERIENCE IN PREMARITAL SEXUAL INTERCOURSE AMONG UNMARRIED YOUTH IN INDONESIA: AN ANALYSIS OF IDHS 2012**YUNIARINI 5638662 PRRH/M****M.A. (POPULATION AND REPRODUCTIVE HEALTH RESEARCH)****THESIS ADVISORY COMMITTEE: AMARA SOONTHORNDHADA, Ph.D.,
KERRY RICHTER, Ph.D.****ABSTRACT**

According to the 2010 Indonesia Population Census, 26.7% of Indonesia's population is aged 10 to 24 years; this means that the country has around 64 million youth. The large number in this age group clearly requires serious attention and treatment of all sectors responding to youth's issues. When young people have little information and knowledge about reproductive health and sexuality, they may not be able to protect themselves from risky behavior. The negative impact upon youth resulting from premarital sexual intercourse may include unwanted pregnancy and illegal abortions that endanger the lives of youth themselves.

This study employed secondary data from the Indonesia Demographic and Health Survey (IDHS) 2012. A total of 10,861 unmarried men and 8,816 unmarried women aged 15 to 24 years old were selected for analysis.

Premarital sexual intercourse is found to be more common among unmarried males (12.4%) compared to unmarried females (1.9%). Age, attitude toward women's virginity, risky behavior, and having friends that have had sex before marriage are strongest predictors of premarital sexual intercourse among both unmarried males and unmarried females in Indonesia. Education and place of residence, sexuality and reproductive health knowledge, and discussing about sexual matters with friends are also strong predictors of premarital sexual intercourse among unmarried males but not among unmarried females.

The study indicates premarital sexual intercourse committed by unmarried youth in Indonesian is affected by personal and environmental factors. The findings also suggest that sexuality and reproductive health education should be provided formally in schools and universities, with more programs focused on university students due to the finding that more older youth (20-24 years) committed premarital sexual intercourse. In addition, family resilience to create open communication is another point that should be taken into account by involving parents and family members to be exposed with Sexuality and Reproductive Health (SRH) information. Therefore, adequate life skill education for youth and family is strongly recommended.

**KEY WORDS: PREMARITAL SEXUAL INTERCOURSE/ SEXUALITY AND
REPRODUCTIVE HEALTH/ YOUTH/ INDONESIA**

76 pages

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CHAPTER I

INTRODUCTION

1.1 Background

Youth is a period of dynamic change in life symbolizing the transition between childhood and adult age. Based on law, social and cultural context, there are many definitions of the specific age range about youth, but in general, youth is defined as young people. The United Nations Fund for Population Activity (UNFPA) defines youth as those between 15 to 24 years for statistical purposes (UN, 2007).

Today, there are more than 1.8 billion young people all around the world (UNFPA, 2011). This number configures one quarter of the world's population. Ninety per cent of who live in developing countries where it tends to compose a large proportion of the population. Around 162.8 million young people live in South East Asia (PRB, 2013b).

Nowadays, youth face many sexual and reproductive health insecurities coming from early, unsaved, and unwanted sexual practice which resulted to the global increasing of number of sexually active youth (WHO, 2012). Youths are persuaded by force into undesired sex or marriage and high insecurity of unwanted pregnancies, threatening childbirth, sexually transmitted infections (STIs) and HIV, and hazardous abortions (UNFPA, 2011).

A study of 500 sexually active teens in Singapore found that 95.2 per cent of the respondents reported had engaged in vaginal intercourse which the age range of first sexual intercourse was 11-19 years (Wong et al., 2009). In additional, a qualitative study of 36 adolescents in Thailand shows that nowadays young people in Thailand start commencing on sexual companionships before marriage as a result of growing effect of industrialization (Sridawruang, Crozier, & Pfeil, 2010).

Moreover, there were approximately 3.2 million unsafe abortions in developing countries among 15 to 19 years old females in 2008 (WHO, 2011). Fifteen

per cent of hazardous abortions in low-income as well as middle-income countries are also among 15 to 19 years old females (Shah & Åhman, 2012).

A study by Indonesia Planned Parenthood Association in Java found that of 2,558 cases of abortion, 58% were females 15 to 24 years old, whom 62 per cent were not married. (Holzner & Oetomo, 2004)

To sum up, premarital sexual intercourse may lead to unplanned adolescent pregnancy and in many cases might end up in committing unsafe abortion. Indeed, unsafe abortion is accountable for around 13 per cent of all maternal deaths, with young people disproportionately affected (Chan, 2008).

1.2 Problem Identification and Rationale

According to 2010 Indonesia Population Census, there are about 26.7 per cent of the population aged 10 to 24 years, or around 64 million people of 237.6 million population are youth (Statistics-Indonesia, 2011).

National Population & Family Planning Board (BKKBN) has been applying some programs to tackle some sexual and reproductive health problems in Indonesia. The programs include developing and providing youth counseling and information center for sexual and reproductive health (SRH) issue in community-based and school-based. Peers may play a limited role in sex education – not that their counsel is infrequently sought but because the information provided may be uncompleted, deceptive, distorted, and transmitted by means of jokes or boasting and may be influenced by the media as well (Strasburger & Wilson, 2002). Therefore, this youth counseling and information center by National Population and Family Planning Board (BKKBN) empowers adolescents as peer-educators and peer-counselors dealing with SRH issues (Jalal, 2013). However, many youth problems still occur in Indonesia in actual fact related to sexual and reproductive health issues although Indonesia government has run those programs for youth.

Youth knowledge about SRH in Indonesia is becoming an interesting issue. The proportion of women who think that HIV can be prevented by limiting sexual intercourse to one partner has increased considerably from 55 percent in 2007 to 66 percent in 2012 (Statistics-Indonesia, (BKKBN), Health-Ministry, & ICF-

International, 2013). Less information and knowledge about reproductive health and sexuality brings young people to unfavorable circumstances (Hambali, 2002). But in contrary, a study of in-school late adolescents in Indonesia shows that knowledge of SRH has encouraged them to practice premarital sexual intercourse (Situmorang, 2011). Indeed, changing the attitude and behavior may not a result of right knowledge (Shaw, 2009)

Premarital sexual relationships are not acceptable, and talking about them and sexuality in general is often believed as taboo. The silence is caused by a high value about girl's virginity before marriage and the belief that talking without concealment about sexual and reproductive health might encourage unmarried youth to practice premarital sex intercourse. (DeJong, Shepard, Roudi-Fahimi, & Ashford, 2007).

The trend of premarital sexual intercourse of unmarried youth in Indonesia is increasing (Statistics-Indonesia, 2013; (Statistics-Indonesia & Macro-International, 2008) . About 3.7 per cent males in age group 15-19 in 2007 reported that they were engaged in premarital sex which increased to be 7.2 per cent in 2012, while females in the same age group showed the same percentage (1.3 %) for both 2007 and 2012 surveys. In addition, there were 10.5 % (2007) males in age group 20-24 reported that they were engaged in premarital sex which had been increased to 20.93 % in 2012, while females in the same age group also showed the inclining of proportion from 1.4 % in 2007 to 3.43 % in 2012.

The early marriage is still a common practice in Indonesia. The Population Reference Bureau reported that 4 per cent of women ages 20 to 24 years old were married by age 15 and 22 per cent married by age 18 in Indonesia. (PRB, 2013a). In addition, Adolescent Fertility Rate (births per 1000 women ages 15 to 19) is 42 for Indonesia which poses in the third highest rank after Timor Leste (51) and Philippines (46) among 11 South East Asia countries (PRB, 2013a). In 2011 the HIV/AIDS prevalence among adolescent aged 15 to 24 is 0.2 percent for men and women. This fact is commonly found in rural areas, where female adolescents are married young and conditioned to start having children immediately (PRB, 2013b).

Another consequence is about committing an unsaved abortion as a result of premarital pregnancy. Abortion is prohibited in Indonesia. According to Indonesia Law no. 36 of Health 2009 of article 75 paragraph 1 that abortion is only allowed under some conditions such as emergency medical indications detected as threatening the lives of mother and / or fetus; or pregnancies resulting from rape that can cause psychological trauma for rape victims (National-Law-Agency, 2014).

A qualitative study in 2002 about premarital pregnancy of 44 youth aged 15-20 years in Yogyakarta Indonesia found that 11 in 18 pregnant females had had an abortion while 7 others decided to give birth (Holzner & Oetomo, 2004). In 2008, a research in Indonesia which data were collected from small-scale, urban, and clinic-based studies of women's experiences with abortion found that 33 % of the respondents were not married, 8 % aged under 19 years and 46 % aged between 20 to 29 years (Sedgh & Ball, 2008). Furthermore, in 2012 National Commission for Children Protection interviewed 14,726 junior- and senior-high school students in 12 big cities in Indonesia and found that 93.7 % of the respondents had had premarital sex intercourse and 21.2 % had undergone abortions (Shintami, Nugroho, Rizal, Rivai, & Tresnawati, 2012). Although abortion issue remains being a very serious problem in Indonesia for endangering mental and health people who undergo it. Another qualitative-quantitative study conducted in Papua and West Papua provinces, among 1,082 students, about 38.3 % of the students reported have had premarital sexual intercourse (Diarsvitri, Utomo, Neeman, & Oktavian, 2011). Among those who reported premarital sexual intercourse, 36.5% had first sexual encounter before 15 years old and 32% of the female actors have had unintended pregnancies with majority of them had unsaved abortions.

1.3 Research Question

What are the factors that affect the premarital sexual intercourse of unmarried youth in Indonesia?

1.4 Scope of Research

This research focuses on factors that influence the premarital sexual intercourse among unmarried youth in Indonesia.

This study is based on the 2012 Indonesia Demographic and Health Survey that was conducted by the Statistics Indonesia (BPS) in cooperation with the National Population and Family Planning Board (BKKBN) and the Ministry of Health (MOH). The population being studied are both males and females aged 15 to 24 years old.

1.5 Objectives

1.5.1 Ultimate Objective:

To help policy maker to design strategies and programs related to youth and sex education in Indonesia.

1.5.2 Specific objectives :

- To investigate the relationship between knowledge about sexuality and reproductive health and premarital sexual intercourse among unmarried youth in Indonesia.
- To investigate the relationship between attitude toward woman's virginity and premarital sexual intercourse among unmarried youth in Indonesia.
- To investigate the relationship between risky behavior (smoking, drinking alcohol, and using drugs) and practice of premarital sexual intercourse among unmarried youth in Indonesia.
- To investigate the relationship between peer influences and premarital sexual intercourse among unmarried youth in Indonesia.

1.6 Operation Definitions

1.6.1 Premarital Sexual Intercourse

Premarital Sexual Intercourse in this study refers to sexual intercourse practiced by unmarried male and female youth aged 15 to 24 years old and live in urban and rural areas in Indonesia.

1.6.2 Knowledge about Sexuality and Reproductive Health

Knowledge about sexuality and reproductive health in this study refers to youth's knowledge about puberty, pregnancy, contraception and HIV/AIDS transmission.

1.6.3 Source of Information about sexuality and reproductive health issues

Source of information about sexuality and reproductive health in 2012 IDHS survey refers to friends, family, teachers, health service providers, religious leaders, mass media, internet and others.

1.6.4 Attitude toward woman's virginity

Attitude toward woman's virginity in this study refers to youth's agreement about the opinion that women should maintain their virginity until marriage and the opinion that men still keep high value of women's virginity.

1.6.5 Risky Behavior

Risky behaviors in this study refer to youth's behaviors related to smoking cigarette, drinking alcohol and using drugs.

1.6.6 Peer influences

In this study, peer influences refer to whether youth had ever discussed with friends about sexual matters or not, and whether youth have any friends who have had sex before marriage or not.

CHAPTER II

LITERATURE REVIEW

2.1 General Review

The main focus of this study is to analyze the factors affecting premarital sexual intercourse among unmarried youth aged 15 to 24 in Indonesia by describing predisposing factors, the knowledge and source of information about sexuality and reproductive health, attitude towards virginity, risky behavior and peer influences. This study applies two theories namely Social Cognitive Theory and the Precaution Adoption Process Model to investigate premarital sexual practice of the population under studied.

2.1.1 The Social Cognitive Theory

The Social Cognitive Theory (SCT) was theorized by Albert Bandura in 1986 which proposes that people are driven to perform a behavior by inner forces and external factors. It explains how people manage their behavior. (Simons-Morton, McLeroy, & Wendel, 2012).

The main idea of SCT, reciprocal determinism, assumes that individual, behavior and the environment influence each other. SCT expands on the cognitive and environmental formulations which rule behavior that is self-regulating.

In this case, premarital sexual intercourse among unmarried youth is likely to be affected by several aspects. Personal aspects can be age, sex, education, place of residence, knowledge, attitudes and risky behavior. In the mean time, peer-influences can play roles as environmental aspects.

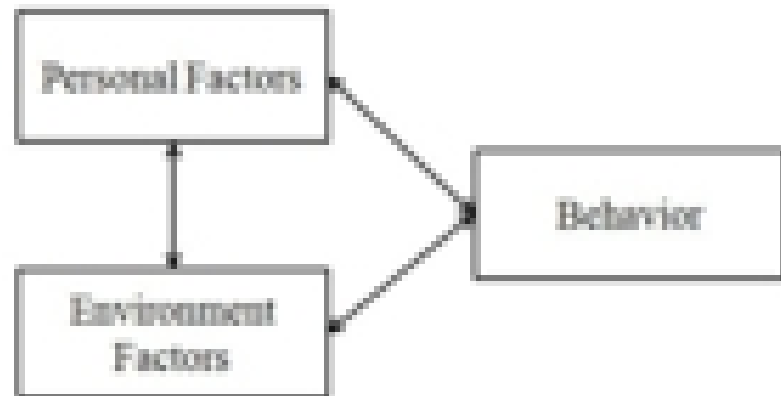


Figure 2.1 Social Cognitive Theory (Bandura, 1989)

2.1.2 The Precaution Adoption Process Model

The Precaution Adoption Process Model was created by N.D. Weinstein and P.M. Sandman (1992) which comprises seven steps of changes. It emphasizes on the subject's psychological processes that interpreted into deliberate activity to lessen a particular risk or as precautionary to prevent a problem which does not currently exist (Simons-Morton et al., 2012). This theory can be applied to explain premarital sexual intercourse among youth in terms of preventing problems that have not existed yet or minimizing harm from existing behaviors.

The seven steps of change are independent and move along in an ordinal rather than a linear way each others. They are *Unaware*, *Unengaged*, *Deciding* (to act or not to act), *Action Planning*, *Acting*, and *Maintenance*.

At *Unaware*, subject does not know about the threats related to a specific behavior. In terms of Premarital Sexual Behavior, youth might not know about the consequences of unprotected intercourse, for example about the use of condoms to prevent pregnancy and or the transmission of STIs. Another example is that youth do not have knowledge about the fertile period and how a woman can be pregnant. In this kind of condition, youth might believe that single time intercourse will not cause pregnancy or conception can be avoided by urinating and vagina washing soon after sexual intercourse.

At *Unengaged*, subject knows about the risks and its relationship with behavior but is not pertained to it and be aware about the risk does not encourage the

subject to regard acting. In terms of premarital sexual behavior, youth are aware about the risks caused by unprotected intercourse such as teenage pregnancy, but are not particularly concerned about it and knowing about the risk does not drive them to consider using condoms. Another example is youth know very well about their girlfriend's fertile period but do not pay attention on it and perform the sexual intercourse without protection.

At *Deciding*, subject decides to make an action or not, which requires the cost and benefit of taking or not taking an action. In terms of Premarital Sexual Intercourse, subject makes a commitment of sorts about taking actions for example deciding to be sexual abstinent before married or contrarily engaging in premarital sexual intercourse.

At *Action Planning*, subject signifies effort which subject plans the feature of action related to what, when and how he/she does. Youth who decides to choose to be abstinent or quit from engaging premarital sexual intercourse plan to avoid other activities that can drive to sexual arousal and ended up with intercourse. Some countries facilitate virginity pledges to keep young people being sexual abstinent to prevent them from engaging in sexual intercourse before married. The pledges which also aimed to decrease the early pregnancy and abortion rate are vowed by youth who decide to be abstinent. Another example is youth will plan to prevent involving in party that seems have risky activities such as drinking alcohol and taking drugs and might end up with sexual practice. Conversely, youth who decides to keep engaging in premarital sexual intercourse will plan to have protected sexual intercourse through condom use and knowledge about safer sex.

At *Acting*, subject engages in behavior which contains important information such as preparation, communication and self-control that guide to decision-making. In this step, youth who decides to be abstinent is not involved in sexual intercourse by avoiding activities that can drive to sexual arousal, or simply doing some sexual-arousal activities without intercourse. Another example, youth who decide to perform protected intercourse will engage in some activities such as purchase condoms, have them on, and negotiate with the partner for their use.

At last step, *Maintenance* needs a self-organization skills and it is harder than one time action taking. For instance, youth who have positive attitude toward

virginity maintains not having sexual intercourse until getting married. Youth who prefer saved sex relationship maintains having a protected intercourse through routine use of condoms.

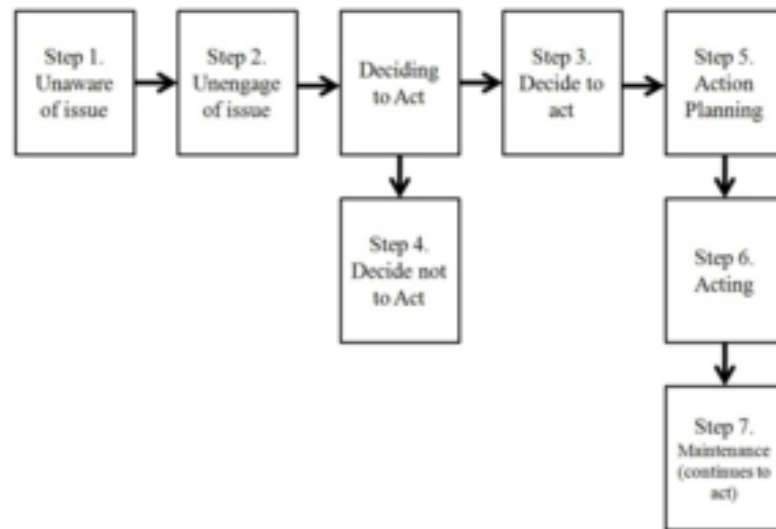


Figure 2.2 The Precaution Adoption Process Model components and linkages by N.D. Weinstein and P.M. Sandman 1992 (Simons-Morton et al., 2012).

2.2 Premarital Sexual Intercourse

Behavior is known as the action by which a human being adjusts to its environment. Whilst, sexual behavior refers to any actions between two individuals or more that urges sexual arousal (Berrill, 2013). There are two main factors of human sexual behavior: the derived sexual response figures that have developed as a means of obtaining reproduction as a part of each subject's hereditary, and other types of effects brought to the individual by society in the appearance of his/her sexuality (Berrill, 2013). Specifically, Premarital Sexual Intercourse in this study refers to sexual intercourse practiced by unmarried youth who are young males and young females aged 15 to 24 years old who never married and live in urban and rural areas in Indonesia.

Phenomenon about earlier sexual experience are less voiced and less general than sometimes assumed in which in some developing countries the phenomenon is going toward later onset of sexual activity for women, but the trend

towards postponed marriage has led to an increase in the prevalence of premarital sex (Wellings et al., 2006).

Nowadays, young people tend to delay to marry as well as to commit in early premarital sexual intercourse. These conditions bring young people to bigger risk of unwanted pregnancies, miscarriages or unwanted birth among unmarried youth (Hambali, 2002).

2.3 Youth and Premarital Sexual Intercourse

Youth is a period of conversion which causes much of perplexing behavior that can irritate parents intensely (Berryman, Smythe, Taylor-Davies, Lamont, & Joiner, 2002). The United Nations defines youth as individuals between the ages of 15 and 24 (UNESCO, 2013). The initiating of adolescence for many young people, however, does correlate with the onset of puberty when the child's anatomy starts to change rapidly (Berryman et al., 2002). The word "adolescence" literally means "growing up" which in theory it explains a different phase between childhood and adulthood but in actual application often merely means the "teenage" years (Collin et al., 2012). Adolescence is a period of main transformation, thus results in some thoughtful difficulties such as mental and emotional troubles, drug use, cognitive change and sexual activity (Berryman et al., 2002). Nevertheless, this is the time when most people start exploring their sexuality and engage in sexual relationship.

2.4 Predisposing Factors

2.4.1 Sex

A study of 583 male and 475 female aged 15-17 years in India by Jaya and Hindin discovered that females had more traditional values and attitudes than males towards premarital intercourse. Females were more likely than males to consent that only married people could have sexual ties and disagree for a sexual relationship even between males and females that love each others to prove their love, and that it is

acceptable to have a sexual relationship if reliable contraceptives are used to prevent pregnancy (Jaya & Hindin, 2009).

Moreover, a study among secondary school students in Malaysia found that male students have a higher proportion of premarital sexual intercourse compared with female students (8.3% and 2.9% respectively). (Lee, Chen, Lee, & Kaur, 2006)

In addition, the lack of female partners between the gender is partly justified by the fact that male are often sexually admitted by sex workers (Nevid, Fichner-Rathus, & Rathus, 1995). Likewise, for many females, the nature of the social partnership with a lover influence sexual decision-making (Varga, 1997).

In general, contextual factors are considered as important factors for girls as the risks related to sexual practice are more shared by females compared to males. (Bearman & Brückner, 2001)

2.4.2 Age

Puberty as a result of hormonal change activates adolescent's sexual arousal that gives an indirect effect on sexual experimentation. Moreover, the earlier development of secondary sex characteristics during puberty such as breast enlargement and genital's hair growth rise the tendency to have sex intercourse at earlier age as well as creating pressure into dating and sex without considering the subject is ready or not psychologically (Nevid et al., 1995).

Males initiated sexual intercourse at earlier age than females in Indonesia (median ages 17 and 18 respectively). For males, initiation was also associated with having parents who live separated, having someone as close friend, tobacco use, high perceived risk for HIV and high STI knowledge. For females other factors associated with earlier initiation were younger age at interview, living away from family member as a confidant, high perceived risk of STIs and consuming marijuana (Liu et al., 2006)

Several studies have found that there is an association between age and sexual experience which as age raises, the involvement in sexual experience increases. For example, Tsala Dimbuene & Defo (2013) found that older youth 20-29 years old were 1.45 times more likely to have premarital sex compared with adolescents 12-19 years old.

It is found that the older the age the more tendencies to have premarital sexual intercourse which showed by the survey data that the rate of premarital sexual intercourse among youth aged 20 to 24 is higher than youth aged 15 to 19 (14.10 % and 4.38% respectively). (Statistics-Indonesia, (BKKBN), Health-Ministry, & ICF-International, 2013)

2.4.3 Education Level

A study of young men in Finland shows that higher age and lower education are statistically associated with early age at first sexual intercourse which also increased the likelihood of reporting unprotected intercourse (Nikula et al., 2009).

In addition, both female and male youth in Indonesia who reported premarital sexual intercourse and completed primary school show highest rate of premarital sexual intercourse (45.5% & 46.5% respectively) compared with youth who have lower or higher education level (Statistics-Indonesia, 2013).

2.4.4 Place of Residence

A survival analysis study in Minnesota found that sociodemographic factors predominated as corresponds of postponement of sexual intercourse across age groups: marital status of the parents and living in a rural area. (Lammers, Ireland, Resnick, & Blum, 2000).

A study in Kenya also shows that although poverty is significantly associated with sexual outcomes in all settings, the urban poor are significantly more likely to have an early sexual debut and a greater incidence of multiple sexual partnerships than their rural counterparts. (Dodoo, Zulu, & Ezech, 2007).

2.5 Cognitive Factors

2.5.1 Knowledge about Sexuality and Reproductive Health (SRH)

The insecurities related to sexual relationships are becoming more intense by less access of knowledge and services in terms of sexual and reproductive health (DeJong, Shepard, Roudi-Fahimi, & Ashford, 2007). Providing information and

services might give advantages to youth whether currently they are active or not sexually and those will lead youth to make intelligent considerations about marriage, sexual companionship, and process of giving birth (DeJong et al., 2007)

In addition, a study of in-school adolescents in Mongolia finds that the lower their knowledge of sexuality and reproductive health, the more likely they tend having sex than others (Algaa, 2000).

Moreover, a survey conducted in 2002 among male youths in Tehran found that limited knowledge regarding STIs and contraceptives causes a significant threat to the sexual and reproductive health of youths. (Mohammadi et al., 2006). In addition, a study using DHS data from 37 countries examined the association between sexual experience and contraceptive knowledge which in most DHS countries, adolescents who had begun having sexual intercourse but were not married were more likely than currently married teens to report knowing about contraceptive methods. (Blanc & Way, 1998).

Consequently, without correct information on reproductive health, sexually active young people have chance getting unintended pregnancies, harmful abortions, and STIs. (DeJong et al., 2007).

2.5.2 Source of information about SRH issue

Main source of sexual and reproductive health information positively associated with youth's premarital sex intercourse (Algaa, 2000). This study found that males who receive the main information about sexual and reproductive health issues from mass media were nearly 12 times more likely to practice premarital sex than males whose the source of information was from non mass media.

Youth in Indonesia have limited sexuality and reproductive health knowledge due to limited formal sex education taught at school. Parents-children discussion about sex is rare due to customs, psychological, communication barriers and parent's experience of not receiving sexuality knowledge from their parents (Utomo, 2003). As a result, most parents get uncomfortable talking about sex with their children.

Despite proof of risky sexual activities among unmarried youth, society norms and attitude kept conventional and the theme of adolescent sexuality endure

sensitive among adolescents themselves, family and health-care professionals (Tangmunkongvorakul & Bhuttarowas, 2005).

In terms of source of SRH knowledge, interviews with 82 adolescent in Thailand shows that sex was one of issues that father and son, or male teachers and male student could talk about in a sensible way without concealment. On the contrary, sexual issues were not commonly discussed between female adolescents and parents for the fear that sexual matters would encourage them to get closer to premarital sexual practice (Tangmunkongvorakul & Bhuttarowas, 2005).

In addition, communication is the principal medium for parents to transfer information and attitudes about sexuality which unzipped and good communication between child and parents are frequently connected with lower rates of practicing premarital intercourse. (Tsala Dimbuene & Defo, 2013)

2.5.3 Attitude toward virginity

A case in a qualitative study in Greater Jakarta Indonesia found that teenage female who believed that her boyfriend would be her future husband tends to not keep her virginity and more likely to have frequently sexual relationship before marriage with her boyfriend. (Suparno, Siagian, Utomo, & Dadun, 2010).

In contrary, a study by University of Chicago found that youth who concern more about teenage pregnancy, abortion, and sexually transmitted diseases are more likely to keep virginity by having virginity pledges in which they vow to abstain from sex until they get married. (Bearman & Brückner, 2001). The study shows that youth who pledge are much less likely to practice sexual intercourse than youth who do not.

2.6 Internal Reinforcing Factor

2.6.1 Risky Behavior

A survival analysis study of 36,284 students in Minnesota found that moderate/high drug use, alcohol use and smoking students were highly significant risk

factors associated with having initiated sexual intercourse among male adolescents. (Lammers et al., 2000).

Moreover, a study among secondary school students in Malaysia similarly found that adolescent sexual intercourse was associated with substance use such as drug taking, alcohol drinking, cigarette smoking and marijuana smoking. (Lee et al., 2006)

In particular, young people usually drink alcohol for some reasons such as for creating symbol of manhood and overcoming problems of life (Sugiharti, 2011). Furthermore, these young people generally come from a family whose parents are drinkers, and / or under pressure of having peer pressure for friendship reason. Sugiharti (2011) also found that young people who drink alcohol 15.7 times greater on having chance for premarital sexual intercourse compared to whom never drink alcohol.

2.7 Peer Influences as Environmental Factor

Commitments related to early sexual intercourse are strongly tied up with social circumstances with peers playing a critical role in generating a sense of peer normative behavior which effect the process of sexual initiation in both positive and negative ways (Kinsman, Romer, Furstenberg, & Schwarz, 1998)

Less close of relationship between young people and their parents may cause young people to get closer to their peers. (Sugiharti, 2011).

Young people who identify their friends to be sexually active are significantly more likely to practice in sex themselves and to have more than one sexual partners (WHO, 2004). Program that focus on peer impacts and norms about sexual issue, consequently, assure for altering behaviors associated to sexual beginning or possessing more than one partners (WHO, 2004).

2.8 Conceptual Framework

The following conceptual framework has been developed based on the above review of literature, showing the causal model for this analysis. The framework

consists of one dependent variable which is premarital sexual intercourse among unmarried youth in Indonesia. The independent variables are categorized into 3 groups which comprise 8 subgroups: (1) sex, (2) age, (3) highest education and place of residence, (4) knowledge and source of information about sexuality and reproductive health, (5) attitude toward woman's virginity, (6) risky behavior, and (7) peer influences. These groups of independent variables are expected to have a direct effect in the model of premarital sexual intercourse among unmarried youth in Indonesia.

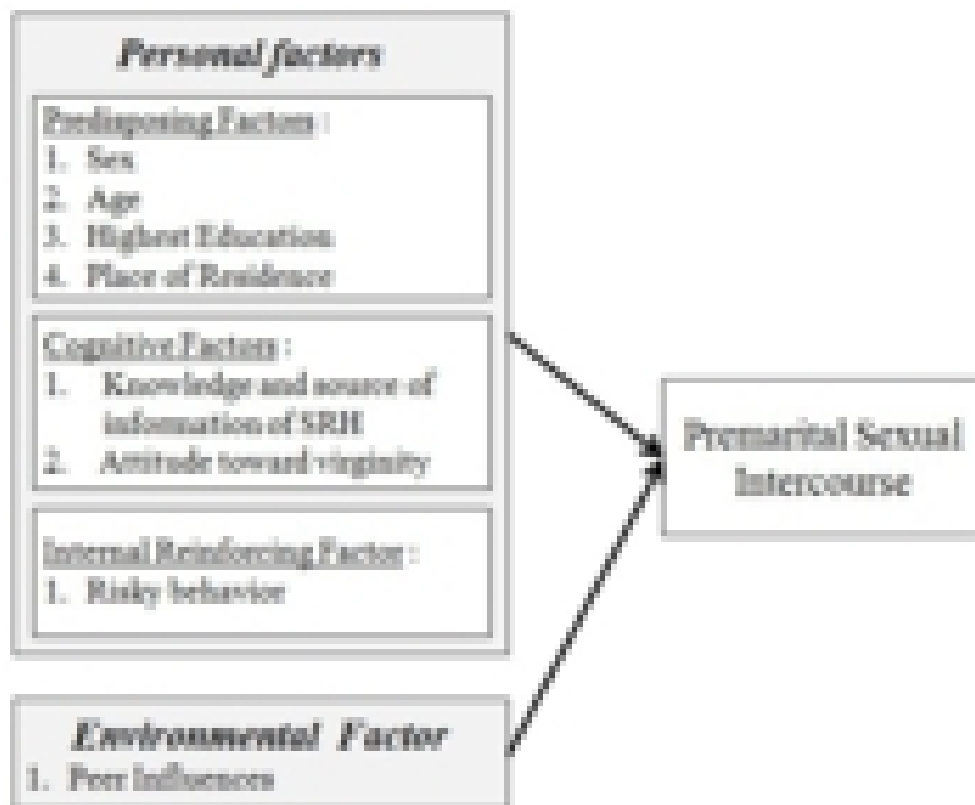


Figure 2.3 Conceptual Framework

2.9 Research Hypotheses

1. Male youth in Indonesia are more likely to have premarital sexual intercourse than females.
2. The older the age of Indonesian youth, the more likely to have premarital sexual intercourse.
3. Youth in Indonesia who live in urban area are more likely to have premarital sexual intercourse than youth who live in rural area

4. Youth in Indonesia who have lower education are more likely to have premarital sexual intercourse than youth who have higher education.

5. Youth in Indonesia who have low level of sexuality and reproductive health knowledge are more likely to have premarital sexual intercourse than youth who have higher education.

6. Youth in Indonesia who disagree to keep virginity before marriage are more likely to have premarital sexual intercourse than youth who agree.

7. Youth in Indonesia who disagree that men still value women's virginity are more likely to have premarital sexual intercourse than youth who agree.

8. Youth in Indonesia who commit risky behavior are more likely to have premarital sexual intercourse than youth who do not.

9. Youth in Indonesia who discuss about sexual matter with friends are more likely to have premarital sexual intercourse than youth who do not.

10. Youth in Indonesia who have friends whom have had sex before marriage are more likely to have premarital sexual intercourse than youth who do not.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Study Population and Sample

The secondary data from quantitative research of Indonesia Demography and Health Survey (IDHS) 2012 is used for this study. This was carried out by Indonesia Statistic Bureau (BPS), National Population and Family Planning Board (BKKBN), Ministry of Health of Indonesia, MEASURE DHS and ICF International. The 2012 IDHS sample intended for providing the reliable estimation of key characteristics for female aged 15 to 49, currently-married male aged 15 to 54 and never-married male aged 15 to 24 in Indonesia as a whole, in urban and rural areas, and in each of the 33 provinces included in the survey (Statistics-Indonesia, (BKKBN), Health-Ministry, & ICF-International, 2013).

The samples of this survey were chosen using a stratified design. In the first step, primary sampling units (PSUs) were selected correspond to the number of households from 2010 Indonesia population census. Next step, a total of 1,840 census blocks (CBs) were selected which include 874 in urban areas and 966 in rural areas. The sample was originated to supply reliable measures for each provinces, thus the amount of CBs in each province was not distributed in quantity to the province population or its residential classification. At final step, an average of 25 households was chosen systematically from each CB (Statistics-Indonesia et al., 2013).

The 2012 IDHS has four sets of questionnaire: the Household Questionnaire, the Woman's Questionnaire, the Currently Married Man's Questionnaire, and the Never-Married Man's Questionnaire. There were 79,428 Indonesian interviewed which consisted of 55,200 females aged 15 to 49, 13,248 currently-married males aged 15 to 54 and 10,980 never-married male aged 15 to 24.

The subgroup for this study selects never-married females and males aged 15 to 24 whom living both in urban and rural areas. Therefore, there were 10,861 males and 8,816 females as respondents selected for the analysis.

3.2 Operational Definitions

3.2.1 Dependent Variables

The dependent variable in this study is premarital sexual intercourse (Q. 1705 and 705) which is dichotomous variable comprising two categories, yes for ever had sex and no for never had sex or on nominal scale should be 0=No and 1=Yes.

3.2.2 Independent Variable

The Independent Variables are divided into:

1. Personal Factors

a. Sex

Sex is defined as two categories in a nominal scale: 0=Female and 1=Male.

b. Age

Age is defined as how old the respondent at his/her last birthday when the survey was held in 2012 and measured by a ratio scale from 15-24 years old which then grouped into two groups as middle adolescence (aged 15-19 years old) and young adulthood (aged 20-24 years old).

c. Place of Residence

Place of residence refers to geographical area where the respondent lives at the time of the survey in 2012, comprises of Urban and Rural area.

d. Education

Education is defined as highest education level of the respondents

e. Knowledge about Sexuality and Reproductive Health

Knowledge about Sexuality and Reproductive Health based on 33 questions refers to whether a respondent have knowledge about Sexuality and Reproductive Health measured by ordinal scale gained from scoring the answers into 3 categories Low, Middle and High.

f. Source of information about SRH issues

Source of information about SRH issues refers to friends, family, teachers, health service providers, religious leaders, mass media, internet, and others. But in this study, it is only focus on number of source of SRH information instead of the name of the sources, which measured by nominal scale which categorized into 5 group 0= None, 1= 1 source only, 2= 2 sources, 3= 3 sources, 4= 4 and more sources.

g. Attitude toward woman's virginity

Attitude toward woman's virginity in this study refers to youth's agreement about the opinion that women should maintain their virginity until marriage and the opinion that men still value women's virginity which both measured by nominal scale: 0 = Disagree and 1 = Agree

h. Risky behavior in this study refers to youth's behavior related to smoking & drinking and taking drugs that measured by nominal scale: 1=Yes and 0=No.

2. Environmental Factors

a. Peer influences

Peer influences in this study refers to whether youth discuss about sexual matters with friends or not (1=Yes and 0=No), and whether youth have any friends who have had sex before marriage or not (1=Yes and 0=No).

Table 3.1 Summary of operational definition and measurement of variables

Variable	Operational Definition	Categories	Measurement Scale
Dependent Variable			
Premarital Sexual Intercourse	Respondent ever had premarital sexual intercourse	0 = No 1 = Yes	Nominal

Table 3.1 Summary of operational definition and measurement of variables (cont.)

Variable	Operational Definition	Categories	Measurement Scale
Independent Variable			
Age	Respondent's age	15 - 19 20 - 24	Ordinal
Place of Residence	Geographical area where the respondent lives at the time of the survey in 2012	0 = Rural 1 = Urban	Nominal
Education	Respondence highest education	0 = Less than Primary 1 = Completed Primary 2 = Some Secondary 3 = Completed Secondary / Higher	Ordinal
Knowledge about Sexuality and Reproductive Health	The respondents score on 33 questions of SRH knowledge.	Low = $\bar{x} - 1SD$ Middle = $-SD1 \leq \bar{x} \leq 1SD$ High = $\geq \bar{x} + 1SD$	Ordinal
Source of information about sexual matters	Number of source of information about sexual matters	0 = None 1 = 1 Source only 2 = 2 sources 3 = 3 sources 4 = 4 and more sources	Ordinal
Attitude toward mantaining women's virginity before married	Agreement about whether should maintain virginity until married or not	0 = Disagree 1 = Agree	Nominal

Table 3.1 Summary of operational definition and measurement of variables (cont.)

Variable	Operational Definition	Categories	Measurement Scale
Opinion about Men still value women's virginity generally	Agreement about whether men still value women's virginity or not	0 = Disagree 1 = Agree	Nominal
Smoking & Drinking Behavior	Respondent's behavior on smoking together with drinking alcohol	0 = Not Smoke & Not Drink 1 = Smoke and Drink 2 = Smoke but Not Drink	Nominal
Drug use	Respondent's behavior on drug using	0 = Never 1 = Ever	Nominal
Discuss about sexual matters with friend	Respondents have discussed about sexual matters with friends	0 = No 1 = Yes	Nominal
Friends Have had sex before marriage	Respondents have friends that had sex before marriage	0 = No 1 = Yes	Nominal

3.3 Method of Analysis

The data will be analyzed using STATA version 12. There will be three steps of analyzing the data. First is defining the characteristics of unmarried youth in Indonesia by using univariate analysis. The second is to see the association between premarital sexual intercourse with each of the independent variables using chi-square. The last step is using binary logistic regression as multivariate analysis that is used since this study has dichotomous variable to measure the effect of certain independent variables mentioned above (Agresti & Finlay, 2009). This study has official approval

of Board of IRB committee of Institute for Population and Social Research Mahidol University coded as COA No. 2014/1-1-30.

3.4 Limitation of the Study

This study is using secondary data from 2012 Indonesia Demography and Health Survey (IDHS 2012). Therefore, it is difficult to find the reliability since this data is based on interviewing the respondents face to face that may result in bias by personal and private questions about sexuality and reproductive health. Respondents in this survey might not give real feedback related to their sexuality and reproductive live, thus may result in under reported data and difficulties to prove the hypotheses.

CHAPTER IV

RESULTS

The results of this study are categorized into three parts for both analysis for unmarried men and unmarried women. The first part presents the general characteristics of youth. In the second part of the results are from bivariate analysis which provide information between premarital sexual intercourse and each independent variable. The last part presents the results of the binary logistic regression analysis of personal factors as the first model and the combination between personal factors and environmental factors as the second model.

4.1 General characteristic of unmarried youth

As mentioned earlier in Chapter 3, the sample size of this study is 19,677 youth which comprises of 10,861 unmarried male youth and 8,816 unmarried female youth.

4.1.1 Predisposing factors

In Table 4.1, it can be seen that three-fifths of the unmarried males and almost 70% of the unmarried females are in the 15-19 years group of age. In terms of place of residence and highest education level, more than half of both unmarried males and females are youth who stay in urban area and more than 45% with some secondary education.

Table 4.1 Number and percentage distribution of unmarried youth by predisposing factors in Indonesia, 2012

Characteristics	Men		Women	
	N	%	N	%
Age				
15-19	6,692	61.6	6,157	69.8
20-24	4,169	38.4	2,659	30.2
<i>Male : Mean = 18.7 years</i>				
<i>Female : Mean = 18.2 years</i>				
Place of Residence				
Rural	4,985	45.9	3,564	40.4
Urban	5,876	54.1	5,252	59.6
Education				
Less than Primary	623	5.736	275	3.1
Completed Primary	824	7.587	414	4.7
Some Secondary	5,303	48.83	4,178	47.4
Completed Secondary/Higher	4,111	37.85	3,949	44.8
Total	10,861	100	8,816	100.0

4.1.2 Cognitive factors of unmarried youth

Table 4.2 presents the distribution of SRH Knowledge of unmarried youth. It can be seen that around 65.9% of males and 68.3% of females have middle level of knowledge about sexuality and reproductive health.

Table 4.2 Number and percentage distributions of SRH Knowledge of unmarried youth in Indonesia, 2012

SRH Knowledge	Men		Women	
	N	%	N	%
Low	1,921	17.7	1,505	17.1
Middle	7,156	65.9	6,021	68.3
High	1,784	16.4	1,290	14.6

Table 4.2 Number and percentage distributions of SRH Knowledge of unmarried youth in Indonesia, 2012 (cont.)

SRH Knowledge	Men		Women	
	N	%	N	%
Total	10,861	100	8,816	100

Score range: 0-48

Men : Mean=16.83, SD=7.99

Women : Mean=19.48, SD=8.06

Table 4.3 shows that most of the unmarried males have no source of information about sexual matters at all (28.5%) while most of unmarried females have 4 and more sources of sexual matters information (24.2%).

Table 4.3 Number and Percentage distribution of Source of Information about Sexual Matters of unmarried youth in Indonesia, 2012

Source of Information about Sexual Matters	Men		Women	
	N	%	N	%
None	3,096	28.5	2,075	23.5
1 source only	2,981	27.4	1,699	19.3
2 sources	2,105	19.4	1,656	18.8
3 sources	1,109	10.2	1,252	14.2
4 and more sources	1,570	14.5	2,134	24.2
Total	10,861	100	8,816	100

Table 4.4 shows that around 98% of both unmarried male and unmarried females agree that women should maintain virginity until marriage. It also shows that most unmarried males and unmarried females agree that men still value their partner's virginity generally (87.9% and 75.2% respectively).

Table 4.4 Number and Percentage of attitude toward women's virginity among unmarried youth in Indonesia, 2012

Attitude toward woman's virginity	Men		Women	
	N	%	N	%
Attitude toward mantaining women's virginity until marriage				
	Agree	10,607 97.7	8,703 98.7	
	Disagree	254 2.3	113 1.3	
Men still value their partner's virginity generally				
	Agree	9,550 87.9	6,632 75.2	
	Disagree	1,311 12.1	2,184 24.8	
Total	10,861	100	8,816	100

4.1.3 Reinforcing Factors

Table 4.5 shows slightly similar percentage of unmarried male who smoke also drink and who smoke but not drink (40.1% and 41.5%). Whilst, most of unmarried female reported not smoke and not drink (84.3%). It is also shown that more than 95% of both unmarried male and female reported never used drug.

Table 4.5 Number and percentage distribution of unmarried youth by committing risky behavior as reinforcing factors in Indonesia, 2012

Risky Behaviors	Men		Women	
	N	%	N	%
Smoking and drinking alcohol				
	Smoke and Drink	4,352 40.1	229 2.6	

Table 4.5 Number and percentage distribution of unmarried youth by committing risky behavior as reinforcing factors in Indonesia, 2012 (cont.)

Risky Behaviors	Men		Women	
	N	%	N	%
Smoke but not drink	4,511	41.5	1,156	13.1
Not smoke and not drink	1,998	18.4	7,431	84.3
Using Drugs				
Ever	465	4.3	27	0.3
Never	10,396	95.7	8,789	99.7
Total	10,861	100	8,816	100

4.1.4 Peer influences as Environmental Factors

Table 4.6 shows that more than half of unmarried youth discuss about sexual matters with friends. In addition, the table also presents that more than half of unmarried youth are having friends who have had sex before marriage as well.

Table 4.6 Number and percentage distribution of unmarried youth by environmental factors in Indonesia, 2012

Peer Influences	Men		Women	
	N	%	N	%
Discuss about sexual matters with friends				
Yes	6,126	56.4	5,185	58.8
No	4,735	43.6	3,631	41.2
Friends have had sex before marriage				
Yes	6,494	59.8	4,746	53.8
No	4,367	40.2	4,070	46.2
Total	10,861	100	8,816	100

4.1.5 Premarital Sexual Intercourse

Table 4.7 gives us information on Premarital Sexual Intercourse among unmarried youth in Indonesia. Unmarried male who practiced premarital sexual intercourse stands at 12.4% out of 10,861 respondents while unmarried female who practiced it stands at 1.9% out of 8,816 respondents.

Table 4.7 Number and percentage distribution of Premarital Sexual Intercourse among unmarried youth in Indonesia, 2012

Premarital Sexual Intercourse	Men		Women	
	N	%	N	%
Yes	1,347	12.4	170	1.9
No	9,514	87.6	8,646	98.1
Total	10,861	100	8,816	100

4.2 The relationship between Premarital Sexual Intercourse and Predisposing Factors, Cognitive Factors, Reinforcing Factors & Environmental Factors

4.2.1 Premarital Sexual Intercourse and Predisposing Factors

Table 4.8 shows that age of respondents is associated with premarital sexual intercourse among unmarried male, statistically significant at 0.001. It shows that more male who aged 20-24 in having premarital sexual intercourse than those who are still 15-19 years old (20.8% and 7.2% respectively).

Table 4.8 Premarital Sexual Intercourse and age among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Age groups				Total	
	15-19		20-24			
	N	%	N	%	N	%
Yes	480	7.2	867	20.8	1,347	12.4

Table 4.8 Premarital Sexual Intercourse and age among unmarried male youth in Indonesia, 2012 (cont.)

Ever had sexual intercourse	Age groups				Total	
	15-19		20-24			
	N	%	N	%	N	%
No	6,212	92.8	3,302	79.2	9,514	87.6
Total	6,692	100	4,169	100	10,861	100
	$\chi^2= 438.8452$ P=0.000					

Similarly, Table 4.9 shows that age of respondent is associated with premarital sexual intercourse among unmarried female youth, statistically significant at 0.001. The percentage of having premarital sexual intercourse is higher among female unmarried youth in the 20-24 group of age (3.4%), compared to those in the 15-19 group of age (1.3%).

Table 4.9 Premarital Sexual Intercourse and age among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Age groups				Total	
	15-19		20-24			
	N	%	N	%	N	%
Yes	80	1.3	90	3.4	170	1.9
No	6,077	98.7	2,569	96.6	8,646	98.1
Total	6,157	100.00	2,659	100	8,816	100
	x²= 42.7044 P=0.000					

Table 4.10 shows place of residence is not associated with premarital sexual intercourse among unmarried male. The result shows that most males who reported having premarital sexual intercourse stay in urban area (13%).

Table 4.10 Premarital Sexual Intercourse and Place of Residence among unmarried male youth in Indonesia, 2012

Place of Residence	Ever Had Sexual Intercourse					
	Rural		Urban		Total	
	N	%	N	%	N	%
No	4,400	88.3	5,114	87.0	9,514	88
Yes	585	11.7	762	13.0	1,347	12
Total	4,985	100.0	5,876	100.0	10,861	100.0
$\chi^2 = 3.7729$ $P = 0.052$						

Similarly, Table 4.11 shows place of residence is also not associated with premarital sexual intercourse among unmarried female. Most of females who reported having premarital sexual intercourse stay in urban area.

Table 4.11 Premarital Sexual Intercourse and Place of Residence among unmarried female youth in Indonesia, 2012

Place of Residence	Ever Had Sexual Intercourse					
	Rural		Urban		Total	
	N	%	N	%	N	%
No	3,498	98.1	5,148	98.0	8,646	98.0
Yes	66	1.9	104	2.0	170	2.0
Total	3,564	100.0	5,252	100.0	8,816	100.0
$\chi^2 = 0.1849$ $P = 0.667$						

Table 4.12 shows that Education is associated with premarital sexual intercourse, statistically significant at 0.001. It shows that most of male that reported premarital sexual intercourse had completed secondary / higher education (54.2%).

Table 4.12 Premarital Sexual Intercourse and Education among unmarried male youth in Indonesia, 2012

Education	Ever Had Sexual Intercourse					
	No		Yes		Total	
	N	%	N	%	N	%
Less than Primary	533	5.6	90	6.7	623	6
Completed Primary	724	7.6	100	7.4	824	8
Some Secondary	4,876	51.3	427	31.7	5,303	49
Completed Sec / Higher	3,381	35.5	730	54.2	4,111	38
Total	9,514	100.0	1,347	100.0	10,861	100.0
$\chi^2=203.34$ $P=0.000$						

Similarly, Table 4.13 shows that Education also is associated with premarital sexual intercourse, statistically significant at 0.001. It also shows that most of female who reported premarital sexual intercourse also completed secondary/higher education (55.3%).

Table 4.13 Premarital Sexual Intercourse and Education among unmarried female youth in Indonesia, 2012

Education	Ever Had Sexual Intercourse					
	No		Yes		Total	
	N	%	N	%	N	%
Less than Primary	264	3.1	11	6.5	275	3
Completed Primary	400	4.6	14	8.2	414	5
Some Secondary	4,127	47.7	51	30.0	4,178	47
Completed Sec/Higher	3,855	44.6	94	55.3	3,949	45
Total	8,646	100.0	170	100.0	8,816	100.0
$\chi^2= 26.1947$ $P=0.000$						

4.2.2 Premarital Sexual Intercourse and Cognitive Factors

Table 4.14 shows that knowledge about sexuality and reproductive health is associated with premarital sexual intercourse among unmarried male, statistically

significant at 0.001. It shows that among males who reported having premarital sexual intercourse, most of them have high knowledge about SRH (17.9%)

Table 4.14 Premarital Sexual Intercourse and Knowledge about Sexuality and Reproductive Health among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Knowledge about Sexuality and Reproductive Health						Total	
	Low		Middle		High			
	N	%	N	%	N	%	N	%
No	1,818	94.6	6,231	87.1	1,465	82.1	9,514	87.6
Yes	103	5.4	925	12.9	319	17.9	1,347	12.4
Total	1,921	100	7,156	100	1,784	100	10,861	100
	x ² = 138.7495 P=0.000							

Unlike unmarried male youth, Table 4.15 shows that knowledge about sexuality and reproductive health is not associated with premarital sexual intercourse for unmarried female youth. In addition, the percentage of having sexual intercourse is highest among unmarried female youth who have low knowledge about SRH (2.3%).

Table 4.15 Premarital Sexual Intercourse and Knowledge about Sexuality and Reproductive Health among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Knowledge about Sexuality and Reproductive Health						Total	
	Low		Middle		High			
	N	%	N	%	N	%	N	%
No	1,471	97.7	5,910	98.2	1,265	98.1	8,646	98.1
Yes	34	2.3	111	1.8	25	1.9	170	1.9
Total	1,505	100	6,021	100	1,290	100	8,816	100
	x²= 1.1004 P=0.577							

Table 4.16 shows that Premarital Sexual Intercourse is associated with number of source of knowledge about sexual matters among unmarried male,

statistically significant at 0.001. Among unmarried males who reported having premarital sexual intercourse, most of them (17.2%) have more than 4 sources of information about sexual matters.

Table 4.16 Premarital Sexual Intercourse and Source of information about sexual matters among unmarried male youth in Indonesia, 2012

Source of Information about Sexual Matters	Ever had sexual intercourse				Total	
	Yes		No			
	N	%	N	%	N	%
None	275	8.9	2,821	91.1	3,096	100
1 source only	347	11.6	2,634	88.4	2,981	100
2 sources	273	13.0	1,832	87.0	2,105	100
3 sources	182	16.4	927	83.6	1,109	100
4 and more sources	270	17.2	1,300	82.8	1,570	100
Total	1,347	12.4	9,514	87.6	10,861	100
x²= 87.1567 P=0.000						

Unlike unmarried male, Table 4.17 shows premarital sexual intercourse is not associated with number of source of information about sexual matters that measured to unmarried female. Among female who reported having premarital sexual intercourse, most of them (2.4%) have no source of information at all about sexual matters.

Table 4.17 Premarital Sexual Intercourse and Source of information about sexual matters among unmarried female youth in Indonesia, 2012

Source of Information about Sexual Matters	Ever had sexual intercourse				Total	
	Yes		No			
	N	%	N	%	N	%
None	50	2.4	2,025	97.6	2,075	100
1 source only	36	2.1	1,663	97.9	1,699	100

Table 4.17 Premarital Sexual Intercourse and Source of information about sexual matters among unmarried female youth in Indonesia, 2012 (cont.)

Source of Information about Sexual Matters	Ever had sexual intercourse				Total	
	Yes		No			
	N	%	N	%	N	%
2 sources	32	1.9	1,624	98.1	1,656	100
3 sources	20	1.6	1,232	98.4	1,252	100
4 and more sources	32	1.5	2,102	98.5	2,134	100
Total	170	1.9	8,646	98.1	8,816	100
$\chi^2= 5.6679$ P=0.225						

Table 4.18 presents premarital sexual intercourse among unmarried male youth is associated with attitude toward woman virginity, statistically significant at 0.001. Most of unmarried male youth who disagree about maintaining women's virginity before marriage reported having premarital sexual intercourse (38.6%).

Table 4.18 Premarital Sexual Intercourse and attitude toward maintaining woman's virginity before marriage among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Women should maintain virginity until marriage				Total	
	Agree		Disagree			
	N	%	N	%	N	%
Yes	1,249	11.8	98	38.6	1,347	12.4
No	9,358	88.2	156	61.4	9,514	87.6
Total	10,607	100	254	100	10,861	100
	$\chi^2= 164.0876$ P=0.000					

Similarly to unmarried male youth, table 4.19 shows that premarital sexual intercourse among unmarried female youth is associated with attitude toward woman virginity, statistically significant at 0.001. Most of unmarried female youth who

Similarly to unmarried male youth, Table 4.21 shows that premarital sexual intercourse among unmarried female youth is associated with opinion that man still value woman's virginity, statistically significant at 0.01. Percentage of female who disagree that man still value women's virginity is higher than female who agree about it in committing premarital sexual intercourse (3.8% and 1.3%, respectively).

Table 4.21 Premarital Sexual Intercourse and opinion that man still value woman's virginity, among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Men still value their partner's virginity generally				Total	
	Agree		Disagree			
	N	%	N	%	N	%
Yes	87	1.3	83	3.8	170	1.9
No	6,545	98.7	2,101	96.2	8,646	98.1
Total	6,632	100	2,184	100	8,816	100
	χ²= 53.8016 P=0.000					

4.2.3 Premarital Sexual Intercourse and Reinforcing Factors

Table 4.22 shows that premarital sexual intercourse among unmarried male youth is associated with smoking and drinking alcohol behavior, statistically significant at 0.001. Most of male who reported experiencing premarital sexual intercourse also have smoke and drink behavior (25.4%).

Table 4.22 Premarital Sexual Intercourse and smoking & drinking alcohol behavior among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Smoking & Drinking Behavior							
	Not Smoke & Not Drink		Smoke & Drink		Smoke but Not Drink		Total	
	N	%	N	%	N	%	N	%
Yes	41	2.1	1,107	25.4	199	4.4	1,347	12.4

Table 4.22 Premarital Sexual Intercourse and smoking & drinking alcohol behavior among unmarried male youth in Indonesia, 2012 (cont.)

Ever had sexual intercourse	Smoking & Drinking Behavior							
	Not Smoke & Not Drink		Smoke & Drink		Smoke but Not Drink		Total	
	N	%	N	%	N	%	N	%
No	1,957	97.9	3,245	74.6	4,312	95.6	9,514	87.6
Total	1,998	100	4,352	100	4,511	100	10,861	100
	χ²= 1.1e+03 P=0.000							

Similarly to unmarried male youth, Table 4.23 also shows that premarital sexual intercourse among unmarried female youth is associated with smoking and drinking alcohol behavior, statistically significant at 0.001. Most of female youth who reported experiencing premarital sexual intercourse also have smoke and drink behavior (14.4%).

Table 4.23 Premarital Sexual Intercourse and smoking & drinking alcohol behavior among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Smoking & Drinking Behavior							
	Not Smoke & Not Drink		Smoke & Drink		Smoke but Not Drink		Total	
	N	%	N	%	N	%	N	%
Yes	85	1.1	33	14.4	52	4.5	170	1.9
No	7,346	98.9	196	85.6	1,104	95.5	8,646	98.1
Total	7,431	100	229	100	1,156	100	8,816	100
	$\chi^2= 253.2195$ P=0.000							

Table 4.24 shows that premarital sexual intercourse among unmarried male youth is associated with using drug behavior, statistically significant at 0.001.

Male who ever tried to use drug were more reported in having sexual intercourse than males who never used drug (45.2% and 10.9%, respectively).

Table 4.24 Premarital Sexual Intercourse and using drugs among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Ever tried to use drug				Total	
	Ever		Never			
	N	%	N	%	N	%
Yes	210	45.2	1,137	10.9	1,347	12.4
No	255	54.8	9,259	89.1	9,514	87.6
Total	465	100	10,396	100	10,861	100
$\chi^2= 479.8768$ P=0.000						

Similarly to unmarried male, table 4.25 shows that premarital sexual intercourse is also associated with using drug behavior, statistically significant at 0.001. Females who ever tried to use drug were more reported in having sexual intercourse than females whom never used drug (25.9% and 1.9%, respectively).

Table 4.25 Premarital Sexual Intercourse and using drugs among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Ever tried to use drug				Total	
	Ever		Never			
	N	%	N	%	N	%
Yes	7	25.9	163	1.9	170	1.9
No	20	74.1	8,626	98.1	8,646	98.1
Total	27	100	8,789	100	8,816	100
	x²= 82.4729 P=0.000					

4.2.4 Premarital Sexual Intercourse and Peer Influences as Environmental Factors

Table 4.26 shows that premarital sexual intercourse among unmarried male youth is associated with discussion about sexual matters with friends, statistically

significant at 0.001. Most of unmarried male who had premarital sexual intercourse reported that they did not discuss about sexual matters with friends (15.1%).

Table 4.26 Premarital Sexual Intercourse and discussing about sexual matters with friends among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Talked about sexual matters with friends				Total	
	Yes		No			
	N	%	N	%	N	%
Yes	423	8.9	924	15.1	1,347	12.4
No	4,312	91.1	5,202	84.9	9,514	87.6
Total	4,735	100	6,126	100	10,861	100
	$\chi^2= 92.9726$ P=0.000					

Unlike unmarried male, table 4.27 shows that premarital sexual intercourse among unmarried females is not associated with discussion about sexual matters with friends. In addition, most of unmarried female youth who had premarital sexual intercourse also reported that they discussed with friends about sexual matters (2.0%).

Table 4.27 Premarital Sexual Intercourse and discussing about sexual matters with friends among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Talked about sexual matters with friends				Total	
	Yes		No			
	N	%	N	%	N	%
Yes	74	2.0	96	1.9	170	1.9
No	3,557	98.0	5,089	98.1	8,646	98.1
Total	3,631	100	5,185	100	8,816	100
	$\chi^2= 0.3928$ P=0.531					

Table 4.28 shows that premarital sexual intercourse among unmarried male youth is associated with having friends who had sex before marriage, statistically significant at 0.001. Male who have friends had sex before marriage have higher

percentage in premarital sexual intercourse than who do not have (19.3% and 2.2%, respectively).

Table 4.28 Premarital Sexual Intercourse and having friends who had sex before marriage, among unmarried male youth in Indonesia, 2012

Ever had sexual intercourse	Have friends had sex before marriage				Total	
	Yes		No			
	N	%	N	%	N	%
Yes	1,253	19.3	94	2.2	1,347	12.4
No	5,241	80.7	4,273	97.8	9,514	87.6
Total	6,494	100	4,367	100	10,861	100
	$\chi^2= 706.2671$ P=0.000					

Similar to unmarried male youth, Table 4.29 shows that premarital sexual intercourse among unmarried female youth is also associated with having friends who had sex before marriage, statistically significant at 0.001. Female who have friends had sex before marriage have higher percentage in premarital sexual intercourse than who do not have (2.9% and 0.8%, respectively).

Table 4.29 Premarital Sexual Intercourse and having friends who had sex before marriage, among unmarried female youth in Indonesia, 2012

Ever had sexual intercourse	Have friends had sex before marriage				Total	
	Yes		No			
	N	%	N	%	N	%
Yes	137	2.9	33	0.8	170	1.9
No	4,609	97.1	4,037	99.2	8,646	98.1
Total	4,746	100	4,070	100	8,816	100
	$\chi^2= 49.9245$ P=0.000					

4.3 Binary Logistic Analysis

Binary logistic regression is applied to analyze this study since it has dichotomous dependent variable. The purpose of the analysis is to measure the effect of certain independent variable which include personal and environment factors. In this analysis, variable education and variable place of residence are compiled become a single variable due to the multicollinearity which showed that two variables are very highly correlated each others. Model 1 presents the effect of personal factors on premarital sexual intercourse and Model 2 emphasizes on the effect of peer influences as environmental factors on premarital sexual intercourse among unmarried youth in Indonesia.

4.3.1 Binary Logistic analysis for unmarried male youth

Table 4.30 shows the results of the two models for unmarried male youth. According to Model 1, all personal factors are statistically significant related to Premarital Sexual Intercourse. The odds ratio shows that unmarried male who age 20-29 years were 1.16 times more likely to have premarital sexual intercourse than those who age 15-19 years. Regarding education and place of residence, having some secondary education with either reside in urban or rural area was positively related to premarital sexual intercourse. Unmarried male who had secondary education and stay in rural area were 38% less likely to have premarital sexual intercourse than those who had less than primary education and stay in rural area, while those who had secondary education and stay in urban area were 50% less likely to have premarital sexual intercourse than those who had less than primary education and stay in rural area. For SRH knowledge, the higher level of SRH knowledge (middle to high), the more likely for unmarried male to have premarital sexual intercourse (2.29 to 2.77 times, respectively) compared with those with low level of knowledge. For attitude toward women's virginity, unmarried male who agree that women should maintain virginity before marriage were 80% less likely to have premarital sexual intercourse than who disagree. In addition, unmarried male who agree that men still value women's virginity were 29% less likely to have premarital sexual intercourse than those who disagree. In terms of risky behavior, unmarried male who smoke also drink were 10.12 times more likely to have premarital sexual intercourse than those who do not smoke and do not drink, while unmarried male who smoke but not drink were 1.82 times

more like to have premarital sexual intercourse than who do not smoke and do not drink alcohol. Moreover, unmarried male who used drugs were 2.86 times more likely to have premarital sexual intercourse than who never used drugs.

For the second model, peer influences as environmental factor were added in order to examine its net effect on premarital sexual intercourse, controlling for personal factors. The results revealed that discussing about sexual matters with friends and having friends who had sex before marriage were statistically significantly associated with premarital sexual intercourse at 0.01 and 0.001 respectively. It is evident that unmarried male youth who discussed about sexual matters with friends were 1.25 times more likely to have premarital sexual intercourse than those who do not. Moreover, unmarried male who have friends that had sex before marriage are 5.73 times more likely to have premarital sexual intercourse than those who do not have friends that had sex before marriage. It can be seen clearly that all personal and environmental factors are predictors for premarital sexual intercourse among unmarried male in Indonesia.

Table 4.30 Binary Logistic Regression: Odds ratios of premarital sexual intercourse among unmarried male youth in Indonesia, 2012

All Factors	Premarital Sexual Intercourse	
	Model 1	Model 2
	(Personal Factors)	(Personal & Environment Factors)
	Odds Ratio	Odds Ratio
Age Group (ref= 15-19)		
20-29	1.16 ***	1.16 ***
Education & Place of Residence (ref= Rural - Less than Primary)		
Urban - Less Primary	0.94	0.73
Rural - Completed Primary	0.77	0.67
Urban - Completed Primary	0.62	0.51 *

Table 4.30 Binary Logistic Regression: Odds ratios of premarital sexual intercourse among unmarried male youth in Indonesia, 2012 (cont.)

All Factors	Premarital Sexual Intercourse	
	Model 1	Model 2
	(Personal Factors)	(Personal & Environment Factors)
	Odds Ratio	Odds Ratio
Rural - Some Secondary	0.62 *	0.53 **
Urban - Some Secondary	0.50 ***	0.39 ***
Rural - Completed Sec / Higher	0.84	0.64 *
Urban - Completed Sec / Higher	0.67 *	0.49 ***
SRH Knowledge (ref=Low)		
Middle	2.29 ***	1.42 **
High	2.77 ***	1.46 *
Attitude toward maintaining women's virginity before married (ref= Disagree)		
Agree	0.20 ***	0.20 ***
Opinion about Men still value women's virginity generally (ref= Disagree)		
Agree	0.71 ***	0.77 *
Smoking & Drinking Behavior (ref=Not Smoke & Not Drink)		
Smoke and Drink	10.12 ***	7.00 ***
Smoke but Not Drink	1.82 **	1.55 *
Drug Use (ref= Never)		
Ever	2.86 ***	2.51 ***
Discuss about sexual matters with friend (ref = No)		
Yes	-	1.25 **

Table 4.30 Binary Logistic Regression: Odds ratios of premarital sexual intercourse among unmarried male youth in Indonesia, 2012 (cont.)

All Factors	Premarital Sexual Intercourse	
	Model 1	Model 2
	(Personal Factors)	(Personal & Environment Factors)
	Odds Ratio	Odds Ratio
Friends Have had sex before marriage (ref= No)		
Yes	-	5.73 ***
LR Chi-square	1671.11	1997.08
Pseudo R-square	0.2052	0.2453
N	10,861	10,861

*p<.05 , **p<.01 , ***p<.001

4.3.2 Binary Logistic analysis for unmarried female youth

Table 4.31 shows the results of the two models for unmarried female youth. According to Model 1, age, attitude toward maintaining women's virginity before marriage, opinion about men still value women's virginity, smoking & drinking behavior, and drug using are statistically significant related to premarital sexual intercourse. The odds ratio shows that unmarried female who age 20-29 years were 1.17 times more likely to have premarital sexual intercourse than those who age 15-19 years. For attitude toward women's virginity, unmarried female who agree that women should maintain virginity before marriage were 84% less likely to have premarital sexual intercourse than who disagree. In addition, unmarried female who agree that men still value women's virginity were 66% less likely to have premarital sexual intercourse than those who disagree. In terms of risky behavior, unmarried female who smoke also drink were almost 11 times more likely to have premarital sexual intercourse than those who do not smoke and do not drink, while unmarried female who smoke but not drink were 3.75 times more like to have premarital sexual intercourse than who do not smoke and do not drink alcohol. Moreover, unmarried

female who used drugs were 3.96 times more likely to have premarital sexual intercourse than who never used drugs.

For the second model, peer influences as environmental factor were added in order to examine its net effect on premarital sexual intercourse, controlling for personal factors. The results revealed that discussing about sexual matters with friends is not associated with premarital sexual intercourse among unmarried female. In addition, the model shows that having friends who had sex before marriage was statistically significantly associated with premarital sexual intercourse at 0.001. It is evident that unmarried youth female who have friends that had sex before marriage are 3.31 times more likely to have premarital sexual intercourse than those who do not have friends that had sex before marriage, although it is found no association with premarital sexual intercourse in the first model.

It can also be noted that education and place of residence, and SRH knowledge were not significantly associated with premarital sexual intercourse among unmarried female in both models.

Table 4.31 Binary Logistic Regression: Odds ratios of premarital sexual intercourse among unmarried female youth in Indonesia, 2012

All Factors	Premarital Sexual Intercourse	
	Model 1	Model 2
	(Personal Factors)	(Personal & Environment Factors)
	Odds Ratio	Odds Ratio
Age Group (ref= 15-19)		
20-29	1.17 ***	1.19 ***
Education & Place of Residence (ref= Rural - Less than Primary)		
Urban - Less Primary	0.58	0.53
Rural - Completed Primary	1.05	1.14
Urban - Completed Primary	1.06	0.86
Rural - Some Secondary	0.58	0.58

Table 4.31 Binary Logistic Regression: Odds ratios of premarital sexual intercourse among unmarried female youth in Indonesia, 2012 (cont.)

All Factors	Premarital Sexual Intercourse			
	Model 1		Model 2	
	(Personal Factors)		(Personal & Environment Factors)	
	Odds Ratio		Odds Ratio	
Urban - Some Secondary	0.48		0.46	
Rural - Completed Sec / Higher	0.62		0.57	
Urban - Completed Sec / Higher	0.59		0.52	
SRH Knowledge (ref=Low)				
Middle	0.91		0.74	
High	0.69		0.56	
Attitude toward mantaining women virginity before married (ref= Disagree)				
Agree	0.16	***	0.14	***
Opinion about Men still value women's virginity generally (ref= Disagree)				
Agree	0.44	***	0.47	***
Smoking & Drinking Behavior (ref=Not Smoke & Not Drink)				
Smoke and Drink	10.93	***	8.74	***
Smoke but Not Drink	3.75	***	3.26	***
Drug Use (ref= Never)				
Ever	3.96	*	3.21	*
Discuss about sexual matters with friend (ref = No)				
Yes	-		0.73	

Table 4.31 Binary Logistic Regression: Odds ratios of premarital sexual intercourse among unmarried female youth in Indonesia, 2012 (cont.)

All Factors	Premarital Sexual Intercourse	
	Model 1	Model 2
	(Personal Factors)	(Personal & Environment Factors)
	Odds Ratio	Odds Ratio
Friends Have had sex before marriage (ref= No)		
Yes	-	3.31 ***
LR Chi-square	248.97	284.18
Pseudo R-square	0.1483	0.1692
N	8,816	8,816

CHAPTER V

DISCUSSION

As already mentioned, the youth's sexual activity is an issue of greater concern in Indonesia these days than ever before. The youth in this study are unmarried young people (mean age is 18.7 for males and 18.2 for females) and descriptive statistics are deployed to present that generally unmarried youth in Indonesia are not trying premarital sexual intercourse. According to the survey, the proportion of those who have had premarital sexual intercourse is approximately 12.4% for males and 1.9% for females. Similarly, a qualitative and quantitative study of 676 adolescents in East Wollega shows that a much higher percentage of young men reported having premarital sex than young women (Seme & Wirtu, 2009). Male-female differential in sexual activity may be better explained by the double-standard norms in terms of sexual initiation. In most developing countries male sexual adventures are socially acceptable but not for women (Algaa, 2000). In this study, it can be assumed that premarital sexual intercourse among women is under reported due to social and cultural standard.

The finding of the study shows the same pattern by age in premarital sexual intercourse experience for both unmarried males and females in Indonesia in which youth who aged 20 to 24 are around 2 times more likely to have premarital sexual intercourse than those who are 15 to 19 years. According to Tsala and Defo (2013), there is an association between age and premarital sexual experience; the older they are, the higher involvement in sexual experience (youth 20-24 years old were 1.45 times more likely to have premarital sex compared with those who are 12-19 years old) (Tsala Dimbuene & Defo, 2013).

Regarding education and place of residence, it is shown that both variables are associated with premarital sexual intercourse among unmarried male youth, with confidence level ranging from 95% to 99.9%. It is significant with the study in Indonesia that urban men are more likely to have had sex than rural men but not

consistent with the highest education in which in the study shows that those having completed secondary / higher education were the most likely to have premarital sexual intercourse (Statistics-Indonesia & Macro-International, 2008). In addition, it is also significant with the study in Kenya that urban youth were more likely to have early sexual debut than rural youth (Dodoo, Zulu, & Ezech, 2007). On other side, education and place of residence is not associated with premarital sexual intercourse for unmarried female youth. This finding is also inconsistent with study in Papua and Papua Barat provinces of Indonesia that shows education and residence were risk factors on premarital sexual intercourse (Diarsvitri, Utomo, Neeman, & Oktavian, 2011).

In terms of knowledge about sexuality and reproductive health, it is associated with premarital sexual intercourse, but not among female youth. However, due to the study findings, discussing about sexual matters with friends did not lead unmarried female youth to try premarital sexual intercourse, but it does for men. On the contrary, unmarried females may learn incorrect knowledge from their friends when they discussed about sexual matters. In addition, unmarried female might response the questions based on their ever-had sex friend's experience rather than the correct knowledge of SRH. Another issue affected the insignificance association of premarital sexual intercourse and level of SRH knowledge among female is about the double standard applied by the society towards female, that learning about SRH knowledge is more acceptable for male than female. In mean time, having friends who have had sex before marriage is associated with premarital sexual intercourse for both male and female. But the limitation of this study is the lack to know whether respondents really know that their friends are not virgin anymore or it is only their perception.

Moreover, when unmarried youth's attitude toward maintaining women's virginity is considered, the findings show a significant positive association with premarital sexual intercourse for both male youth and female youth. It shows both unmarried male and female youth who agree to maintain women's virginity until marriage are less likely to have premarital sexual intercourse compared to those who disagree. This findings is not consistent with the study in Greater Jakarta Indonesia which found that teenage female who believed that their boyfriends would be their

future husbands tend to not keep their virginity and more likely to have frequently sexual relationship before marriage with their boyfriends (Suparno, Siagian, Utomo, & Dadun, 2010).

In addition, being agreed with opinion about men still value women's virginity is also found associated with premarital sexual intercourse. It shows that male and female youth who agree that men still value women's virginity are less likely to have premarital sexual intercourse compared to those who disagree. This finding is not supported by the previous study in East Wollega that presented premarital sexual intercourse encourage and approve sexual experimentation of boys as cultural norms (Seme & Wirtu, 2009).

Furthermore, the result reveals that smoking, drinking and drug using behavior are significant in experiencing premarital sexual intercourse for both men and women. Partially, this is consistent with previous studies among male adolescents in Mongolia found that males who ever drank alcohol were three times more likely to experience premarital sexual intercourse than those who did not (Algaa, 2000). But there was no statistically significant relationship in this regard among female youth. Due to this study, the significance of smoking-but-not-drinking among unmarried male decreases from 0.001 to 0.01 level of significant. It can be assumed that peer influences affect the behavior.

Moreover, a study among the secondary school students in Malaysia similarly found that adolescent sexual intercourse was associated with substance use such as drug taking, alcohol drinking, cigarette smoking and marijuana smoking (Lee, Chen, Lee, & Kaur, 2006). Another study that support this finding is a study in Northern Thailand which shows that ever went out, drinking, smoking cigarette, using amphetamine and using marijuana are statistically significant with having sexual intercourse for both male and female adolescent (Liu et al., 2006).

Lastly, peers as the environmental factor play a significant role leading to experience in premarital sexual intercourse. Discussing sexual matters with friends is significant with experience in premarital sexual intercourse for males, but not for females. These conditions may be supported by the study in Thailand that shows sexual issues were not commonly discussed between female adolescents for the fear that sexual matters would encourage them to get closer to premarital sexual practice,

in contrary with males that can discuss about sexual matters without being stigmatized (Tangmunkongvorakul & Bhuttarowas, 2005). In addition, this study found having friends who had had sex before marriage is associated with premarital sexual intercourse among both male and female youth. It is consistent with a study by WHO reported that male and female youth who perceive that their friends are sexually active are significantly more likely to practice in sex themselves and to have more than one sexual partners (WHO, 2004).

Finally, the results can answer the hypotheses that have mentioned earlier in Chapter 2.

1. Male youth in Indonesia are more likely to have premarital sexual intercourse than female counterparts. Based on the univariate analysis, the study finds that males are more likely to have premarital sexual intercourse than females. It means this hypothesis is accepted.

2. Older youth are more likely to experience premarital sex than the younger. The study found that male youth who are in the age group 20-24 years are more likely to have premarital sexual intercourse compared with those in younger age group 15-19 years. It means this hypothesis is accepted for both male and female analysis.

3. Youth in Indonesia who live in urban area are more likely to have premarital sexual intercourse than youth who live in rural area. But, the study found that all urban male youth are less likely to have premarital sexual intercourse compared with youth in rural area. It means this hypothesis is rejected for male analysis. A similar result also found among female adolescents and the hypothesis is also rejected.

4. Youth in Indonesia who have lower education are more likely to have premarital sexual intercourse than youth who have higher education. This study found that respondents who have higher education (completed primary, some secondary, and completed secondary) are less likely to have premarital sexual intercourse compared with those who have less than primary education. It means this hypothesis is accepted. A similar result is also found among female youth and the hypothesis is also rejected.

5. Youth in Indonesia who have low level of SRH knowledge are more likely to have premarital sexual intercourse. It is found that males with higher level of

knowledge (middle and high categories) are more likely to have premarital sexual intercourse compared with those who have low knowledge, thus the hypothesis is rejected. Premarital sexual intercourse is found not associated with knowledge among female and the hypothesis is also rejected.

6. Youth in Indonesia who disagree to keep virginity before marriage are more likely to have premarital sexual intercourse than those who agree. It is found that youth in Indonesia who agree to keep virginity until their marriage are less likely to have premarital sexual intercourse. Thus, this hypothesis is accepted for both male and female analysis.

7. Youth in Indonesia who disagree that men still value women's virginity are more likely to have premarital sexual intercourse than those who agree. It is found that youth in Indonesia who agree that men still value women's virginity are less likely to try premarital sexual intercourse. This finding supports the hypothesis for both male and female analysis.

8. Youth in Indonesia who commit risky behavior are more likely to have premarital sexual intercourse than youth who do not. The finding shows that youth in Indonesia who have smoking-drinking and drug using behavior are more likely to have premarital sexual intercourse. The hypothesis is accepted for both male and female analysis.

9. Youth in Indonesia who discuss about sexual matter with friends are more likely to have premarital sexual intercourse than those who do not. It is found that male respondents who discuss about sexual matters with friends are more likely to have premarital sexual intercourse, so the hypothesis is accepted. The opposite result is found among female respondents so the hypothesis is rejected for female analysis.

10. Youth in Indonesia who have friends whom have had sex before marriage are more likely to have premarital sexual intercourse than youth who did not. This hypothesis is accepted for both male and female analysis because it is found that youth who have friends whom have had sex before marriage are more likely to have premarital sexual intercourse.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The objective of this study is to analyze factors affecting premarital sexual intercourse among unmarried youth in Indonesia. Therefore, the analysis was derived from the Indonesia Demography Health Survey (IDHS) 2012. The dependent variable is premarital sexual intercourse while independent variables deployed in this study included age, education and place of residence, knowledge about SRH, source of sexual information, attitudes toward women's virginity, substance abuse such as smoking, drinking and drug use, discussion with peers about sexual matters, and having friends who have had sexual relationships before marriage.

This study covered 10,861 unmarried males and 8,816 females aged 15-24 years old. Most of both male and female were in the age group of 15-19 years (61.6% and 69.8% respectively). More than a half of unmarried youth are those who have had secondary education (but not completed) and stay in rural area. About 65% of respondents have average knowledge of sexuality and reproductive health. In contrast, about 24 % of females had 4 to 8 sources of sexual information, while almost 29% of males reported that they did not have any source of sexual information at all. Regarding their attitudes toward women's virginity, about 95% of both males and females agreed that women should maintain their virginity until marriage. Most males and females also agreed upon the value of women's virginity generally (87.9% and 75.2% respectively). In addition, the effect of religion in Indonesia which is Islam majority protects youth in Indonesia to avoid practicing premarital sexual intercourse.

Chi-squared tests were attempted to find the relationship between premarital sexual intercourse and personal and environment factors. The tests among female respondents found that premarital sexual intercourse was not associated with place of residence, sexual and reproductive health (SRH) knowledge, source of sexual information, and discussion with friends about sexual matters. Whilst, the analysis

result for males shows that premarital sexual intercourse was associated with all personal and environmental factors except for place of residence. In addition, it is assumed that the effect of religion in Indonesia which is Islam majority protects youth in Indonesia to avoid practicing premarital sexual intercourse.

Furthermore, binary logistic regression was applied to assess the hypotheses. The first model explains effects of personal factors. The second model includes personal factors together with environmental factors. Based on social cognitive model applied in this study, it significantly concluded that personal and environmental factors had an effect on premarital sexual intercourse among unmarried youth in Indonesia. The confounding factors related to age, education and place of residence, SRH knowledge, attitudes towards women's virginity, risky behavior (personal factors), discussion with friends about sexual matters and having friends who had sexual experience before marriage (environmental factors) played a major role leading to premarital sexual intercourse among unmarried male youth in Indonesia. On the other hand, this study found that factors affecting premarital sexual intercourse among unmarried female youth were associated with age, attitude toward women's virginity, risky behavior (personal factors) and having friends who have had sexual experience before marriage (environmental factors).

6.2 Recommendations

6.2.1 Policy Recommendations

Based on the findings, this study recommends several important points to policy makers:

1. Responding to the finding that the educated youth tend to commit premarital sexual intercourse than the lower educated, it is needed to recommend Indonesian government to put sexual and reproductive health as a special subject in high school and university, particularly more comprehensive programs for youth at the university level due to the findings that older youth (20-24) are more likely to commit premarital sexual intercourse than the younger counterparts.

2. Promoting Youth Centre at the school level which is gender sensitive, confidential, affordable and friendly also needed to be the centre of excellence for youth to address some crucial problems regarding to SRH issues among young people. Youth Centre will provide SRH peer-educators and peer-counselors who will provide and share proper information in terms of SRH and to facilitate counseling session for those in needs. Peer-educators and peer-counselors are also important to lift up youth's self esteem. The higher self esteem that youth have, the more capable for them not to be motivated by their friends who have had sex before marriage. SRH education is very important for any level of education for young people, either they live in urban or rural area.

3. Parental communication skill is another strategy that is needed to be accounted in addressing youth problems. An approach through increasing parental education related to youth's life skills can be a possible choice of solution. Developing parents' group at the school-based and university-based will increase more interactive activities between those who are involved, such as training, orientation and focused group discussion. In addition, parents with well-equipped SRH knowledge can be the first change-of-agents to share information on reproductive health issues.

4. Youth empowerment policy is also needed to equip and encourage young unmarried people to have negotiation skills in order to refuse unsafe sexual debuts and to respect each other by controlling themselves not to practice sexual intercourse and being abstinence until getting married. This empowerment policy also is expected to reduce risky behaviors such as smoking, drinking and drug taking in terms of social campaigns and education campaign.

5. Generating and developing a well organized documentation, data collection and recording systems related to adolescent's sexuality is highly recommended since it is very limited in Indonesia.

6.2.2 Research Recommendations

1. Beside quantitative research, in-depth studies are also needed to provide broader information from youth's perspective such as factors affecting premarital sexual intercourse and how youth can cope with the social mainstreams

such as peers, social media and other attractions leading to misbehavior that cause their lifestyle unhealthy.

2. Another research can be conducted focused on older youth like university-based due to this study finding that older youth have more tendencies to try experiencing premarital sexual intercourse than younger youth.

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APPENDIX

**Selected questions from Indonesia Demography and Health Survey
2012 questionnaire**

No.		Code of answers
1301 & 201	When a boy begins to change from childhood to adolescence, also known as puberty, he experiences physical changes. Can you tell me what they are?	Develop Muscles Change in Voice Growth of facial hair, pubic hair, underarm hair, chest, legs and arms Increase in sexual arousal Wet Dreams Growth of adam's apple Hardening of nipples others don't know
1302 & 202	When a girl begins to change from childhood to adolescence, also known as puberty, she experiences physical changes. Can you tell me what they are?	Growth of facial hair, pubic hair, underarm hair, chest, legs and arms Growth in breast Growth in hips Increase in sexual arousal Menstruation others don't know
1304 & 204	Where did you get the information about the physical changes from childhood to adolescence ?	FRIENDS MOTHER FATHER SIBLING

No.		Code of answers
		RELATIVES TEACHER HEALTH SERVICE PROVIDER RELIGIOUS LEADER TELEVISION RADIO BOOK/MAGAZINE/NEWSPAPER INTERNET OTHER DON'T KNOW
1306 & 206	Before you menstruated, did anyone talk to you about menstruation? Before you had wet dreams, did anyone talk to you about wet dreams?	YES NO
1307 & 207	Who talked to you about menstruation ? Who talked to you about wet dreams?	Friends Mother Father Siblings Relatives Teacher Health Service Provider Religious Leader Other
208	Is there the fertile period for woman who have menstruated?	Yes No Don't Know
209	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	Just Before her period begins During her period Right after her period has ended Halfway between

[illegible]

No.		Code of answers
	9. Lactational Amenorrhea Method 10. Rhythm or Periodic Abstinence 11. Withdrawal 12. Emergency Contraception 13. Others	Yes No Yes No Yes No Yes No Yes No
1501 & 401	We would like to know about the people with whom you have talked about or asked questions about sexual matters. Have you talked about these things with: FRIENDS MOTHER FATHER SIBLING RELATIVES TEACHER HEALTH SERVICE PROVIDER RELIGIOUS LEADER	Yes No Yes No Yes No Yes No Yes No Yes No Yes No
1502 & 402	If you want to know more about reproductive health, who would you like to ask?	Friends Mother Father Siblings Relatives Teacher

No.		Code of answers
		Health Service Provider Religious Leader Television Radio Book/Magazine/Newspaper Internet Other Don't Know
1508 & 408	Have you heard of a place for young adults to obtain information and counselling about young adult reproductive health?	Yes No
1602 & 501	Have you ever tried to smoke a cigarette ?	YES NO
1607 & 510	Now I have some questions about drinking alcohol such as arak, tuak, beer and others. Have you ever drunk an alcohol-containing beverage?	YES NO
1614 & 517	Have you yourself ever tried to use drugs (Local Term) ?	YES NO
1620 & 523	How often did you inject the drugs?	Everyday A few times a week Every week Less than once per week Once a month Less than once a month Other
901 & 601	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	Yes No

No.		Code of answers
902 & 602	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	Yes No Don't Know
903 & 603	Can people get the AIDS virus from mosquito bites?	Yes No Don't Know
904 & 604	Can people reduce their chance of getting the AIDS virus by using a condom everytime they have sex ?	Yes No Don't know
905 & 605	Can people get the AIDS virus by sharing food with a person who has AIDS?	Yes No Don't Know
906 & 606	Can people get the AIDS virus because of witchcraft or other supernatural means?	Yes No Don't Know
906A & 606A	Can people get the AIDS virus by sharing unsterilized needle or syringe?	Yes No Don't Know
907 & 907	Is it possible for a healthy-looking person to have the AIDS virus?	Yes

No.		Code of answers
		No Don't Know
908 & 608	Can the virus that causes AIDS be transmitted from a mother to her baby: - During pregnancy? - During delivery? - By breastfeeding?	Yes No Don't Know Yes No Don't Know Yes No Don't Know
908A & 609	How do you know if someone who was infected HIV/AIDS?	PHYSICAL CHANGES BEHAVIOUR CHANGES BLOOD TEST/VCT OTHER DON'T KNOW
930 & 610A	Do you know a place to get VCT service? Do you know of a place where people can go to get tested for the AIDS virus?	Yes No
932 & 612	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	Yes No Don't Know

No.		Code of answers
934 & 614	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	
		Yes No Don't Know/Not sure/ Depends
935 & 615	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED SHOULD NOT BE ALLOWED Don't Know/Not sure/ Depends
937 & 616	Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?	Yes No
937A & 617	What other infections have you heard about?	SYPHILIS GONORRHEA GENITAL WARTS/CONDYLOMATA CHANROID CLAMYDIA CANDIDA GENITAL HERPES OTHER
937B & 618	From which sources of information have you learned about sexually transmitted diseases (STDs)?	RADIO TELEVISION NEWSPAPER/MAGAZINE POSTER HEALTH PROFESSIONAL RELIGIOUS INSTITUTION SCHOOL/TEACHER COMMUNITY MEETING FRIENDS/RELATIVES

No.		Code of answers
		WORK PLACE INTERNET OTHER
937C & 619	If a man has a sexually transmitted disease, what symptoms might he have?	ABDOMINAL PAIN GENITAL DISCHARGE/DRIPPING FOUL SMELLING DISCHARGE BURNING PAIN ON URINATION REDNESS/INFLAMMATION IN GENITAL AREA SWELLING IN GENITAL AREA GENITAL SORES/ULCERS GENITAL WARTS GENITAL ITCHING BLOOD IN URINE LOSS OF WEIGHT IMPOTENCE OTHER NO SYMPTOMS DON'T KNOW
937D & 620	If a woman has a sexually transmitted disease, what symptoms might she have?	ABDOMINAL PAIN GENITAL DISCHARGE/DRIPPING FOUL SMELLING DISCHARGE BURNING PAIN ON URINATION REDNESS/INFLAMMATION IN GENITAL AREA SWELLING IN GENITAL AREA GENITAL SORES/ULCERS GENITAL WARTS GENITAL ITCHING BLOOD IN URINE LOSS OF WEIGHT IMPOTENCE OTHER NO SYMPTOMS DON'T KNOW

No.		Code of answers
1705 & 705	Had Sexual Intercourse , Has not had Sexual Intercourse	Had Sexual Intercourse Has not had Sexual Intercourse
1712 & 715	Do you have any friends who have had sex before marriage ?	YES NO DON'T KNOW
1713 & 716	Because your friends have had sex, are you motivated to have sexual intercourse?	YES NO DON'T KNOW
1718 & 721	Do you strongly agree, agree or disagree of the opinion that women should maintain their virginity before marriage ?	STRONGLY AGREE AGREE DISAGREE
1719 & 722	Do you men in general still value virginity in a woman? / Do you think men in general still value their partner's virginity?	Yes No Don't Know

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