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UNIVERSITY OF HEALTH SCIENCES, FACULTY OF PUBLIC HEALTH
and
MINISTRY OF EDUCATION AND TRAINING - MINISTRY OF HEALTH
HANOI UNIVERSITY OF PUBLIC HEALTH

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**PORNOGRAPHY WATCHING AND ASSOCIATED
FACTORS AMONG UNIVERSITY STUDENTS AT
UNIVERSITY OF HEALTH SCIENCES (UHS),
LAO PDR DURING 2019**

MASTER THESIS
MASTER OF PUBLIC HEALTH
CODE: MPH 8720701

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Professor Bui Thi Thu Ha

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ABSTRACT

Background: Pornography watching has become an extensive social phenomenon worldwide and has contributed to changes in the terrain of human sexuality causing both positive and negative attitudes. Pornographic sources (Internet, smartphone, movies/videos, television, and magazines/books) have made the available of pornography faster and easier than ever before. Pornographic material provides sexual explicit content that is not filtered before publication and distribution into society, thus students often deliberately search for these materials due to curiosity. This paper has the aim of describing the proportion of watching pornography and associated factors among university students.

Method: The PRECEDE–PROCEED Theory was used to guide this study. The study adopted a cross-sectional design. The study was conducted at the University of Health Sciences (UHS), Lao PDR from January to March 2019. A sample of 365 university students was selected for this study by cluster and multi-stage sampling. The data was collected by self-administered questionnaires and analyzed by using statistics software, namely SPSS version 13.1. In addition, descriptive and inferential statistics were applied.

Results: The results showed that the frequency of erotic pornography detailing sexual intercourse was high at 40.9% (62.0% for males and 23.8% for females). Factors associated with watching pornography were sex, participants having partners, a positive attitude toward to pornography watching and having supportive friends. Males were 4.6 times more likely to watch erotic pornography than females participants (AOR=4.6, 95%CI=2.9-7.4, $P<0.000$). Participants who had partners were 1.9 times more likely to watch erotic pornography than those who were single (AOR=1.9, 95%CI=1.1-3.2, $P<0.009$). Participants who had positive attitudes were 1.8 times more likely to watch erotic pornography than those who had negative attitudes (AOR=1.8, 95%CI=1.1-2.9, $P<0.014$) and participants who had friends to support pornographic viewing were 1.8 times more likely to watch erotic

pornography than those who did not have persuasive friends (AOR=1.8, 95%CI=1.6-2.9, $P<0.010$).

Conclusion: The frequency of watching erotic pornography detailing sexual intercourse was high among university students. The factors such as males, having partners, maintaining a sympathetic attitude and having influential friends were also significant motivators associated with watching erotic pornography.

Recommendations: Policy makers should develop programs and create barriers to reduce accessing to pornography, promote self-respecting social norms and take step to mitigate factors that put pressure on youth to watch pornography.

Keywords: Pornography, Viewing, university students, UHS

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Abbreviation Template and Acronyms

AIDS	Acquired Immune Deficiency Syndrome
DVD	Digital Video Disc
EPT	Erotic Pornography Type
FMS	Faculty of Medical Science
FP	Faculty of Pharmacy
HIV	Human Immune-deficiency Virus
MPT	Mild Pornography Type
MPT	Moderate Pornography type
NSRC	National Sexual Resource Center
NUS	National Union of Students
PW	Pornographic Watching
SEMs	Sexually Explicit Materials
STIs	Sexual Transmitted Infections
STDs	Sexual Transmitted Diseases
UHS	University of Health Sciences
WHO	World Health Organization

Introduction

Pornography is a public health issue today due to its contribution to increasing frequency of sexual harm. Young people are being exposed to violent and degrading content which sadly effects real life behavior. Pornographic content could affect the emotional, psychological and physical well-being of youth (Wright, Sun, Steffen, & Tokunaga, [2015](#)). For example, pornographic watching (PW) can start people down a path towards to psychological problems such as depression, anxiety, loneliness and stress (Wamathai, Sirera, & Mwenje, [2014](#)). More than 80% of people engaged with pornographic materials experience problematic usage of such items and 54% of them have sexual problems (O'Sullivan, Brotto, Byers, Majerovich, & Wuest, [2014](#); WHO, [2018b](#)).

In the world, pornography has become a common source of information for millions of youth in their home, at work, at school or at college. In the digital age where there is a world without borders pornography has increased in both developed and developing countries (Morelli, Bianchi, Baiocco, Pezzuti, & Chirumbolo, [2017](#)). In addition, pornography has become easier to access, not overly expensive, frequently anonymous, and relatively private (Olmstead, Negash, Pasley, & Fincham, [2013](#)). A report by the National Center on Sexual Exploitation (NCOSE) showed that 64% of people ages 18–24 use pornography weekly or more often (McDowell, [2016](#)). Pornography users among youth accounted for 87% of males and 31% of females (Carroll et al., [2008](#)). Globally, youth are exposed to pornography before having sex at an average of 53% and 30 million youths were infected with a sexual transmitted diseases (STDs) or Human Immunodeficiency Virus (HIV) while others had early pregnancies and abortions (Lou et al., [2012](#)).

Laos is country in the process of a rapid socio-economic transition which is also influencing the sexual attitudes and behaviors of Lao youth. There is increasing internet use with a rise of 36.7% users per month in 2017 (Stats, [2018](#)). Hence the concerns for the increasing influence of PW on youth behavior, attitudes, and beliefs (Keobounphanh & Toole, [2008](#)).

This study focuses on students at the University of Health Sciences (UHS). The students of the UHS come from different ethnic groups such as Lao, Hmong and Khmu. Medical students studied anatomy and physiology with the application of high technology. It is possible the UHS students are more exposed to internet use than any other group in the Lao PDR. In addition, the university has invested deeply in the expansion of technology to improve learning. However, as highlighted, media exposes people to unfiltered material. Hence the university students can easily gain access to pornographic material. Moreover, the university students are in the transition phase into adulthood and interest in their sexuality could be high.

Research objectives

1. To describe the frequency of pornographic watching among university students at the UHS, the Lao PDR during 2019.
2. To identify factors associated with pornography watching among university students, the Lao PDR during 2019.

Chapter 1: Literature Review

1.1. Definitions

1.1.1. Pornography

The term pornography is derived from the Greek adjective *pornographos*, meaning ‘**the writing about prostitutes**’ and was originally related to any work of art or literature about prostitution. Historically and culturally, the meaning of the term has changed over time. While often being associated with erotica, a term generally bearing positive connotations, it is also associated with **obscenity**, which carries highly negative connotations. The word, erotica, comes from the Greek *Eros* (God of Love) and is associated with pleasurable desires and feelings. Obscenity, in contrast, is derived from the Latin, *obscenus*, meaning filth. So the term pornography can refer to material that is potentially sexually exciting and arousing, without any sense of immorality. However, it can also relate to portrayals of sexual activity that are regarded as offensive, and possibly, criminal (Smith, [2015](#)).

Pornography has many different definitions in the academic literature. For each in country study, researchers have argued and used different definitions of pornography. Researchers defined pornography as sexually explicit material (SEM) with a primary intention of arousing sexual perceptions or increasing sexual arousal (Malamuth & Huppin, [2005](#)). Pornography, often colloquially referred to as porn, is any material whether written, visual, or otherwise that consists of sexually explicit material and is intended to sexually arouse (Carroll et al., [2008](#)). Some researchers say that pornography is a term for sexually explicit Internet material, which narrowed the definition to being audio-visual material on or from the Internet that portrays sexual acts in obvious ways and which includes the explicit portrayal of aroused genitals and oral, vaginal and anal penetration (Jochen Peter & Valkenburg, [2009](#)).

In the present, the definition of pornography (i.e. sexually explicit material) is the portrayal of sexual subject matter for the purpose of sexually arousing or satisfying a person, and it comes in the form of magazines, movies, videos, Internet websites

and smartphone application. While many people have argued that pornography is an artistic expression, protected by the First Amendment of the American Constitution, others feel there is a distinct line between art and porn (Seltzer, [2011](#)).

What is difference between pornography watching and pornography consumption? They really have the same meaning. Pornography consumption has meant pornography using/watching (Morgan, [2011](#)), while pornographic watching has also meant pornography using/watching. So why do some researchers use the word ‘watch’ instead of ‘consumption’. Usually the word “consumption” makes people think of food consumption. However, it related to the habitual usage of a particular consumable which in this instance is SEM that stimulate a demand (Goldsmith, Dunkley, Dang, & Gorzalka, [2017](#); Mattebo, Tydén, Häggström-Nordin, Nilsson, & Larsson, [2013](#); Poulsen, Busby, & Galovan, [2013](#); Prause & Pfaus, [2015](#)).

Pornographic watching: The use of pornography nowadays is associated with affordability, anonymity and accessibility. These factors seem to be the key reasons for increased pornography use (Hald & Malamuth, [2015](#); Regnerus & Uecker, [2011](#)). Researchers found that sexual arousal and curiosity to be the primary motivators for pornography use among emerging adults, with an increasing number of users being young adults who find it a seemingly safe way to explore their sexuality. Among adults, 67% of males and 49% of females state that pornography is an accepted activity while 87% of males and 31% of females reported viewing pornography on a regular basis with use peaking at age 22 and subsequently decreasing (Carroll et al., [2008](#)). Pornography appears to be a common practice among youth and can also be linked to positive and negative health outcomes especially female youths while male pornography usage is an indicator of risky behavior (Willoughby, Hall, & Goff, [2015](#)). According to Regnerus and Uecker (2011), they found that thirty percent of youths reported viewing pornography out of curiosity, 19% seeking sexual arousal, and 13% were hoping to become a better sexual partner. They also found that the primary motivation behind youths’ pornography use was to fulfill curiosity and to become sexually aroused.

Masturbation usually accompanies pornography use as a way to relieve sexual tension but is a weak substitute for sexual intercourse and lacks the emotional connection that comes with sexual intercourse and is thus less satisfying (Regnerus & Uecker, [2011](#)).

Pornography exposure: individual have develop an acceptance of people using pornography, (Gilkerson, [2012](#)).

1.1.2. Youth

According to the categorization of the World Health Organization, youths are the people aged between 15 and 24 years (WHO, [2018a](#)). Youth is the time of life when one is young, and often means the time between **childhood** and **adulthood**. It is also defined as “the appearance, freshness, vigor, spirit, etc., characteristic of one who is young” (Dictionary, [2013](#)).

Youth is also mentioned as a phase of rapid physical and cognitive growth. This is a sensitive stage of life where both males and females experience attitude and behavior changes in their life. Not only do they start taking adult shape but they also become sexually mature. As an outcome youth at this age are often attracted towards the opposite sex which leads to intimate relationships. Furthermore, this is also the period where one develops their cognitive power making them capable of abstract and critical thoughts. Youth is the period where humans starts experiencing sense and decision making of their self-awareness and emotional independence (UNFPA, [2014](#)).

The target group of this study is the youth of the university between 18 and 24 years. They are not only having already acquired major physical changes, they also have obtained cognitive maturity. The typical youth features like risk taking, curiosity, and anxiety are less prevalent among these older youths. Youth is supposed to be the period of opportunity when they can change their attitude and behavior. However, they still have strong peer influence which is more significant more than parental guidance (Khanal, [2016](#)).

University students are the biggest group (31%) which view pornography because they may seek pornographic information to satisfy their curiosity, develop their sexuality or heal their sexual relationship with their partner (Leahy, [2009](#)). watching pornography has made students change their behavior and develop an addiction to watching it. In some cases to become more addicted means being fascinated with watching porn (Laier & Brand, [2017](#)). A significant theme in the literature is that pornography watching can have negative health effects on the individual viewer (Corneau & Van der Meulen, [2014](#)). In addition, youth are exposed to pornography before having sex at an average of 53% and 30 million youths were infected with STD or HIV while others had early pregnancies and abortions (Kraus & Russell, [2008](#)).

1.2 Classification of Pornography

Pornography, often colloquially referred to as porn, is any material whether written and visual that consists of sexually explicit material and that is intended to sexually arouse. While pornography has existed, in some form, for millennia, today it is most readily available online though it does also continue to be available in traditional forms of literature, audio-media, and magazines. In addition, pornography is a general term used to refer to human gestures and gestures intended to seduce and seduce the sexual instinct of the opponent. Pornography can be divided into many categories: First, mild pornography (just kissing, hugging) consists of stimuli such as nudes, persons engaging in petting, and nonviolent intercourse without genitalia visible. Second, there is moderate pornography that has sexual intercourse which shows the upper parts of the body comprising a stimulating portrayal of consensual nonviolent sexual acts with breasts visible. Final, there is erotic pornography type detailing sexual intercourse or explicit pornography involving the stimulate portrayal of consensual nonviolent sexual acts with genitalia visible (Bleakley, Hennessy, & Fishbein, [2011](#); Hald & Malamuth, [2015](#); Paolucci, Genuis, & Violato, [1997](#)).

The section above outlined the categories of pornographic watching. In the examination, the researchers could not use all three types of pornographic watching for their analysis because the mild pornography (just kissing, hugging) and moderate pornography having sexual intercourse showing the upper parts of the body types were not serious concern and indirectly related to public health concerns about pornography watching in youth. This is because they are easy to see in real life. In contrast, erotic pornography type detailing sexual intercourse affects people more seriously as they need, plan and pursue it more actively so as to view it. Therefore, the researcher chose erotic pornography detailing sexual intercourse type to be dependent variable for examining the associated factors of pornography watching. This type seriously affects people's personal life, physical well-being and has made youths change their behavior to become fascinated and sometimes addicted to pornography (Perrin et al., [2008](#)).

1.3 Measurements for Pornographic Watching

Respondents were asked: Have you viewed erotic pornography through movies/videos, smartphone, television and magazines/books in the last month? Respondents options were measures on a 4-point Likert scale (ranging from 0 to 3), which included never (recorded as zero), rarely (recorded as one time), often (recorded as 2-3 times) and always (recorded as more than four times) per week (Shek & Ma, [2016](#); Sun, Bridges, Johnson, & Ezzell, [2016](#)). There were five categories and five questions related to the main content of pornography watching in youth. Then, the variables were classified in two groups (No and Yes) based on the number of viewing meaning that if they watched erotic pornography through Internet, smartphones, movies/videos television and magazines/books less than two times it was not observed with a habitual tendency (Conner, [2014](#)).

1.4 Negative and Positive Effects of Pornographic Watching

The literature defines pornography is a compulsive, uncontrolled form of the use of pornographic content via the Internet, smartphones, television, movies/videos and magazines/books, and that it has important consequences for the lifestyle of the individual (Spenhoff, Kruger, Hartmann, & Kobs, [2013](#)). Therefore, pornographic watching can have negative and positive effects on the viewer.

1.4.1 Negative Effects of Pornographic Watching

The possible negative implications of viewing pornography are that they can provide youth with emotional problems (Barnes Jr, [2017](#)) and the appearance of compulsive or addictive usage patterns. Moreover several researches have suggested that viewing pornography leads to impairments in interpersonal functioning in terms of decreased sexual satisfaction (Velten & Margraf, [2017](#)) relationship and intimacy difficulties (Groves, Gillespie, Royce, & Lever, [2011](#)), sexual permissiveness (Valkenburg & Peter, [2008](#)) and unhealthy sexual behavior (Carroll et al., [2008](#)). A previous studies in the United States found that those who watched pornography were more likely to be depressed and less likely to follow the rules (Romito & Beltramini, [2011](#)). A similar study in Sweden found that of 96% of youths who had viewed pornography, the more frequent users were more likely to be obese and report difficulties in peer relationship and other possible drawbacks to the individual. In addition, they used pornography as an educational tool, in particular they frequently turned to pornography to educate themselves about sexuality (Mattebo et al., [2013](#)). Another study in Sweden found that more than 50% of youths who viewed porn were associated with interpersonal isolation or were responding to depressed moods or stress (Patterson & Price, [2012](#)). A previous study among Asian countries indicated that of the 53% of young people who watched porn it caused them to have greater sexual permissiveness. This finding help to explain the heightened risk behavior that in turn has caused 30 million youths to experience a greater risk of STDs or HIV while other have undergone

early pregnancies and abortions. These, in turn, lead to still more weaknesses and disabilities (Lou et al., [2012](#)).

1.4.2 Positive Effects of Pornographic Watching

The study found multiple positive effects from viewing pornography for youth. Firstly, viewing pornography can relieve stress and it is one alternative for people when reducing stress and boredom in their life (J. Peter & Valkenburg, [2016](#)). A previous study in Germany found that 53.7% of respondents felt comfortable or less stressed when they viewed pornography. Another study in Germany indicated that 1 in 2 of respondents used pornography for less stress in their sexual activity (Laier & Brand, [2017](#)). Secondly, they viewed pornography to decrease boredom in their free time. Youths accepted that pornography was entertainment to make them cheerful or that they may be use it intentionally to improve their moods or poor psychological health states (Bridges & Morokoff, [2011](#)). A previous study in Croatia found that 35% of youths use pornography for entertainment (Kohut & Štulhofer, [2018](#)). Thirdly, youths believe that pornography is tool to seek out and learn about sex. For the example, pornography has been found to function as a form of sex education for youth because it can provide information about the human body and sexual practices, thus increasing a sense of sexual competence and liberalization and decreasing sexual shame (Sun et al., 2016). A previous study in the United Kingdom found that 60% of youth watch porn to get more information about sex and to fill in gaps in their sexual education (NUS, [2015](#)). A similar study in the United States found that 30% of college students reported viewing pornography for curiosity (Regnerus & Uecker, [2011](#)). Lastly, viewing pornography among youths may be a way of reducing anxiety because pornography makes them have confidence in one's sexual self and sexual abilities which are integral contributors to a quality of life and hoping to become a better sexual partner (Regnerus & Uecker, [2011](#)). Some researchers claim that it is the ultimate freedom of sexual expression, imparting a feeling of power and liberty (Cox, Mills-Koonce, Propper, & Gariépy, [2010](#); Laier & Brand, [2017](#)).

1.5 Situation of Pornographic Watching Around the World and in the Lao PDR

1.5.1 Global Status of Pornography

Pornography products earn 97 billion dollars in sales annually (Maes & Levinson, [2012](#)). More money is spent on porn every year than movie tickets and all other forms of performance related entertainment combined. There are 420 million web pages containing pornographic content, with 700 million DVDs rented out yearly and 13,000 hardcore videos produced every year (Zacharias, [2017](#)).

As indicated by Pornhub's report, the United States of America is the leading country with regards to nations that watch the most porn. The United Kingdom stands in the second position and the third place is tied between is India and Japan (Pornhub.com, [2016](#)).

Pornography is a widespread feature among the top 50 most visited websites and more than 90% of youths have viewed pornography in their lives. In addition, frequent use of pornography has been associated with relationship dissatisfaction among coupled men and women (Conner, [2014](#)). According to pornography industry websites 4,599,000,000 hours of pornography viewing occurred worldwide with approximately 23 billion viewers. This means that around 44,000 people porn sites every minute. In recent time, there has been an increase of 31% for viewing online pornography by youth globally and from that demographic there is a slightly higher percentage of 33% for 18–24 year old viewers (Pornhub.com, [2016](#)). Pornography viewing by youth is common; the frequency of viewing at 89% by males is a high percentage when compared with females who register at 57%. In addition, males spend more time than females watching porn (Rissel et al., [2017](#)) and it has become an essential part of youth culture. The frequency access to pornography by youth was 31.88% for numerous times, 20.94% for several times, 28.13% for occasional usage and 19.06% for those who accessed porn on once occasion (Kamaku & Mberia, [2014](#)).

1.5.2 Status of Pornographic Watching in Laos

Pornography is not a new phenomenon; however, the rise of pornography in society means that it is more accessible, diverse and normalized than ever before and has become more acceptable of people in the present. However, there is not clear evidence to indicate that Lao people watch pornography in excessive amounts. Nevertheless, an increasing number of people are taking and sharing explicit images and videos of themselves, thus increasing Internet consumption with a rise of 36.7% per month by users in 2017 (Stats, [2018](#)).

1.6 Factors Affecting Pornographic Watching

In reviewing the literature on the effects of pornography watching there is a variety of evidence suggesting risk and the chance of harm from being in deep frequent exposure to pornography. There effects include predisposing, reinforcing and enabling factors which can alter behavior.

1.6.1. Predisposing Factors.

These factors consist of individual (sex, age, marital status), parental and attitudinal factors.

Sex is found to be one of the key factors in pornography watching. According to a previous study in Canada, it showed that males experience a higher percentage (64%) of pornography watching than females (30%) (Poulsen et al., 2013). Among males youths in the Nordic countries (Sweden, Denmark, Norway and Finland), 92% responded that they had viewed pornography. Approximately 99% of the males reported having viewed more pornography than females (Mattebo, [2014](#)). A previous study in Hawassa City, Southern Ethiopia indicated that male students had almost 1.8 times higher exposure to SEMs when compared to female students (95 % CI: AOR 1.84(C.I= 1.22, 2.79) (Habesha, Aderaw, & Lakew, 2015). One study noted that males have been found to be more likely to be exposed to SEMs than females (Such as, seven times likely to report using pornography ($p < 0.001$) (Jensen, [2013](#)). A similar study in the United States indicated that males were likely to watching pornography more than females (63.4% and 39.5% respectively)

(Bleakley et al., [2011](#)). Some studies found that close to 50% of men reported watching pornography weekly or more often while only 3.2% of women reported weekly viewing. Others research depicted men doubling women's weekly average of online sexual use, 2.8 hour/week contrasted to 1.4 hour/week (Hertlein, [2012](#)). Conversely, according to Pornhub countries with a high proportion of female pornography watching were Jamaica, Micronesia and Moldova (46%, 42% and 40% respectively) and there was a 26% average proportion of female pornography watching in worldwide (Pornhub, [2017](#)). Another study found that one third of pornography viewers are women (Webroot, [2018](#)). The data from these reviews has shown that "sex" is one of the most important factors in pornography watching.

Age: Previous studies have found that age is one of the factors that is associated with pornography watching. A previous study in England found that watching pornography can be distributed freely to people over 18 years of age. People in this age group constituted approximately 53% of pornography viewers (Flood, [2009](#)). A similar Study in the United States found that more than half (64%) of the respondents reported that they viewed pornography when they were aged over 18 year. Two thirds (67%) of respondents between the ages of 31 and 49 viewed pornography at least monthly and one half of them between 50 and 68 year of age look at porn monthly (Kraus, Rosenberg, Martino, Nich, & Potenza, [2017](#)). In contrast, viewing pornography is a surprise for people who are under 18 with approximately 44% having seen some online pornography (A. Quadara, A. El-Murr, & J. Latham, [2017](#)). The researchers found that eleven is the average age that a child is first exposed to porn, and 94 percent of children will see porn by the age of 14 (Gibbons, [2012](#)). The data from these reviews has shown that "age" is one of the most important factors in pornography watching.

Marital status: marital status is one of important factors in viewing pornography among youth. A previous study found that more than half (54%) of respondents who had a boyfriend/girlfriend (or any sex partner) had watched pornography in order to learn how to do something sexual. These are consistent with prior studies

that have found that some youth use SEMs to learn about sexual organs and functions, the mechanisms of sex, and to further sexual identity development (Arrington-Sanders, Trent, Morgan, Harper, & Fortenberry, [2014](#); Kubicek, Beyer, Weiss, Iverson, & Kipke, [2010](#); E. F. Rothman et al., [2012](#)).

Parental status: Parents are significant factors that influence a youth's porn watching. A parent's level of education and the income of the family have a deciding influence. Living with both parents combined with the rest of the living arrangements resulted in a marginal association statistic (OR: 1.5; 95% CI: 1.0 – 2.2; $p=0.05$) suggesting that those living with both parents were one-and-a half times more likely to state that they were more knowledgeable about porn than their counterparts (Watson & Smith, [2012](#)).

Attitude: Attitudes are the main factors influencing the viewing of pornography by youth. An Australian survey of pornography users found 58% of respondents thought pornography had had a very positive or a positive effect on their attitudes towards sexuality; 35% felt it had had no effect; and 7% thought it had a negative effect or a large negative effect (A. Quadara, A. El-Murr, & Latham, [2017](#)). The main positive effects included feeling less repressed about sex (53.8%); feeling more open-minded about sex (49.7%); an increased tolerance of other people's sexualities (40.1%); giving pleasure to consumers (40.5%); providing educational insights (61.3%); sustaining sexual interest in long-term relationships (33.3%); making viewers more attentive to a partner's sexual desires (31.7%); helping consumers find an identity or community (30%); and helping them to talk to their partners about sex (37.6%) (McKee, [2007](#); Wallmyr & Welin, [2006](#); Watson & Smith, [2012](#); WHO, [2018b](#); Zacharias, [2017](#)). Furthermore, pornography has been found to function as a form of sex education for young people that can provide information about the human body and sexual practices, thus increasing a sense of sexual competence and liberalization and decreasing sexual shame. On the other hand, the common effects from having negative attitude about watching pornography were that led objectifying people, caused them to have unrealistic

sexual expectations, caused relationship problems, caused a loss of interest in sex and led to addiction (A. Quadara et al., [2017](#)). The results from previous qualitative research study found that the common negative effect, mentioned by 18 youth (1.8%) was that pornography led to them to objectify people. Sixteen youth (1.6%) respondents stated that pornography caused them to have unrealistic expectations, both of themselves and other people's bodies and pleasure. Five youth (0.5%) said that pornography caused problems in a relationship, four youth (0.4%) found it had led to a loss of interest in real sexual contact, and four other adolescents had a problem with an addiction to pornography (McKee, [2007](#)).

1.6.2. Reinforcing Factors

This study is looking to identify the people who influence students to take up watching pornography including peers and family member.

For a family, pornography hurts everyone namely children, adults, youths, relatives, and society. Among youths, pornography hinders the development of a healthy sexuality; it changes sexual attitudes and social realities. The family unit has a direct and statistically significant positive relationship on watching pornography due to the intimacy of the family group. The behavior of a youth's family has an important role in the development of the youth's personality because the family is where the youth first gets experience and education (Afifi, Joseph, & Aldeis, [2008](#)). Forty-seven percent of families in the United States reported that pornography was a problem in their home (Wright, Tokunaga, & Bae, [2014](#)). A large study showed that 81% of youth viewed pornography at home. Males reported that the influence of people in the family to support youths in viewing pornography were brother 33%, father 12% and sister 4%. Meanwhile females responded that the influence of family members to support youths to view pornography was broken down with brother 41%, sister 13% and mother 7% (Wardhani, Tamtomo, & Demartoto, [2017](#)).

Friends groups have the most powerful impact on the habit of youth and their behavior various forms (Shek & Ma, [2016](#)) of viewing pornography material are on

the rise because of peer pressure which is the key factor that drives' youth sexual activity and watching pornography. Youths tend to ignore or reject the possible impacts of viewing pornography (Van Ouytsel, Ponnet, & Walrave, [2014](#)). In northern Europe, almost all males 60% have viewed pornographic material at the suggestion of their friends (Similarweb, [2017](#)). A previous study in the United States found that 71% of participants had a friend to encourage to view pornography (Owens, Behun, Manning, & Reid, [2012](#)).

1.6.3. Enabling Factors

These are the factors that influence the sourcing and accessibility of pornography. According to Lou (2012), the main sources of information about watching pornography come from having seen pornographic site on the Internet (50%-84%), through smartphone applications (61%-87%), movies/videos (86%), television programs (87%) and having read pornographic magazines/books (75%) (Lou et al., [2012](#)). A previous studies show that the occurrence of pornography use was significantly related to the practice of content on sexually explicit sites and could be developed through an exposure to pornography and sexual models on the Internet that is imitating and copying such acts. The main source of information about the Internet was friends (63.3%). The frequency of use showed that 29.5% of information accessed the Internet every day. Youth spend more time with media than they do in any other activity with an average of 7 hours/day. Today's youth have unprecedented access to new media and use it expected and unexpected ways. Recent research by the Pew Internet and American Life Project revealed that 93% of youths aged 12 to 17 were going on-line, and 71% had a cell phone. Internet users reported watching videos (57%), creating and visiting social networking sites such as Facebook (65%), and making online purchases (38%) (Strasburger, Jordan, & Donnerstein, [2010](#)).

Pornographic watching has been greater in recent years than before because of the convenience, easy accessibility and privacy of SEMs made available through the Internet, television, movies/videos and magazines/books. It was revealed that 88%

of males and 45% of females had watched SEMs and spent an average of more than 7 hours per day in the past six months accessing media sources (Strasburger et al., [2010](#)). Youth regularly use the Internet for non-recreational (e.g., doing homework and project) and entertainment purposes (e.g., playing online video games, watching videos, visiting social networking sites). With regards to sexual content on the internet, music, movies, television, and magazines, the exposure to sexual content in mass media accelerates youths' sexual activity and those who visit sexually explicit web sites are more likely to have permissive sexual attitudes and multiple sexual partners, and thus engage in risky sexual behavior (such as unprotected sex). Moreover, watching pornography has also been linked with increased sexually aggressive behavior (Owens et al., [2012](#)).

College communities are an important source of pornography watching among students. At this phase they have a great deal of freedom to choose their own interests and needs. Therefore, they have a chance to access pornography than other people. About 60 percent of college students reported that watching pornography in class rooms. Perhaps the most pertinent issue relating to pornography is file sharing in peer-to-peer networks. This has the highest rate of use compared to other pornographic media exchanged by youth (Collins, Martino, & Shaw, [2010](#)). The most common setting to watch pornography was at home, and most youth watched it alone. Seventy-nine percent of families have private bedrooms to which the door can be closed thus increasing the likelihood for youths to view pornography with relative ease. Therefore, it is easy for youths who need to access sources of information for pornography (have Internet/Wi-Fi use contract) by using devices in the home (e.g. television, films, computer and smartphone) (Ofcom, [2017](#)).

1.7 Conceptual Frame Work

A comprehensive structure for assessing health needs designing, implementing, and evaluating health promotions and other public health programs to meet the target needs. PRECEDE provides the structure for planning a targeted and focused public

health program. PROCEED provides the structure for implementing and evaluating the public health program (Figure 1).

PRECEDE stands for Predisposing, Reinforcing, and Enabling Constructs in Educational Diagnosis and Evaluation. It involves assessing the following community factors:

- Social assessment: Determine the social problems and needs of a given population and identify desired results.
- Epidemiological assessment: Identify the health determinants of the identified problems and set priorities and goals.
- Ecological assessment: Analyze behavioral and environmental determinants that predispose, reinforce, and enable the behaviors and lifestyles that are identified.
- Identify administrative and policy factors that influence implementation and match appropriate interventions that encourage desired and expected changes.
- Implementation of interventions.

PROCEED stands for Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development. It involves the identification of desired outcomes and program implementation:

- Implementation: Design intervention, assesses availability of resources, and implement program.
- Process Evaluation: Determine if the program is reaching the targeted population and achieving desired goals.
- Impact Evaluation: Evaluate the change in behavior.
- Outcome Evaluation: Identify if there is a decrease in the incidence or prevalence of the identified negative behavior or an increase in identified positive behavior (Green & Kreuter, 1999).

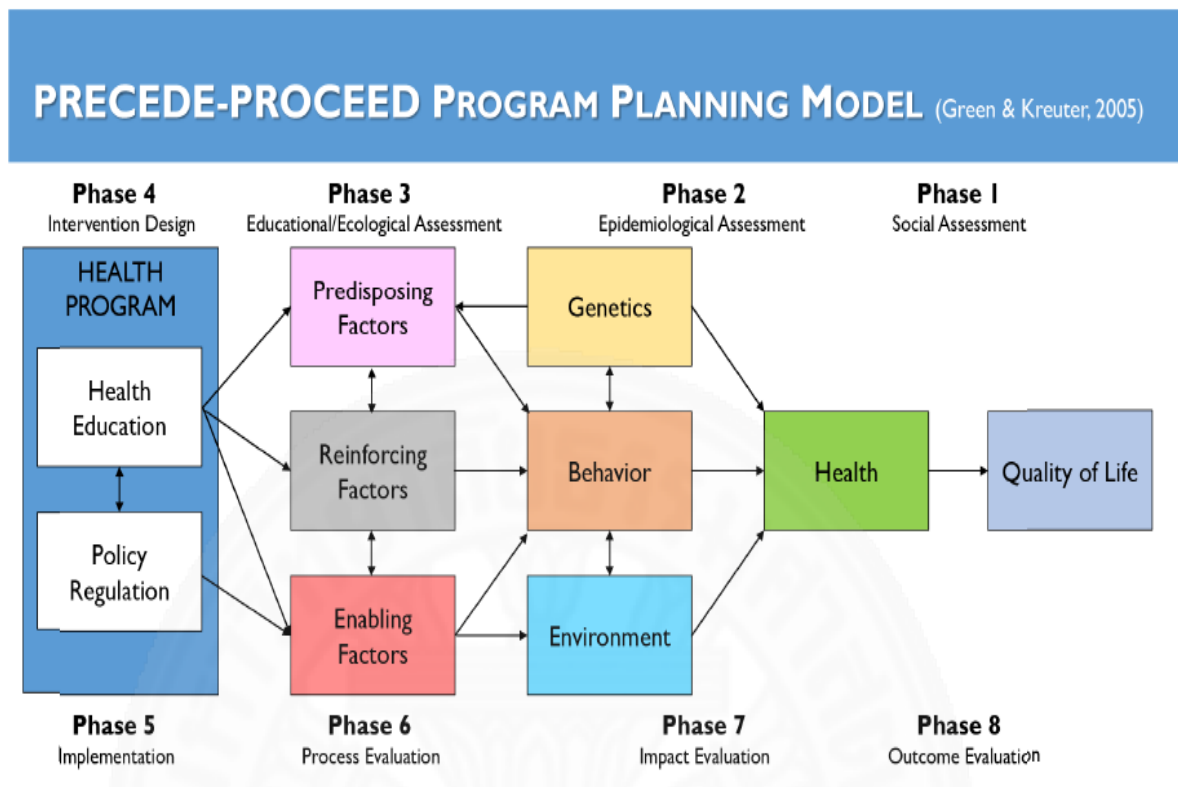
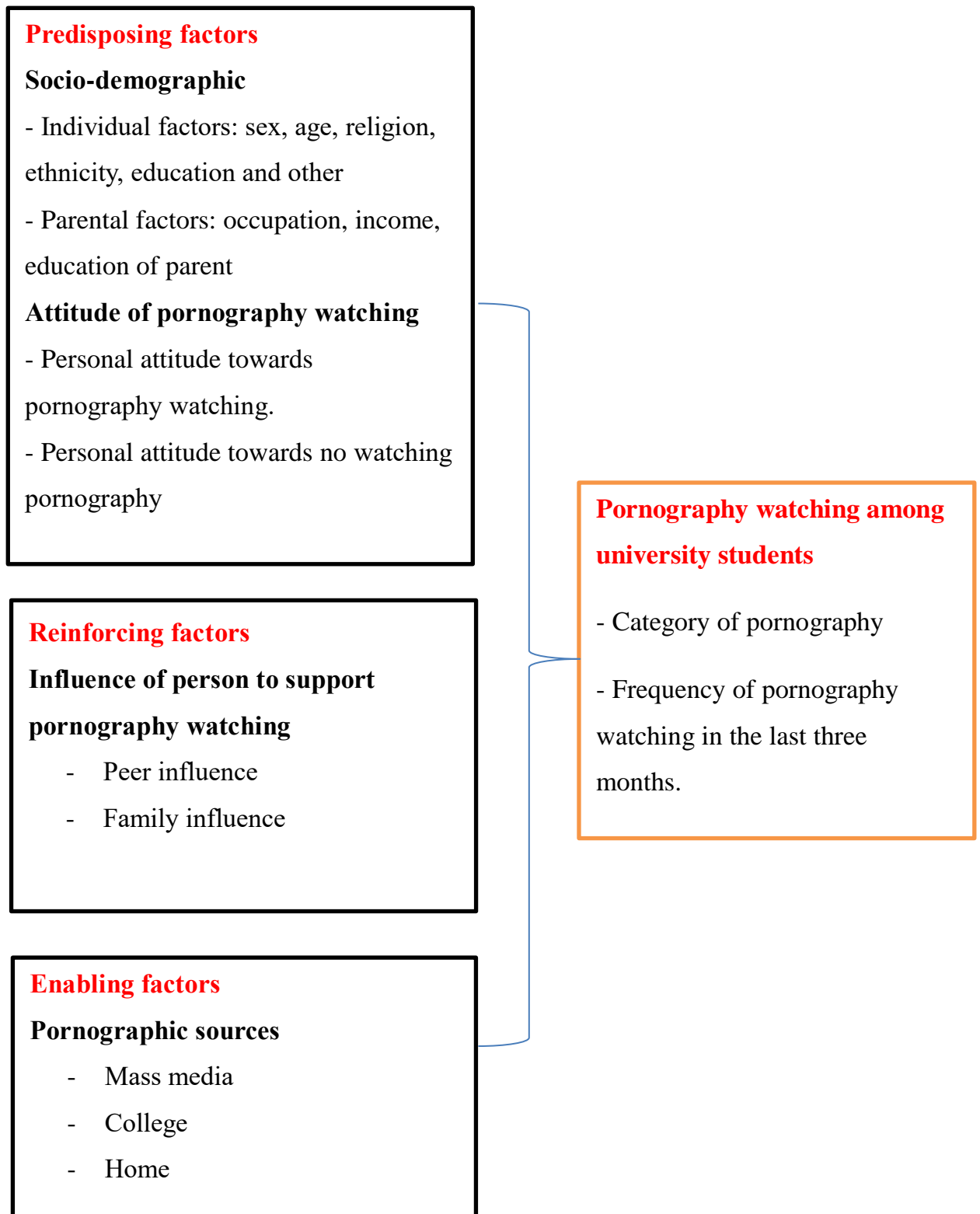


Figure 1.1: Conceptualization of the PRECEDE–PROCEED model of health promotion.

This study will build upon the PRECEDE–PROCEED theory to explain the behavioral changes identifies. It provides a comprehensive structure for assessing health and quality of life needs. In this theory framework there are eight phases (Social Diagnosis, Epidemiological, Behavioral & Environmental Diagnosis, Educational & Ecological Diagnosis, Administrative & Policy Diagnosis, Implementation, Process Evaluation, Impact Evaluation and Outcome Evaluation). For this study we conduct two phase (phase two and three, namely Epidemiological, Behavioral & Environmental Diagnosis, and Educational & Ecological Diagnosis).

Figure 1.2: The conceptual framework of pornography watching and associated factors among university students at the UHS



Chapter 2: Subject and Methodology

2.1. Study Area and Period

The study setting is the University of Health Sciences (UHS) in Vientiane Capital, Lao PDR. The population for this study comprised of undergraduate students who was youths between the ages of 18 and 24 years. The UHS was established in 2001, and comprise of seven faculties (Faculty of Medical Science, Faculty of Pharmacy, Faculty of Dentistry, Faculty of Basic Sciences Faculty of Nursing, Faculty of Medical Technology and Faculty of Public Health) with approximately 2,500 students in 2018. The students come from different ethnic groups including Lao, Hmong, Yao, Khmu and Akha, and they have student's representatives. The students involved in the survey were full-time undergraduates.

2.2. Study Design:

The study used the cross-sectional design to collect data by use self-administrated questionnaires (SAQ) to get information. In this method, a researcher posed a series of questions to respondents; summaries were made of the responses given by university students using percentages, frequency distribution and some other statistical approaches.

2.3. Sample Size:

The sample size was students drawn from two faculties at the UHS and the sample size was calculated by using the formula below:

$$n = \frac{NZ_{\frac{\alpha}{2}}^2 P(1 - P)}{e^2 (N - 1) + Z_{\frac{\alpha}{2}}^2 P(1 - P)}$$

- N: Population size (805 people)

- $Z_{\alpha/2}$: Level of confidence according to the standard normal distribution (5% ($\alpha = 0.05$) $Z_{\alpha/2} = 1.96$, for confidence level 95%).

- p: 50%=0.5 (P is expected proportion of pornography watching. There was no reference proportion from previous studies, hence we used p=50% or 0.5% to get the biggest sample size).

- e: tolerate margin of error 0.05

$$805 \times (1.96)^2 \times 0.5 \times (1-0.5)$$

$$n = \frac{\quad}{(0.05)^2 \times (805-1) + (1.96)^2 \times 0.5 \times (1-0.5)} = 261$$

$$(0.05)^2 \times (805-1) + (1.96)^2 \times 0.5 \times (1-0.5)$$

Assuming a 10% non-response rate, design effect 1.3, the sample size was:

$$n = 261 \times 1.3 + 10\% = 260 \times 1.3 + 26 = 365$$

The final sample included a total of **365 university students**

2.4. Sampling Method:

The research was conducted at the University of Health Sciences (UHS) and a multi-stage sampling method was applied. The first step, cluster sampling was used to decide the selection of two faculties at the UHS; the Faculty of Medicine and the Faculty of Pharmacy. The sample group included all grades in these faculties. For the second step, stratified random sampling was used to calculate the percentage of students in each grade level and the number of representative students needed. Finally, a systematic random sampling technique was selected for students in each grade. The researchers explained the purpose of the study and benefits of this study to participants clearly and then had them sign a consent form before conducting the interviews.

Why do we select UHS? There are few reasons. The most important, is the convenient selection for researchers because the subjects came from health sector and the researchers were more familiar with the UHS than other universities. The second reason was to explore how the knowledge, attitudes and behavior of health science students toward watching pornography had evolved. With the assumption that health students are more knowledgeable about human biology and may be familiar with ways to access pornography, it was therefore believed the level of watching pornography would be high.

This study selected medical students from years 3-6 and pharmacy students from years 1-5. There were some differences in the knowledge and skills of medical and pharmacy students due to their learning and practices as well as differences in their undergraduate training and education. Medical students studied about anatomy, physiology, biochemistry, pharmacology and pathology. All these courses were directly applicable in diagnosing, understanding and treating a disease, while pharmacy students focused on chemistry, human biology and physiology, pharmaceuticals (how medicines are made) and pharmacology (how drugs interact with the body).

Figure 2.1: Flow Chart of Sampling Procedure

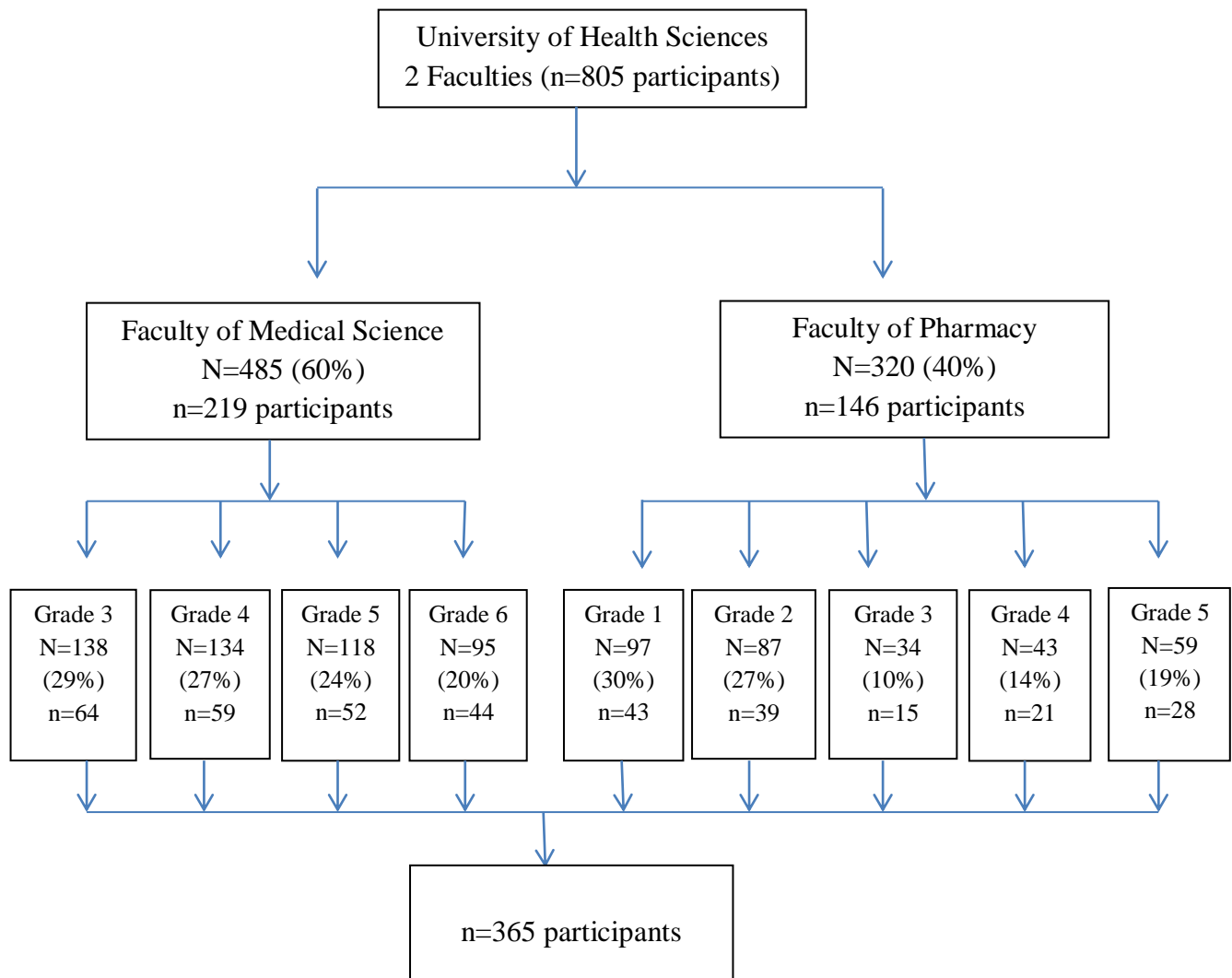


Table 2.1: The proportion of students who were selected from each grade level

Grade Level	Faculty of Medical Science		Faculty of Pharmacy	
	Number of students	Proportion of students	Number of students	Proportion of students
Grade 1			97	43
Grade 2			87	39
Grade 3	138	64	34	15
Grade 4	134	59	43	21
Grade 5	118	52	59	28
Grade 6	96	44		
Total	485	219	320	147

2.5. Data Collection Method

Data was collected over two weeks at the end of January 2019. The trained interviewers collected the data by self-administered interviews using a structured questionnaire and spent about 30 minutes to complete this task. The questionnaire was prepared in English at the beginning and then translated into Lao and back to English to ensure the consistency and pretested with 30 respondents in a no university context before data collection commenced for approximately 1-2 week.

However, the reliability of the instrument (questionnaire) was determined through the pre-testing of the questionnaire at the Military Medical Academy using 30 respondents who had similar characteristics as the target population. The Cronbach alpha test for attitude reliability was carried out and gave a result of 0.74 which showed that the questionnaire was reliable.

2.6. Variables and Definition

The measurement of variables included the dependent and independent variables. Dependent variables consisted of the frequency of watching pornography since the last time and categories of watching pornography. Independent variables included

predisposing, reinforcing and enabling factors. The details of variable and definitions are showed in Annex I.

2.7 Measurements

2.7.1 Socio-Demographic Characteristics

Socio-demographic characteristics constituted the first section of the questions about the participants' sex, age, grade, faculty, marital status, residence, and parental factors. This part consisted of 17 questions.

2.7.2 Frequency of Watching Pornography

Respondents were asked: Have you erotic pornography through the Internet, movies/videos, smartphones, television and magazines/books in the last month? The dependence were measured on a 4-point Likert scale (which ranged from 0 to 3), which included never (recorded as zero), rarely (recorded as one time), often (recorded as 2-3 times) and always (recorded as more than four times) per week (Shek & Ma, [2016](#); Sun et al., [2016](#)). There were three categories and five questions that related to the main content of pornography watching in youth. The variables were then classified in two groups (No and Yes) based on the number of viewing meaning that if they watched erotic pornography through the Internet, smartphones, movies/videos television and magazines/books less than two times it was regarded as not watching pornography actively (Conner, [2014](#)).

2.7.3 Factors Associated of Watching Pornography

- **Attitudes towards watching pornography**

The attitude part consisted of 20 items. The Likert scale ranging from strongly disagrees to strongly agree was applied. A questionnaire with a four points Likert scale for attitude statements was used to determine the strength of the attitude toward pornography watching by students. Each respondent was given a score based on the number of responses provided and ranked from 20-73 points. For the attitude of pornography watching questions, they were found in items 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 with five answers to choose from and they were scored as: 1=

Strongly disagree, 2= Disagree, 3= Agree and 4= Strongly agree. For the attitude of non-pornography watching, questions were found in items 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20 with four answers to choose from and they were scored as: 4= Strongly disagree, 3= Disagree, 2= Agree and 1= Strongly agree.

Using the attitude score guide, the assigned were summed up. The mean score was 46, the minimum score was 20, and the maximum score was 73. Then the scores were modified according to Bloom's criteria (Shultz, Whitney, & Zickar, [2013](#)) and classified into two groups as follow:

- Score 20-46 (<71%): Negative attitude
- Score 47-73 (>71%): Positive attitude

However, this part was pre-tested before data collection at the Military Medical Academy (no study university) using 30 respondents with similar characteristics as the target population. Then the Cronbach alpha test of attitude reliability was done which gave a result of 0.74 showing that the questionnaire was reliable.

- **Influence of people to encourage watching pornography**

Influence of people in family: The influence of family member in to take up watching pornography were categorized and coded using 0=No and 1=Yes. If respondents reported Yes they used code to indicate father (0=No, 1=Yes), mother (0=No, 1=Yes), grandfather (0=No, 1=Yes), grandmother (0=No, 1=Yes), brother (0=No, 1=Yes), sister (0=No, 1=Yes), and others (0=No, 1=Yes). This variable was described utilize find and describe the relationship of watching pornography according to family influence.

Peer influence: For the influence of people classed as friend and acquaintances in the viewing pornography they were categorized with 0=No and 1=Yes. If respondents reported Yes they used code to identify friends (0=No, 1=Yes), neighbor (0=No, 1=Yes), and others (0=No, 1=Yes). This variable was used to finding and describes the relationship of pornography watching in these groups.

- **The sources of watching pornography**

This part included two questions about sources of pornography material for watching with multiple choice questions (respondents could choose more than one choice for their sources).

2.8. Data Analysis Method

2.8.1 Data Entry

The data forms were entered into the standard relational database Epi.Info 6.0. The data collected was coded and analyzed using statistics analysis software, namely SPSS version 13.1, after rechecking the data, clarifying data entry errors, accounting for missing values, and code scoring. This was carried out for the following parts of the questionnaire. All questionnaires were checked by the supervisors during the fieldwork stage of data collection.

2.8.2 Statistical Techniques

After data collection and data entry was completed, data analysis took place using in the following method:

- Descriptive statistics were used to describe the demographic characteristics of the subject. Categorical variables were presented as frequencies and percentages while continuous variable were presented as mean and standard deviations for watching pornography among the university students.

- Logistic regression analysis was used to identify any association between independent variables (i.e., individual and parental characteristics, predisposing, enabling and reinforcing factors) and pornography watching (i.e., category of pornography watching and frequency of watching pornography). Logistic regression was used to examined the odds ratio (OR) for comparing the relative odds of the occurrence of outcomes for watching pornography, given exposure to the variables of interest namely demographic factors, personal attitudes of the university students, influencing people to support watching pornography and sources of pornography. A 95% confident interval was used to estimate the

precision of the odds ratio (a large confidence interval indicated a low level of precision for the odds ratio, whereas a small confident interval indicated a higher precision for the odds ratio). A p-value of 0.05 was used to determine the statistical significance of the test. Lastly, the outcomes were presented in the text and tables.

2.9. Ethical Consideration

The study was undertaken after the National Ethics Committee for Health Research, Ministry of Health, Lao PDR and the International Review Board of the Hanoi University of Public Health reviewed and approved the research protocol. Verbal consent was obtained from participants prior to the interviews with the approval of the National Ethics committee for Health Research due to the sensitive topic examined in the questionnaire. Participants were informed about confidentiality agreement that was used to ensure the privacy of the participants. The participation of all participants was voluntary and measurements were taken to assure respect, dignity and freedom of each individual participating in the study. Information on the purpose and procedures of the study was explained. Participants were guaranteed anonymity during and after the research period. When conducting an interview no name was not written, nor an address of the participant recorded, the interviewer only wrote a code number to represent each participant.

Chapter 3: Results

This research was conducted with the aim of describing pornography watching and associated factors for 365 university students aged between 18-24 years, attending grade 1 to grade 6 in the two faculties at the University of Health Sciences. The study also aimed to describe the proportion of pornography watching among university students at the UHS and to identify the associated factors for watching pornography among university students at the UHS. The results and discussion of this research are presented as follows.

3.1 Socio-Demographic Characteristics

Table 3.1: Socio-demographic characteristics of respondents (N=365)

Demographic variables	Frequency (N=365)	Percentage (%)
Sex		
Female	202	55.3
Male	163	44.7
Ages		
18-20	90	24.6
21-22	105	28.8
23-24	170	46.6
Min=18, mean=21.9, Max=24, SD=1.7		
Ethnicity		
Lao	254	69.6
Akha and Hmong	74	20.3
Khmu	37	10.1
Religion		
Buddhist	263	72.0
Animist	102	28.0
Faculty		
Pharmacy	146	40.0
Medical	219	60.0
Grade		
Grade 1-3	161	44.1
Grade 4-6	204	55.9
Marital status		
Single	259	70.9
Have boy/girl friend	76	20.8
Married	30	8.3

Demographic variables	Frequency (N=365)	Percentage (%)
Live with whom		
Family	170	46.6
Living alone	35	9.6
With roommate, boy/girl friend	160	43.8
Members in family (N=170)		
1-5 people	111	65.3
6-11 people	59	34.7
Members in shared accommodation (N=160)		
1-4 people	99	61.9
5-10 people	51	31.9
11-18 people	10	6.2
Parental status		
Together	333	91.2
Separated	17	4.7
Widowed	15	4.1
Father's occupation (N=355, dead 10)		
Employed (urban commercial)	50	14.1
Employed (government staff)	165	46.5
Farmer	140	39.4
Mother's occupation (N=360, dead 5)		
Employed (urban commercial)	74	20.5
Employed (government staff)	104	28.9
Farmer	182	50.6
Family status		
Poor	33	9.0
Average	295	80.8
Wealthy	37	10.2
Source of money earn		
Get from parents	279	76.4
Earn money by yourself	86	23.6
Allowance from parents (N=279)		
5.000 kip/day-30.000 kip/day	138	49.6
35.000 kip/day-70.000 kip/day	102	36.5
More than 75.000 kip/day	39	13.9
Money earn by yourself (N=86)		
600.000 kip/month-1.400.000 kip/month	15	17.4
1.500.000 kip/month-2.000.000 kip/month	57	66.3
2.100.000 kip/month-4.600.000 kip/month	14	16.3

Sources: computed from field survey data during 17-18/1/2019 at UHS.

A total of 365 students at the UHS completed the self-administered questionnaire. The socio-demographics of respondents are presented in [Table 3.1](#). There were

more females respondents (N=202, 55.3%) than males. The participants were aged between 18 and 24 years (Min=18, mean=21.9, Max=24, SD=1.7) and most of participants were 23-24 years of age (N=170, 46.5%), ethnic Lao (N=254, 69.6%) and Buddhist (N=263, 72.0%). The number of students at the Faculty of Medical was higher than the Faculty of Pharmacy (N=219, 60%), the number of students in grades 4-6 (N=204, 55.9%) was the highest. More than two thirds (70.9%) of the participants were single and lived with their parents (46.6%) at the time of the interview. Each family consisted of 1-5 people (N=111, 65.3%), while other respondents lived with roommate (N=160, 43.8%) and each shared residence had 1-4 people (N=99, 63.9%).

The majority of students (91.2%) reported that their parents were living together. The most common occupation for father was in the government service (46.7%), while for mothers' it was farming (50.6%). Most of the students reported that their family's had enough to live on (80.8%), and they got an allowance from their parents (76.4%). However, others relied on earning their own income (23.6%). About half (49.6%) of the respondents were receiving allowances which ranged I value from approximately 5,000 kip/day-30,000 kip/day.

3.2 Descriptive Frequency of Pornography

The frequency of pornography watching was classified into three categories to measure the level of pornography watching among university students. There were classed as follows: 1) mild pornography type, 2) moderate pornography type and 3) erotic pornography type

3.2.1 Results of Pornography Watching for Three Categories

Table 3.2: Results of Pornography Watching for Three Categories using a Likert Scale among UHS

VariableS	Pornography Watching			
	Never N(%)	Rarely N(%)	Often N(%)	Always N(%)
Mild Pornography Type				
... watch on the Internet	43 (11.8)	114 (31.2)	148 (40.6)	60 (16.4)
... watch on a smartphone	43 (11.8)	123 (33.7)	142 (38.9)	57 (15.6)
... watch in movies/videos	84 (23.0)	116 (31.8)	118 (32.3)	47 (12.9)
... watch on television	127 (34.8)	117 (32.0)	91 (24.9)	30 (8.3)
... viewing in magazines/books	194 (53.1)	92 (25.2)	56 (15.4)	23 (6.3)
Moderate Pornography Type				
... watch on the Internet	68 (18.7)	128 (35.1)	129 (35.3)	40 (10.9)
... watch on a smartphone	62 (17.0)	130 (35.7)	140 (38.3)	33 (9.0)
... watch in movies/videos	115 (31.6)	104 (28.5)	117 (32.0)	29 (7.9)
... watch on television	172 (47.2)	127 (34.7)	62 (17.0)	4 (1.1)
... viewing in magazines/books	217 (59.4)	104 (28.4)	39 (10.8)	5 (1.4)
Erotic Pornography Type				
... watch on the Internet	92 (25.2)	141 (38.6)	96 (26.3)	36 (9.9)
... watch on a smartphone	93 (25.5)	145 (39.7)	101 (27.7)	26 (7.1)
... watch in movies/videos	141 (38.6)	139 (38.1)	67 (18.4)	18 (4.9)
... watch on television	217 (59.5)	117 (32.0)	29 (8.0)	2 (0.5)
... viewing in magazines/books	246 (67.4)	91 (24.9)	24 (6.6)	4 (1.1)

Note: PW scale: 0=Never, 1=rarely, 2=Often, 3=Always.

The results of pornography watching by three categories are presented in

[Table 3.2.](#)

The results showed that respondents were often watching mild pornography on the Internet, smartphones and movies/videos (40.6%, 38.9% and 32.3%). However, the use of televisions and magazines/books (34.8% and 53.1%) was rarely associated with mild pornography as a high number of respondents reported that they never watched or read these materials.

Furthermore, respondents reported that they often watched moderate pornography on the Internet (35.3%), smartphones (38.3%) and movies/videos (32.0%). Nearly half (47.2%) of the respondents were never watched it on television. More than half (59.4%) of them never viewed pornography contained in magazines/books.

In addition, respondents reported that they rarely watched erotic pornography on the Internet (38.6%) and smartphones (39.7%). Less than half (38.6%) of them never watched erotic pornography on movies/videos, and more than half of the respondents reported that they never watched it via television (59.5%) or browsed through such content in magazines/books (67.4%).

3.2.2 Frequency of Pornography Watching

Table 3.3: Frequency of pornography watching among HUS

Variables	Frequency (N=365)	Percentages (%)
Mild Pornography Type		
No	123	33.7
Yes	242	66.3
Moderate pornography Type		
No	165	45.2
Yes	200	54.8
Erotic Pornography Type		
No	216	59.1
Yes	149	40.9

Table 3.3 presents frequency of pornography watching by three categories (mild , moderate and erotic types). Each type had five questions to establish the level of frequency using a Likert scale with these values, 0=never, 1=rarely, 2=often and 3=always. Then the answers were classified into two groups (0=No and 1=Yes) based on the number of pornographic viewings. If the respondents watched through the Internet, smartphones, movies/ videos, television or magazines/books less than 2 times it was denoted as not watching.

The results revealed that more than half (66.3%) of the respondents had watched mild pornography, over half (54.8%) of them had watched moderate pornography and nearly half (40.9%) reported watching erotic pornography.

3.2.3 Reasons for not Watching Pornography

Table 3.4: Reasons for not watch pornography among UHS students

Why not watched pornography	Unhealthy	Do not know how to locate	Afraid	Fear	Other
	N (%)	N (%)	N (%)	N (%)	N (%)
Mild Pornography Type on (N=123)					
Internet	55 (44.7)	27(22.0)	16(13.0)	17 (13.8)	8 (6.50)
Smartphones	61 (49.6)	20(16.3)	19(15.4)	18 (14.6)	5 (4.1)
Movies/Videos	27 (22.0)	48(39.0)	21(17.0)	13 (10.6)	14 (11.4)
Television	16 (13.0)	57(46.3)	23(18.7)	18 (14.6)	9 (7.4)
Magazines/Books	25 (20.3)	70(56.9)	15(12.2)	8 (6.5)	5 (4.1)
Moderate Pornography Type on (N=165)					
Internet	65 (39.4)	46 (27.9)	24 (14.5)	18 (11.0)	12 (7.2)
Smartphones	62 (37.6)	39 (23.6)	34 (20.6)	17 (10.3)	13 (7.9)
Movies/Videos	53 (32.2)	74 (44.8)	20 (12.1)	12 (7.3)	6 (3.6)
Television	49 (29.7)	85 (51.5)	18 (10.0)	7 (4.2)	6 (3.6)
Magazines/Books	31 (18.8)	83 (50.3)	28 (17.0)	16 (9.7)	7 (4.2)
Erotic Pornography Type on (N=216)					
Internet	62 (28.7)	59 (27.3)	43 (19.9)	37 (17.1)	15 (7.0)
Smartphones	66 (30.5)	71 (32.9)	30 (13.9)	38 (17.6)	11 (5.1)
Movies/Videos	57 (26.4)	78 (36.1)	39 (18.0)	33 (15.3)	9 (4.2)
Television	51 (23.6)	81 (37.5)	45 (20.8)	32 (14.8)	7 (3.3)
Magazines/Books	39 (18.0)	93 (43.0)	50 (23.2)	27 (12.5)	7 (3.3)

The respondents' reasons for not watching pornography are presented in [Table 3.4](#).

The reasons for not watching mild pornography were listed as not good for health if watched through the Internet (44.7%) or smartphones (49.6%). Others said it was difficult or did not know how to find it if relying on movies/videos (39.0%), television (46.3%) and magazines/books (56.9%) as their sources.

Meanwhile, the reasons for not watching moderate pornography were reported as unhealthy if viewed through the Internet (39.0%) or smartphones (37.6%). The students said it was difficult or did not know how to find moderate pornography if accessed through movies/videos (44.8%), television (51.5%) and magazines/books (50.3%).

Finally, the reasons for not watching erotic pornography were that it was considered unhealthy (28.7%) if accessed through the Internet. All the other sources, namely smartphones (32.6%), movies/videos (36.1%), television (37.5%) and magazines/books (40.3%), were deemed difficult to navigate or the students lacked the skills to locate erotic pornography in them.

3.3 Associated Factors of Pornography Watching

3.3.1 Personal Attitude Toward to Pornography Watching

Table 3.5: Attitudes of respondents to PW among UHS students based on gender (N=365)

Variable	Strongly Disagree		Disagree		Agree		Strongly Agree	
	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)
Pornography viewing is a common act in daily life	42.1	23.9	49.5	51.5	6.4	20.9	2.0	3.7
Pornography is simple to access	12.4	3.7	21.3	19.6	47.0	52.8	19.3	23.9
I believe that PW can stimulate one's sex life	6.4	4.9	19.3	7.4	56.9	57.7	17.3	30.1
Pornography use exposes me to a variety of experiences	16.3	8.0	38.1	27.6	41.1	54.0	4.5	10.4
My cheerfulness depends on me being able to use pornography	49.0	33.7	42.6	45.4	6.9	17.2	1.5	3.7
PW for young people is one of the best tools around to learn something about sex	22.8	12.9	37.6	35.6	36.6	45.4	3.0	6.1
Using porn provides me with memorable experiences	33.7	16.6	49.0	46.6	16.3	34.4	1.0	2.4
If I watched porn right now, I would have difficulty stopping	42.6	33.1	50.0	52.8	6.0	10.4	1.5	3.7
My heart would beat faster if I was watching pornography right now	26.3	11.0	43.6	36.2	28.7	46.6	1.5	6.1
My need to watch pornography seems overpowering	34.2	25.1	54.9	55.8	8.4	17.2	2.5	1.9
Nothing would be better than PW right now	49.5	44.2	37.1	45.4	6.9	9.2	6.5	1.2
I think pornography should be prohibited by law	7.4	11.1	13.9	16.6	40.6	44.1	38.1	28.2
I think the accessibility of pornography should be limited	2.5	6.1	14.4	12.9	51.0	52.1	32.2	28.8
I feel ashamed after viewing pornography	8.9	14.1	33.2	43.6	44.6	36.2	13.3	6.1
I feel depressed after viewing pornography	9.4	13.5	46.0	50.3	35.6	30.7	8.9	5.5
I feel sick after viewing pornography	11.9	14.1	50.5	56.4	30.2	22.1	7.4	7.4
PW is harmful for health	14.8	16.6	40.1	36.2	38.1	43.6	6.9	3.7
PW makes youths lose their feeling of control	5.9	10.4	24.8	22.1	48.0	51.5	21.3	16.0
PW can make people become anti-society	16.8	15.3	39.6	36.2	34.2	43.6	9.4	4.9
PW is not important for sexual activity	13.9	14.1	49.0	52.8	30.2	26.4	6.9	6.7

Sources: computed from field survey data during 17-18/1/2019 at UHS

The questions measuring the attitudes of respondents towards pornography watching are presented in [Tables 3.5](#). Attitudes towards pornography watching were displayed using four rankings, namely strongly disagree, disagree, agree and strongly agree.

Both female and male students had a firmly negative view that PW was a common action in daily life, with 91.6% of women either disagreeing or strongly disagreeing while 75.4% of men shared the same attitudes. In addition, both female and male students had an affirmative view that PW could stimulate their sex life, with 74.2% of women either agreeing or strongly agreeing while 87.8% of men held the same views. A large majority of students did not believe PW influenced their level of cheerfulness with 91.6% of women and 79.2% of men either strongly disagreeing or disagreeing. An equally high percentage of students believed that access to pornography should be limited, with 83.2% of women and 80.9% of men either agreeing or strongly agreeing. Finally, a clear majority of students felt that pornography should be prohibited by law, with 78.6% of women and 72.3% of men strongly agreeing.

Table 3.6: Level of Attitude towards to PW among UHS students (N=365)

Level of attitude	Number	Percentage (%)
Negative attitude	160	43.8
Positive attitude	205	56.2
Min=20, Mean 46, Max=73 and Cronbach's Alpha=0.756		

The attitude of people is an important influencing factor affecting pornography watching. The results of this study concerning pornography watching attitudes are reported in [Tables 3.5](#) and [3.6](#).

[Table 3.6](#) showed the level of attitude towards watching pornography. There were 20 questions relating to attitude. The mean score was 46, with the minimum score at 20, and the maximum score at 73. According to the mean value, they were

classified into two groups, <46 score represented a negative attitude and >46 score represented a positive attitude. More than 55% of the respondents held a positive attitude towards pornography watching .3.3.2 Influential factors on pornography watching.

3.3.2.1 Family Influences

Table 3.7: Person in family supporting respondent to watch pornography

Person who supports PW	Frequency	Percentage (%)
Do you have a person in your family who encourages youth to watch pornography?		
No	328	89.9
Yes	37	10.1
Person in your family who supports youth to watch pornography (N=37)		
Father		
No	25	67.6
Yes	12	32.4
Mother		
No	33	89.1
Yes	4	10.9
Grand father		
No	36	97.3
Yes	1	2.7
Grand mother		
No	34	91.9
Yes	3	8.1
Sister		
No	34	91.9
Yes	3	8.1
Brother		
No	15	40.5
Yes	22	59.5
Other		
No	35	94.6
Yes	2	5.4

Significant information about family influences is shown in [Table 3.7](#). The majority of respondents (89.9%) did not have any person in their family to promote pornography watching. However, among those who reported having a family

member encourage PW, it was usually male siblings (59.5%) responsible for this behavior. Another point to note from those respondents who gave an affirmative response was that around a third (32%) of their fathers supported pornography watching. In contrast, very few (10.9%) of these same respondents stated that their mothers supported pornography watching. In addition, these respondents reported that they had few sisters (8.1%), grandmothers (8.1%), grandfathers (2.7%) and other relatives (5.4%) condoning the watching of pornography.

3.3.2.2 Peer Influences

Table 3.8: Friends' Influence in Supporting respondents to watch pornography

Person who supports PW	Frequency	Percentage (%)
Do you have a friend/acquaintance who encourages youth to watch pornography		
No	178	48.8
Yes	187	51.2
Friend/Acquaintance who supports youth to watch pornography (N=187)		
General friend		
No	126	67.4
Yes	61	32.6
Close friend		
No	35	18.7
Yes	152	81.3
Neighbour		
No	183	97.9
Yes	4	2.1

Table 3.8 shows the results of friends and acquaintances who support pornography watching. More than half (51.2%) of the students reported that they have a friend to guide them when searching for pornography and usually they were close friends (81.3%), followed by general friends (32.6%) and neighbors (2.1%).

3.3.3 Sources of Pornography for viewing

Table 3.9: Sources of visual pornography

Sources of pornography	Frequency (N=365)	Percentage (%)
Internet		
No	63	17.3
Yes	302	82.7
Smartphone		
No	131	35.9
Yes	234	64.1
Movie/Video		
No	202	55.3
Yes	163	44.7
Television		
No	259	71.0
Yes	106	29.0
Magazine/Book		
No	267	73.2
Yes	98	26.8
School resources		
No	354	97.0
Yes	11	3.0
Materials at Home		
No	358	98.1
Yes	7	1.9

Presented in [Table 3.9](#) are the sources of pornographic watching. The main sources were the Internet (82.7%), followed by smartphones (64.1%) and movies/videos (44.7%). The other sources cited were magazines/books (26.84%), school resources (3.01%) and materials at home (1.92%) respectively.

The result above showed the frequency of pornography watching among university students through three types 1) Mild pornography, 2) Moderate pornography and 3) Erotic pornography. In the examination, the researchers could use all three types of pornography watching for their analysis. This was because mild pornography and moderate pornography were not regarded as serious and only having indirect significance to public health concerns about pornography watching amongst youth.

Therefore, the researcher chose the erotic pornography type to be the dependent variable for examining the associated factors of pornography watching. This type has seriously affected personal lives, physical well-being and has made youths change their behavior to become fascinated pornography addicts (Perrin et al., 2008).

3.4 Bivariate Analysis of Erotic Pornography and Socio-demographic Characteristics

Table 3.10 Bivariate analysis between erotic pornography and socio-demographic characteristics among UHS students

Variables	Erotic Pornography				OR (95% CI)	P-value
	No (N=216)		Yes (N=149)			
	N	%	N	%		
Socio-demographic characteristics						
Sex						
Female	154	76.2	48	23.8	1	
Male	62	38.0	101	62.0	5.2 (3.3-8.2)	0.000*
Ages						
18-20	57	63.3	33	36.7	1	
21-22	69	65.7	36	34.3	0.9 (0.5-1.6)	0.729
23-24	90	52.9	80	47.1	1.5 (0.9-2.5)	0.109
Ethnicity						
Lao	151	59.5	103	40.5	1	
Akha and Hmong	37	50.0	37	50.0	1.4 (0.8-2.4)	0.149
Khmu	28	75.6	9	24.3	0.4 (0.2-1.0)	0.062
Religion						
Buddhist	156	59.3	107	40.7	1	
Animist	60	58.8	42	41.2	1.0 (0.6-1.6)	0.932
Faculty						
Pharmacy	95	65.1	51	34.9	1	
Medical	121	55.2	98	44.8	1.5 (0.9-2.3)	0.062
Grade						
Grade 1-3	101	62.7	60	37.3	1	
Grade 4-6	115	56.4	89	43.7	1.3 (0.8-1.9)	0.220
Marital status						
Single	167	64.5	92	35.5	1	
Have partner	49	46.2	57	53.8	2.1 (1.3-3.3)	0.001*
Live with whom						
Family	109	64.1	61	35.9	1	
Living alone	19	54.3	16	45.7	1.5 (0.7-3.1)	0.276
With boy/girl friend	88	55.0	72	45.0	1.4 (0.9-2.2)	0.092

Variables	Erotic Pornography				OR (95% CI)	P-value
	No (N=216)		Yes (N=149)			
	N	%	N	%		
Parental status						
Together	200	60.1	133	39.9	1	
Separated /Divorced	7	41.2	10	58.8	2.1 (0.7-5.7)	0.130
Widowed	9	60.0	6	40.0	1.0 (0.3-2.8)	0.996
Family status						
Poor	22	66.7	11	33.3	1	
Average	176	59.7	119	40.3	1.3 (0.6-2.8)	0.437
Wealthy	18	48.6	19	51.4	2.1 (0.8-5.5)	0.131
Source of money						
Get from parents	167	59.9	112	40.1	1	
Earn money by yourself	49	57.0	37	43.0	1.1 (0.6-1.8)	0.635
Personal attitude factors						
Negative Attitude	112	70.0	48	30.0	1	
Positive Attitude	104	50.7	101	49.3	2.2 (1.4-3.5)	<u>0.000*</u>
Family						
No	197	60.1	131	40.0	1	
Yes	19	51.4	18	48.6	1.4 (0.7-2.8)	0.309
Friend						
No	124	69.7	54	30.3	1	
Yes	92	49.2	95	50.8	2.3 (1.5-3.6)	<u>0.000*</u>
Sources of pornography						
Internet						
No	43	68.25	20	31.75	1	
Yes	173	57.28	129	42.72	1.6(0.8-2.8)	0.109
Smartphones						
No	80	61.07	51	38.93	1	
Yes	136	58.12	98	41.88	1.1(.7-1.7)	0.582
Movies/Videos						
No	117	57.92	85	42.08	1	
Yes	99	60.74	64	39.26	0.8(.5-1.3)	0.586
Television						
No	142	54.83	117	45.17	1	
Yes	74	69.81	32	30.19	0.5(0.3-0.8)	0.09
School Resources						
No	211	59.60	143	40.40	1	
Yes	5	45.45	6	54.55	1.7(0.5-5.9)	0.353
Materials at Home						
No	214	59.78	144	40.22	1	
Yes	2	28.57	5	71.43	3.7(0.7-19.4)	0.120

Note: *significant association (p<0.05)

The results of the bivariate analysis of erotic pornography and socio-demographic characteristics were presented in [Table 3.10](#).

The factors significantly associated with erotic pornography were sex, marital status, personal attitudes towards watching pornography erotic and the influence of friends. Males watched erotic pornography five times more than females (OR=5.2, 95% CI=3.3-8.2, $P<0.000$). Furthermore, participants with partners were two times more likely to watch erotic pornography compared to singles (OR=2.1, 95% CI=1.3-3.3, $P<0.001$). Moreover, personal positive attitudes towards erotic pornography were two times more likely than negative attitudes (OR=2.2, 95% CI=1.4-3.5, $P<0.000$). However, there was no statistically significant relationship between erotic pornography and age, ethnicity, religion, faculty, grade, living arrangements, parental status, family status and income sources.

In addition, the results showed that no statistically significant relationship was found for family members who supported UHS students to watch pornography. Respondents who had friends to support pornography watching were more than two times likely to watch pornography than those who did not (OR=2.3, 95% CI=1.5-3.6, $P<0.000$). Furthermore, sources of pornography had no statistically significant relationship with erotic pornography.

3.5 Multivariate Analysis for Factors with Erotic Pornography

Table 3.11: Multivariate analysis of factors' association with erotic pornography UHS students

Variables	Erotic Pornography		P-value
	COR (95% CI)	AOR (95% CI)	
Sex			
Female	1	1	
Male	5.2 (3.3-8.2)	4.6 (2.9-7.4)	<0.000*
Marital status			
Single	1	1	
Have boy/girl friend	2.1 (1.3-3.3)	1.9 (1.1-3.2)	0.009*
Attitude			
Negative	1	1	
Positive	2.2 (1.4-3.5)	1.8 (1.1-2.9)	0.014*
Friend			
No	1	1	
Yes	2.3 (1.5-3.6)	1.8 (1.6-2.9)	0.010*

Note: *significant association ($p < 0.05$)

An attempt to identify the best model for pornography watching analysis was presented in [Table 3.11](#). This involved a selection of independent variables to be included into the multiple logistic regression model borrowed from the literature review, and with the results of the univariate analysis. The independent variables had to be significantly correlated with the dependent variables thus achieving a p-value less than 0.05. The backward stepwise was performed to determine the association between factors and pornography watching. Some independent variables which made the model unreliable were excluded and the results were presented by adjusting the odds ratio (AOR) with a corresponding 95% confidence.

After making these adjustments, the factors significantly associated with erotic pornography were sex, marital status, a positive attitude towards watching pornography and the influence of friends. The male students were nearly five times more likely to watch erotic pornography compared to females (AOR=4.6, 95% CI=2.9-7.4, p -value<0.000). The students with a partner were nearly two times more likely to watch erotic pornography compared to singles (AOR=1.9, 95% CI=1.1-3.2, p -value 0.009). The participants with a positive attitude were nearly

two times more likely to watch erotic pornography compared to those who had negative attitudes (AOR=1.8, 95% CI=1.1-2.9, *p*-value 0.014). University students who had influential friends were nearly two times more likely to watch erotic pornography compared to those who did not (AOR=1.8, 95% CI=1.6-2.9, *p*-value 0.010).

Chapter 4: Discussion

The aim of this present study was to determine the frequency of pornography watching and associated factors among university students at the UHS. This study examined the demographic attitudes toward to pornography watching, such as how family and friends' influence correlates to pornography watching among students.

4.1 Frequency of erotic pornography

The findings showed that there were high frequencies (40.9%) of erotic pornography usage among university students. The results were surprising because this was the first study of its type in Laos and it was not anticipated that such a high frequency already existed in the target group. Our findings were high, however, not as high as other studies previously done in countries such as Australia, Kenya, China and Taiwan. These differing results were most likely due to different methods, criteria, and sample groups. For instance, the present study recruited undergraduates who are more likely to have had access to affordable pornography and been able to exchange it without time limits (Kvalem, Træen, Lewin, & Štulhofer, [2014](#)). A previous study in Australia indicated that a high frequency of pornography watching was common and the convenience of doing it was due to unlimited access to sources so that anyone could view pornography (Lim, Agius, Carrotte, Vella, & Hellard, [2017](#)). A similar research in Kenya indicated a higher likelihood of pornography use, due to the fact that students were at a crucial stage in life where they were making choices that affected their sexuality and had a great deal of freedom to choose their own relationships and sexual activities (Wamathai et al., [2014](#)). A previous study from China indicated that more than half (57.4%) of the students used pornography due to curiosity and interest about sexuality (Chi, Yu, & Winter, [2012](#)). In another Taiwanese study there was high (59%) frequency of viewing pornography, they believe that watching pornography was professional equipment that helps them succeed in sexuality and makes their partners happy (Chen, Leung, Chen, & Yang, [2013](#)). A similar result in Singapore found with a

frequency of 50%. It was largely due to the inadequate discussions and lack of guidance from parents, so young people look elsewhere for sex education (Choi, [2008](#)). In addition, another study suggested that frequent viewers of pornography believed using such material could create a more stimulating sex life for them (Hardy, Steelman, Coyne, & Ridge, [2013](#)).

4.2 Factors associated with erotic pornography

The key findings of this research indicated that the factors significantly associated with erotic pornography were in ranking order: 1) sex, 2) marital status, 3) personal attitude and 4) friends' influence.

Sex: Male students watched erotic pornography more than females. This is the first research conducted in Laos which revealed the high proportion of students watching erotic pornography. As a consequence it may be necessary to incorporate sex education topics covering pornography use in high schools so as to counter the problem of widespread and uninformed pornography viewing at the tertiary level. Males were actively watching pornography due to common behavioral aptitudes (Chowdhury, Chowdhury, Kabir, Perera, & Kader, [2018](#)). For example, males were more likely to watch and accept pornography, as well as use it alone, whereas females appeared more likely to view pornography with a sexual or dating partner (Braithwaite, Coulson, Keddington, & Fincham, [2015](#)). Recent research has found a little evidence of association between pornography use and male sexual health disturbances (Landripet & Štulhofer, 2015; Prause & Pfaus, [2015](#)). However, there is concern regarding the impact of pornography watching affecting the health of university students such as early sex, pre-marital sex, abortions, and STD infections (Asekun-Olarinmoye, Asekun-Olarinmoye, Adebimpe, & Omisore, [2014](#); Mattebo, [2014](#)). The UHS findings were similar to previous research in Western countries such as Australia and the United States of America. The results from Australian researchers found that pornography watching was a common practice among young Australians, especially young males. This accounted for one hundred per cent of

males and 82% of females (Lim et al., 2017). A previous study among the US college students reported that 75% of males and 15% of females watched pornography in the past 12 months (Willoughby, Carroll, Nelson, & Padilla-Walker, [2014](#)). A similar study in the US reported that 87% of males and 31% of females watched pornography (Cooper & Klein, [2018](#)). The proportion of UHS respondents who reporting watching erotic pornography was similar to Western countries because of globalization and Laos is becoming increasingly mainstreamed into regional and international networks. Modern technology and trends have given university students easy access to pornographic material (via the Internet, smartphones, movies/videos, television and print media) (Ounaphom, Vongsavanhong, Sayavong, Songbandith, & Sheridan, [2009](#)).

The findings of the study found that the ages of the participants were not associated significantly with erotic pornography. This may be due to demography, cultural differences, socio-economic status, and household characteristics. Therefore the findings were not the same as other studies. For example, lots of research in other countries indicated that age was associated with pornography watching. So these studies found that 94% of children had viewed pornography before reaching the age of 17 (Gibbons, [2012](#)). Another study in the United States found that 64% of respondents had viewed pornography when they were aged between 18 and 30 years old. In addition two thirds (67%) of respondents in the same study aged between 31 and 49 had viewed pornography at least monthly and one half of the people aged between 50 and 68 had looked at pornography monthly (Kraus et al., [2017](#)). When comparing age groups that viewed pornography, people under the age of 17 had a higher percentage than other groups. Why was this group so high? This may have been because the parents were not close to their children; meaning that the parents left their children with mobile phones and other devices therefore enabling them to have more access to pornography and because around this age puberty starts, which is typically accompanied by an enhanced interest in sexuality (Fagan, [2009](#)). Nearly half (47%) of the families in an American study reported that

pornography is a problem in their home due to children knowing and learning from family acts (Wright et al., [2014](#)). In a previous study in Australia it found that children aged 3 to 18 years reported that 78% owned mobile phones, and 93% had laptop or computer access (Sundeen & Sundeen, [2013](#)).

Marital status: UHS students who had partners were significantly associated with erotic pornography. In addition, the results of this study suggested that viewing pornography together with partners may be common for particular youth. There was also a strong likelihood that youths would do something they had seen in pornography. Pornography was one source of information about sex for the youths in this sample. A previous study in America found that over half of the respondents watched pornography to learn about sexual organs and functions, the mechanisms of sex, and to further their sexual identity's development (Arrington-Sanders et al., [2014](#)). In another American study, just over half of the respondents had been asked to watch pornography together by a dating or sexual partner, and 44% had tried to do something sexual that a partner had seen in pornography (E. Rothman & Adhia, [2015](#)). A similar study from Nepal indicated that males and females watched pornography before having sex and emulated what they had seen in pornographic materials (Regmi, Simkhada, & Van Teijlingen, [2010](#)). Another study in Sweden indicated that both partners watched pornography to have greater openness concerning their sexuality and to develop a willingness to experiment with their sexual practices, and to enhance the relationship of their sex life by openly expressing feelings of eroticism in a way they felt confident with (Daneback & Månsson, [2013](#)).

Positive attitude: the result showed that university students who expressed positive attitudes towards pornography were also more likely to watch pornography and to believe that pornography reflects real-world sexual practices. In addition, it made them more instrumental and less relational in their approach to sex because pornography commodifies sexual interactions (Oddone-Paolucci, Genuis, & Violato, [2017](#)). According to a study by Carroll, it found that 67% of males and

49% of females agreed that viewing sexually explicit material was an acceptable way to express one's sexuality (Carroll et al., [2008](#)). In fact many youths in another study regarded viewing pornography as a positive outcome because they had increased satisfaction, satisfied their curiosity and heightened their sexual learning through sexual interactions (Weinberg, Williams, Kleiner, & Irizarry, [2010](#)). Pornography has been found to function as a form of sex education for youth that can provide information about the human body and sexual practices, thus increasing a sense of sexual competence and liberalization, while also decreasing sexual shame (Sun et al., [2016](#)). A previous study in Australia revealed that more than half of the respondents thought pornography had a very positive or constructive effect on their attitudes. The main benefits, in order of reporting, were making viewers feel less repressed about sex, making them more open-minded about sex, increasing their tolerance of other people's sexualities, giving pleasure to the viewer, providing educational insights, and sustaining sexual interest in a long-term relationship (McKee, [2007](#)). A similar study in Hong Kong indicated that positive attitudes made viewers more attentive to a partner's sexual desires, helped viewers find an identity or community and helped them to talk to their partner about sex (Shek & Ma, [2013](#)).

Friend influence: The results showed that both males and females frequently reported their friends' pressure was very important during their student life. In this study the university students were more likely to discuss and share impressions about pornography with their friends than their family members. Males often discussed ways to find and share pornographic materials among friends. Females also accepted that friends who watched pornography influenced them. This study revealed that most males shared their pornography watching experiences with their friends and also encouraged their friends to do the same. These findings are similar to those of research conducted in other Asian countries (Lou et al., [2012](#)). Youth spend more time out of the house with friends as a group, so it is understandable that friends' influence on attitudes, speech, interests, looks and behavior outweighs

the influence of family (Braithwaite, Aaron, Dowdle, Spjut, & Fincham, [2015](#)). A previous study in the USA indicated that friends also served as a source of pornography information (Braithwaite, Coulson, et al., [2015](#)). A similar study in China indicated that friends who viewed pornography regularly would encourage their friends to watch the same things that had seen (Yan et al., [2010](#)).

All of this discussion has shown that the frequency of pornography watching and many other factors associated with the use of pornography are more pervasive than originally thought among UHS students. If pornography watching is not recognized as a real condition currently influencing students we may not be able to solve serious affects to their health and lifestyles in the future. Therefore, the UHS should come up with programs to provide knowledge about the harms of watching pornography excessively and organize peer groups for the purpose of sharing critical reflection about pornography's influence. It is pointless trying to organize a crackdown on the use of pornography. It will always find a way into media and information sources. However, it is crucial that the UHS and other education services generate a better awareness of pornography's drawbacks to counter delusional and dangerous behavior inspired by pornographic content.

4.3 Limitations

There were limitations in this research. To begin with, this study was the first of its kind therefore information about pornography watching in the Lao PDR was virtually non-existent, so the comparative data and statistics came from research in other countries. Secondly, the questionnaire for pornography watching was quite a sensitive matter among university students. Hence the researcher was concerned that the answers from participants, especially female, were not detailed fully because the study touched on very sensitive and personal issues. Thus socially desirable responses rather than honest opinions cannot be ruled out. In addition, the cross-sectional nature of the study made it impossible to draw inferences about the direction of relationships between dependent and independent variables. Therefore,

this research failed to achieve the full disclosure of the participants and many answers that were provided served as decoys to steer investigation away from their real experiences. This study was conducted at only one university in Vientiane Capital. Therefore the ability to generalize or equate trends found at the UHS to other university student samples would be highly circumspect due to selection bias. Finally, there were three categories of pornography watching (mild, moderate and erotic). In the survey, the researchers could not use all three types for analysis because mild and moderate pornography were not serious threats and indirectly related to public health concerns about pornography watching in youth. In addition, youth can easily observe mild and moderate pornography in real life and mainstream media. Conversely erotic pornography requires the consumer to have set intentions and take planned steps in their pursuit of it. Hence, the researchers choose the third category (erotic pornography) to be the dependent variable for their examination of associated factors for pornography watching. This type of pornography viewing seriously affects people's personal life, physical well-being and has made youths change their behavior to become fascinated addicts of pornography which can contain sadistic, chauvinistic and dehumanizing content.

Conclusions

The findings of this study indicated that pornography watching among students at the UHS was a common behavioral aptitude among males who sought out pornographic content for reasons of curiosity, to extend their sexual knowledge, to relieve their mindset when feeling sexually inadequate and to satisfy sexual fantasies. Furthermore, the results indicated a relatively high frequency of erotic pornography use among students at the UHS.

Factors associated with watching pornography based on gender, showed males were 4.6 times more significantly associated with watching erotic pornography compared to female participants. Participants who had partners were significantly associated with watching erotic pornography compared to singles. Participants who had positive attitudes were significantly associated with watching erotic pornography compared to those with negative attitudes. Finally participants who had friends were significantly associated with watching erotic pornography compared to those who were loners.

Recommendations

This research showed that university students had a high frequency of watching erotic pornography. This issue should not be overlooked, although pornography does not directly affect people's health like infectious diseases. The results of pornography watching may cause long term effects on the personal life of the viewer, which in turn often require appropriate public health interventions and preventative treatments. Therefore, policy makers should develop policies and programs to create deterrents to accessing pornography. At the same time, public health authorities should deliver information about the dangers of viewing pornography among youth, especially males who generally have a deeper interest and more active pursuit of pornography. Furthermore, education programs have a duty to offer knowledge of the harms of pornography watching among youth who have partners since there is a link between having multiple partners and an increased risk of STDs. In addition, programs should provide an awareness of the potentially negative impacts of pornography watching to mitigate carefree attitudes among youth. Moreover, programs and campaigns should be organized by the government and non-government agencies to effectively address the influence of peer groups, trends in social media and commercial factors which put unwanted pressure on youth to watch pornography

The findings from the current study need to be investigated further. Subsequent research might focus more on qualitative aspects to identify the metaphysical (psychological, sociological and aesthetic) factors which encourage addictive tendencies to watch pornography among youth in other educational institutions in Laos.

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ANNEX I. Variables and definitions

Variables	Definition	Measurement	Data collection method
Socio-demographic characteristics			
Sex	The biological character or quality that distinguishes males and females from one another as expressed by an analysis of the person's gonadal, morphologic (internal and external), chromosomal, and hormonal characteristics	Bivariate (male/female)	Self-administrated
Ages	Age of participant a youth who is between the ages of 18 and 24 years	Continuous	Self-administrated
Ethnicity	Ethnicity of participant (within a significant national or cultural group) with a common national or cultural tradition base represented in 50 ethnic groups.	Category (Lao, Akha, Hmong, Iu Mien, Khmu, other)	Self-administrated

Religion	A belief system often involving the worship of a controlling power, especially a personal god or gods	Category (Buddhist, Christian, Animist and other))	Self-administrated
Faculty	A group of university departments concerned with a major division of knowledge	Continuous	Self-administrated
Grade	Level of study in the academic year 2018-2019	Continuous	Self-administrated
Relationship status	Living arrangement linked to marital status	Category (Single, have boy/girlfriend, Married, Divorced)	Self-administrated
Residency status	Someone who resides with you permanently or on a part-time basis	Category (Lives with parent, With mother only, With father only, With friend, Living alone, With girl/boyfriend)	Self-administrated
Family size	Number of members living in household	Continuous	Self-administrated
Roommate arrangement	Number of people sharing a rented room (participant)	Continuous	Self-administrated

Parent's marital status	Relationship you're your parents currently have	Category (Together, Separated, Divorced, Widowed)	Self-administrated
Father's occupation	Main job that your father does	Category (Unemployed, Employed (private business), Employed (Govt.), Farmer, other)	Self-administrated
Mother's occupation	Main job that your mother does	Category (unemployed, employed (private), employed (Govt.), farmers, other)	Self-administrated
Family economic status	Financial situation of family	Category (poor, average, wealthy)	Self-administrated
Earn money by yourself or get from your parents	Ability to earn money by yourself or get money from parents	Category (Get from your parents, earn money by yourself)	Self-administrated
Allowances from parents	Daily allowance from parents	Continuous	Self-administrated
Earn money by yourself	Ability to earn money by yourself	Continuous	Self-administrated

Frequency of pornography watching among UHS student			
Pornography watching	The viewing of movies, pictures, magazines, etc., that show or describe naked people or sex in a very open and direct way in order to cause sexual excitement	5 items measuring pornography watching, each item was rated on a four point Likert scal (0=never, 1=rarely, 2=often, 3=always)	Self-administrated
Factors associated with pornography watching			
Attitudes of students towards pornography watching			
Attitude towards to pornography watching	A feeling or way of thinking that affects a consumer's behavior in pornography watching	Category by the Likert scale (Strongly disagree, disagree, agree and strongly agree)	Self-administrated
Attitude towards to not watching pornography	A feeling or way of thinking that affect a consumer's behavior to avoid in pornography watching	Category by the Likert scale (Strongly disagree, disagree, agree and strongly agree)	Self-administrated
Influence of person to support pornography watching			
Influence people in family	The influential person outside the family who encourages the student to watch pornography	Category (father, mother, grandfather, grandmother, brother, sister and other)	Self-administrated

Peer influence	The influential person outside the family who encourages the student to watch pornography	Categorical (friend, neighbor, other)	Self-administrated
Source of pornography watching			
Mass media	Mass media is means of communication for people through technology	Category(Internet, Movie/Video, Smartphone, Television and Magazine/Book)	Self-administrated
The college	An educational institution	Category (friend, boy/girlfriend, teacher, other)	Self-administrated
The home	The place where one lives permanently, especially as a member of a family or household.	Category (father, mother, grandfather, grandmother, brother, sister and other)	Self-administrated

ANNEX II. Questionnaire

ID of participant._____. Date: ____/____/_____.

Title: Pornography Watching and Associated Factors Among University Students in The University of Health Sciences (UHS), Lao PDR.

Please answer by ticking (✓) in the appropriate and writing in the given spaces.

I. Part 1: Demographic characteristics of youth (students) and parents questionnaire

No	Questionnaire	Answer
1	Sex	<input type="checkbox"/> 0. Female <input type="checkbox"/> 1. Male
2	Age	_____ years old
3	Ethnicity	<input type="checkbox"/> 1. Lao <input type="checkbox"/> 2. Akha <input type="checkbox"/> 3. Hmong and Iu Mien <input type="checkbox"/> 4. Khmu Other _____
4	Religion	<input type="checkbox"/> 1. Buddhist <input type="checkbox"/> 2. Christian <input type="checkbox"/> 3. Animist 4. Other _____
5	What faculty do you study in?	Faculty of _____
6	What grade at the faculty do you study in?	Grade _____
7	What is your marital status?	<input type="checkbox"/> 1. Single <input type="checkbox"/> 2. Have boy/girl friend <input type="checkbox"/> 3. Married <input type="checkbox"/> 4. Divorced
8	Now, whom do you live with?	<input type="checkbox"/> 1. Family <input type="checkbox"/> 2. With roommate <input type="checkbox"/> 3. Living alone <input type="checkbox"/> 4. With boy/girl friend
9	How many people are there in your family?	_____ People
10	How many people are there in your rented room?	_____ People
11	What is the marital status of your mother and father?	<input type="checkbox"/> 1. Together <input type="checkbox"/> 2. Separated <input type="checkbox"/> 3. Divorced <input type="checkbox"/> 4. Widowed

12	What is your father's occupation ?	<input type="checkbox"/> 1. Unemployed
		<input type="checkbox"/> 2. Employed (private business)
		<input type="checkbox"/> 3. Employed (govt)
		<input type="checkbox"/> 4. Farmers
		5. Others _____
13	What is your mother's occupation?	<input type="checkbox"/> 1. Unemployed
		<input type="checkbox"/> 2. Employed (private business)
		<input type="checkbox"/> 3. Employed (government)
		<input type="checkbox"/> 4. Farmers
		5. Others _____
14	If you compare your family with other families in your village how does it rank economically?	<input type="checkbox"/> 1. Poor
		<input type="checkbox"/> 2. Average
		<input type="checkbox"/> 3. Wealthy
15	Do you earn money by yourself or get money from your parents?	<input type="checkbox"/> 1. Get from parents (Go to 15)
		<input type="checkbox"/> 2. Earn money by yourself (Go to 16)
16	How much money do you get from your parent each day?	LAK _____ per day
17	If you earn money by yourself how much income per month do you get?	LAK _____ per month

Part 2: Attitude toward to pornography watching

Please read the statements below, and indicate (circle) how your attitude applies to the statement. 1= Strongly Disagree, 2=Disagree Agree, 3= Agree, 4=Strongly Agree.

No	Statement	1 Strongly Disagree to 4 Strongly Agree			
1	Pornography viewing is a common act in daily life	1	2	3	4
2	Pornography is simple to access	1	2	3	4
3	I believe that pornography watching can stimulate one's sex life	1	2	3	4
4	Pornography use exposes me to a variety of experiences	1	2	3	4
5	My cheerfulness depends on me being able to use pornography	1	2	3	4
6	Pornography watching is one of the best tools around for young people to learn something about sex	1	2	3	4
7	Using porn provides me with memorable experiences	1	2	3	4
8	If I watched porn right now, I would have difficulty stopping	1	2	3	4
9	My heart would beat faster if I was watching pornography right now	1	2	3	4
10	My need to watch pornography seems overpowering	1	2	3	4
11	Nothing would be better than watching pornography right now	1	2	3	4
12	I think pornography should be prohibited by law	1	2	3	4
13	I think the accessibility of pornography should be limited	1	2	3	4
14	I feel ashamed after viewing pornography	1	2	3	4
15	I feel depressed after viewing pornography	1	2	3	4
16	I feel sick after viewing pornography	1	2	3	4
17	Pornography watching is harmful for health	1	2	3	4
18	Pornography watching makes youths lose their feeling of control	1	2	3	4
19	Pornography watching can result in a lack of normal relations with people in society	1	2	3	4
20	Pornography watching is not important for sexual activities	1	2	3	4

Part 3: Influence of people to encourage pornography watching

Please answer by ticking (✓) in the box below that you think is appropriate.

No	Questionnaire	Answer
1	Do you have person in your family who encourages you to watch pornography?	<input type="checkbox"/> 0. No (Go to 3) <input type="checkbox"/> 1. Yes
2	Who are the influential people in your family who gave you exposure to and encouragement to watch pornography (more than one answer permitted)	<input type="checkbox"/> 1. Father <input type="checkbox"/> 2. Mother <input type="checkbox"/> 3. Grandfather <input type="checkbox"/> 4. Grandmother <input type="checkbox"/> 5. Brother <input type="checkbox"/> 6. Sister 7. Other (specify) _____
3	Do you have friends who encourage you to watch pornography?	<input type="checkbox"/> 0. No (GO to 5) <input type="checkbox"/> 1. Yes
4	Who is the influential person outside your family who encourages you to watch pornography with other students (more than one answer permitted)	<input type="checkbox"/> 1. General Friend <input type="checkbox"/> 2. Close Friend <input type="checkbox"/> 3. Neighbor 4. Other (specify) _____

Part 4: Sources of audio-visual pornography

Please answer by ticking (✓) in the box below that you think is appropriate.

No	Questionnaire	Answer
1	How did you receive sources of information about pornography ? (More than one answer permitted)	<input type="checkbox"/> 1. Internet <input type="checkbox"/> 2. Smartphone <input type="checkbox"/> 3. Movies/ Videos <input type="checkbox"/> 4. Television <input type="checkbox"/> 5. School Resources <input type="checkbox"/> 6. Materials at Home 7. Other_____
2	Which of the sources mentioned above provided you with the most information? Rank in order 1, 2 and 3 of their importance), 1=the main source 2= the secondary source 3=the minor source 1. Internet 2. Smartphone 3. Movies/ Videos 4. Television 5. School Resources 6. Materials at Home 7. Other_____

Part 5: Category and Frequency of Pornography Watching

Category and frequency of pornography watching, using a scale from 0 to 4, with 0 = never, 1 = rarely (1 time), 2 = often (> 2 times) and 3 = always, please indicate (circle) and click (✓) in appropriate option below:

No.	Question	0 = never, 1= rarely, 2 = often, 3=always
Mild pornography Type		
1	Did you watch on the Internet?	0 1 2 3
2	Did you watch on a smartphone?	0 1 2 3
3	Did you watch in movies/ videos?	0 1 2 3
4	Did you watch on television?	0 1 2 3
5	Did you view in a magazine/book?	0 1 2 3
6	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 1)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
7	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 2)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
8	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 3)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
9	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 4)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
10	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 5)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
Moderate Pornography Type		
11	Did you watch on the Internet?	0 1 2 3
12	Did you watch on a smartphone?	0 1 2 3
13	Did you watch in movies/ videos?	0 1 2 3
14	Did you watch on television?	0 1 2 3
15	Did you view in a magazine/book?	0 1 2 3

16	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 11)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
17	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 12)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
18	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 13)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
19	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 14)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
20	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 15)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
Erotic Pornography Type		
21	Did you watch on the Internet?	0 1 2 3
22	Did you watch on a smartphone?	0 1 2 3
23	Did you watch in movies/ videos?	0 1 2 3
24	Did you watch on television?	0 1 2 3
25	Did you view in a magazine/book?	0 1 2 3
26	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 21)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
27	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 22)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
28	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 23)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____

29	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 24)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____
30	If you have never watched on the Internet? What is your reason? (This question is for people who answered 0 in Article 25)	<input type="checkbox"/> 1. Unhealthy
		<input type="checkbox"/> 2. Do not know how to find
		<input type="checkbox"/> 3. Shame
		<input type="checkbox"/> 4. Afraid
		5. Other_____

ANNEX III. Format of participant information sheet

Title of research project: Pornography watching and associated factors among university students at the University of Health Sciences, Lao PDR.

You are being invited to take part in a research project. Before you decide to participate it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and do not hesitate to ask if anything is unclear or if you would like more information.

1. Brief background and Rationale

The use of pornography is increasing, especially in the United States; in fact it's the biggest user of pornography in the world. Meanwhile in Asia, pornography users are largely concentrated in three countries: China, South Korea and Japan (ranked in descending order).

In Laos, information about pornography watching is not available because this is a taboo subject and thus far there has been no report for research that focuses on pornography. If there is information it has not been made publicly available yet.

2. Objectives of this study:

The purpose of this study is to gather information from students at the University of Health Sciences (UHS) detailing the prevalence and factors associated with watching pornography. This will be done by using a self-administered respondent inquiry form that will take around 30 minutes to complete. It consists of a questionnaire form covering topics such as demographics, attitudes and sources of pornography. The target population group in this study is 18- to 24-year-old college students.

Research activities which involve you, the volunteer, to participate in are detailed as follows:

- You will be informed about the risks and inconveniences that may occur during the research.

- You will be informed about the benefits you may receive from the research.
- You will have the opportunity to ask about the research and its related processes.
- You can withdraw from the research at any time without any impact.
- If you voluntarily agree to be a respondent, the researcher would like you to sign a written informed consent form.
- Then the researcher will ask you a set of questions, you have the right to participate in the research without pressure or discrimination.
- This research won't be risky to your physical, mental, social and economic well-being nor your beliefs. You may spend about 30 minutes to answer the questions.
- The information the participant provides in response to the query form will be confidential and will be destroyed after the completion of the research.
- This study will not only give direct benefits to you, as the results of this study will also be useful for your family members and the wider community. The information will be used to develop interventions to manage challenges in public reproductive health for youth in the Lao PDR.
- Participation in the study is voluntary and each participant has the right to deny information and/or withdraw from the study at any time, there is no need to give any reason, and there will be no negative repercussion for participant.
- The researcher will use a coding system to keep the answers confidential. We will never expose the names of the respondents. The researcher will explore, interpret and note down all the information obtained independently thus avoiding the revelation of the respondents' confidentiality. The data entry is performed by the researcher with the help of experts who are also obligated to confidentiality agreements. After that the researchers will analyze the data and elucidate the findings. The hard copy of the data collection forms will be destroyed after the report has been completely done.

- While administering the questions and collecting the data , the researcher won't disturb much of your time, so there will not be any compensation for your participation in this study.
- If you have any questions or would like to obtain more information, please contact the researcher Mrs. Sengdaly XAYHONGKHAM at the Medical Administration Department, Ministry of Public Security, Khouvieng Road, Ban Beungkhayong, Sisattanak District, Vientiane Capital, Lao PDR or on her mobile phone number +86520 99972617 or her private email Sengdaly_xk79@yahoo.com at any time. If the researcher has new information regarding benefits or risks/harm, the participants will be informed as soon as possible.
- If researcher does not perform the interview with the participants as indicated in the information, the participants can report the incident to the Ethics Committee for Health Research (University of Health Sciences, Faculty of Postgraduate Studies), Office Address at Samsenthai Road, Ban Kaognot, Sisattanak district, Vientiane Capital, Lao PDR. Tel: +856 21 245820, Fax: +85621 214055 and the Ethics Council: IRB HUPH, 1A Duc Thang street, Bac Tu Liem district, Hanoi, Vietnam; email: irb@huph.edu.vn).

ANNEX VI. Consent form (Students)

- **Title:** Pornography and associated factors among university students in the University of Health Sciences, Lao PDR
- **Principle researcher's name:** Ms. Sengdaly XAYHONGKHAM MPH student English program

1. I read the explanations for participating in the research, and I have been invited to participate in the research.
2. I asked questions to sections that I did not understand, and I got satisfactory answers.
3. I can refuse to participate in the study or withdraw my participation in the study, and I know that this decision will not be harmful to me.
4. I understand that my personal information will be protected and kept secret in any research publication, and I agree for it to be used for research and academic purposes only.
5. I will receive one copy of the two copies of the written agreement.
6. Participation in this research is important and useful to the whole population. So, I agree to participate in this research voluntarily.

Name of research
participants

Signature

Date of consent
(day / month/ year)

Name of the researcher who
signed the agreement

Signature

Date of consent
(day / month/ year)

ANNEX V. Ethical Approved (Vietnam and Laos)

MINISTRY OF HEALTH
HANOI UNIVERSITY OF PUBLIC HEALTH

SOCIALIST REPUBLIC OF VIETNAM
Independence – Freedom - Happiness

No.: 471/2018/YTCC-HD3

Subject: Ethical Approval

Hanoi, December 21st, 2018

DECISION

On Ethical approval for research involving human subject participation

THE CHAIR OF THE ETHICAL REVIEW BOARD FOR BIOMEDICAL RESEARCH
HANOI UNIVERSITY OF PUBLIC HEALTH

- Based on decision No. 651/QĐ-ĐHYTCC by the Dean of Hanoi School of Public Health on the Issuing Regulation of the Institutional Ethical Review Board of Hanoi School of Public Health; 26 June 2015;
- Based on Decision No. 560/QĐ-ĐHYTCC by the Dean of Hanoi School of Public Health on Establishment of The Institutional Ethical Review Board of Hanoi School of Public Health; 16 May 2016;
- Based on Decision No. 58/QĐ-ĐHYTCC by the Dean of Hanoi University of Public Health about the member replacement of The Institutional Ethical Review Board of Hanoi University of Public Health; 15 January 2018;
- Based on the minutes of meeting to review ethics application No. 018-471/DD-YTCC dated December 21st, 2018,

DECIDED:

Article 1. Grant ethical approval for ethnographic study project:

- Project Title: **Pornography watching and associated among university's student in university of health science, Lao PDR**
- Principal Investigator: **Sengdaly XAYHONGKHAM**, Hanoi University of Public Health
- Supervisors: Prof. Bui Thi Thu Ha – Hanoi University of Public Health
Dr. Kongmany chaluenvong
- Research site: University of Health Science at Vientiane Capital, Lao PDR
- Project time: from 01/09/2018 to 30/04/2019
- Data collection time: from 12/2018 to 01/2019
- Review type: Expedited review

Article 2. This decision is effective from **21/12/2018** to **30/04/2019**

Article 3. Principal Investigator has to send progress report once each year and a final report upon the study completion to the Institutional Ethical Review Board of Hanoi University of Public Health (IRB of HUPH).

Article 4. Principle Investigator should notify (IRB of HUPH) immediately of any adverse effects arising from this study (e.g. unexpected adverse outcomes, unexpected community/subject risk factors or complaints, etc.). Active research projects are subject to random audit by the IRB of HUPH.

CHAIR OF HUPH IRB
(Signature and full name)



Ha Van Nhu

SECRETARY
(Signature and full name)



Nguyen Thi Minh Thanh

Lao's People Democratic Republic
Peace Independence Democracy Unity Prosperity



Ministry of Health
University of Health Sciences
Ethic Committee

No: **108** /19

Tel: 021 245820

Vientiane, Date **07/02/19**

Ethical Clearance

- According to the Ethic Committee's declaration of the University of Health Sciences Number: 3809/UHS.15, dated 1 Sep, 2015.
- According to the letter of request for Ethical Clearance of Ms Sengdaly XAYHONGKHAM Master of Public Health, faculty of Public Health, University of Health Sciences. for research entitled: « Pornography watching and Associated Factors Among University's Student in University of Health Science(HUS), LAO PDR »

The Ethic Committee of the University of Health Sciences approved the research proposal of this study before it is initiated. This study is committed in compliance with local requirements, to confirm that it is without the physical and psychological harm of the participants as well as the ethical issues for health research. However, we believed that this study/project will contribute to a great importance of health promotion; it will also be a direct and indirect participants' beneficial and to be a crucial database in the further research of the University of Health Sciences and Health sectors in the country.

Hence, the Ethic Committee of the University of Health Sciences sincerely agreed to approve in term of ethical clearance for this study/project.

President of the
University of Health Sciences



Dr. Phouthone VANGKONEVILAT

for President of the
Ethical research committee

Dr. Bansa OUPATHANA

ANNEX VI. Thesis Comment

HANOI UNIVERSITY OF PUBLIC HEALTH

**THESIS COMMENT FORM OF MASTER PROGRAM
(For reviewer of thesis defence committee – Master Program)**

Thesis topic: Pornography watching and association factors among university students at university of health sciences (UHS), Lao PDR

Thesis code: *(Written on the right corner of thesis cover page)*

Hanoi, Date 20th May, 2019

1. Thesis topic has correct orientation and specialized codes (Master of public health applied science orientation/ Master of public health applied research orientation)

Yes..

Student should have carefully proved reading for spelling and grammar for the thesis.

2. Thesis title:

1. Comments: The thesis is on track and in line with Master of public health - applied science track

2. Which part need to be edited, (if any):
.....

Need to add time of the study: 2019

3. Research summary:

1. Comments: Summary is good

2. Which part need to be edited, (if any):
.....

Add abstract of the thesis.

4. Introduction:

1. Comments:
.....

Introduction is too long, it should be only 1 – 1.5 page

In the introduction you should state:

- Pornography is a Public Health issue, reason why
- Extend of the issue in the world and in Lao PDR
- Students are high risk
- Students at UHS

2. Which part need to be edited, (if any):

.....

5. Research Objectives:

1. Comments:

You should put Objectives in a separate Chapter

2. Which part need to be edited, (if any):

6. Literature review:

- Student have read and referred to good references, however this Chapter needs some revisions:
- Structure: you could structure this part in this order (this is suggestion):
 - Definition
 - Effects of pornography watching
 - Situation of pornography watching (in general, among students) in the world and in Lao PDR
 - Factors affecting pornography watching behaviour
 - Conceptual framework
- Contents need to be matched with the headings: in many part of the literature review 1.2.1, 1.2.2, 1.2.3 you mix with the effects of pornography watching
- You need to clarify watching, consumption and exposure clearly

2. Which part need to be edited, (if any):

.....As above...

7. Subjects and research methods:

1. Comments: (i) Subjects are suitable to objectives; (ii) Sample size and sample selection are appropriate and feasible; (iii) Variables/contents are suitable to objectives, orientation and specialized codes; (iv) Data collection is clear,

feasible and appropriate with research content; (v) Data analysis and research ethic are written clearly and appropriately; (vi) Other comments (if any):

- You already have percentage of youth watching (89% with males and 57% with female), why did you choose $p = 0.5$?
- In the sample size you should not write down “163 men and 202 women” as in page 25
- In page 26 you stated that you expect to see differences in two faculties => if so you should have other kind of sampling calculation
- Page 27, heading 2.5, paragraph 2: 86 questions (not questionnaire)
- Variable and definition: you should arrange in the order of objectives 1 and 2 step by step
- 2.7 Measurement: no need to have that long
- 2.9 Ethical: more detail about right of participants and how you keep information confidential. You also need to have decision numbers for ethics from HUPH and UHS

2. Which part need to be edited, (if any):

.....As above.....

8. Research results:

1. Comments: (i) Research results are suitable with objectives, orientation and specialized codes; (ii) Research result is presented clearly and followed by objectives; (iii) Using data analysis appropriately and ensuring confidence of these methods; and other comments (if any):

.....

- Table 1 and 16 are too long, you should divide them in smaller tables
- Results should be arrange by objectives, now you present them not in order
- Page 48: do not repeat about 5 ranking questions
- Table 16: some items with Yes/No, you just present Yes OR No results

2. Which part need to be edited, (if any):

.....

As above

9. Discussion:

1. Comments: (i) Structure/Content of this part are suitable to objective and research results; (ii) Reference citation is correct:

.....

Need more efforts for discussion

Arrange by objectives

2. Which part need to be edited, (if any):

.....As above.....

10. Conclusion:

1. Comments: (The main research result are given in this part and suitable to objectives)

No comment...

2. Which part need to be edited, (if any):

.....

As above

11. Recommendations

1. Comments: The recommendation is given appropriately and based on research results: Recommendations are not based on research results

2. Which part need to be edited, (if any):

.....

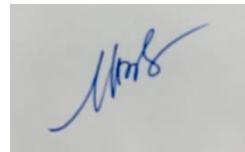
12. FINAL CONCLUSION: (NEED TO BE CLEARLY STATE):

Approval

Approval with some conditions

Reject

Reviewer



Nguyễn Ngọc Bích

HANOI UNIVERSITY OF PUBLIC HEALTH

THESIS COMMENT FORM OF MASTER PROGRAM

(For reviewer of thesis defence committee – Master Program)

Thesis topic: PORNOGRAPHY WATCHING AND ASSOCIATION FACTORS AMONG UNIVERSITY STUDENTS AT UNIVERSITY OF HEALTH SCIENCES (UHS), LAO PDR

Thesis code: (Written on the right corner of thesis cover page)

MPH 1730057

....., Date.....Month.....year 2019

13. Thesis topic has correct orientation and specialized codes (Master of public health applied science orientation/ Master of public health applied research orientation)

.....
.....
.....

14. Thesis topic:

1. Comments

.....
..... The topic should be changed to Factors associated with watching pornography among students at the University of Health Sciences, Lao PDR.....

2. Which part need to be edited, (if any):

.....
.....
.....

15. Research summary:

1. Comments:

.....

Could you elaborate more about the description of dependent variable? As the sentence “The dependent variable was categorized of what?
“Recommendation should be more specific
.....

2. Which part need to be edited, (if any):

.....
.....
.....

Introduction:

1. Comments:

.....

..... Introduction is too long?

2. Which part need to be edited, (if any):

.....
.....
.....

16. Research Objectives:

1.

Comments.....

.....
.....

2. Which part need to be edited, (if any):

.....
.....
.....

Literature review:

1. Comments: (structure and content of literature review are coherent with objectives and research topic, use updated reference and citation correctly, and other comments (if any):

.....

2. Which part needs to be edited, (if any):

.....What is different between pornography watching and pornography consumption...

17. Subjects and research methods:

1. Comments: (i) Subjects are suitable to objectives; (ii) Sample size and sample selection are appropriate and feasible; (iii) Variables/contents are suitable to objectives, orientation and specialized codes; (iv) Data collection is clear, feasible and appropriate with research content; (v) Data analysis and research ethic are written clearly and appropriately; (vi) Other comments (if any):

..... Why do you select UHS?. Not clear about 86 questionnaires, you mean the numbers of students or the number of questions. Please clarify that why 86 questionnaires remained in the analysis and how many questions that you delete, why you delete.

Please indicate which type of logistic regression used such as backward or forward method.....

2. Which part need to be edited, (if any):

.....

18. Research results:

1. Comments: (i) Research results are suitable with objectives, orientation and specialized codes; (ii) Research result is presented clearly and followed by objectives; (iii) Using data analysis appropriately and ensuring confidence of these methods; and other comments (if any):

.....

2. Which part need to be edited, (if any):

.....

.....I am interesting in the dependent variable, why did you choose only the third category, could you run analysis for all category and putting the category in one table in landscape.....

Discussion:

1. Comments: (i) Structure/Content of this part are suitable to objective and research results; (ii) Reference citation is correct:

.....Explain more in this chapter because it too short and compare age group of watching pornographic

2. Which part need to be edited, (if any):

.....
.....

19. Conclusion:

1. Comments: (The main research result are given in this part and suitable to objectives)

..... Need to rewrite.....
.....

2. Which part need to be edited, (if any):

.....
.....

20. Recommendations

1. Comments: The recommendation is given appropriately and based on research results:

.....
.....

2. Which part need to be edited, (if any):

.....
.....Need more specific recommendation.

.....
.....

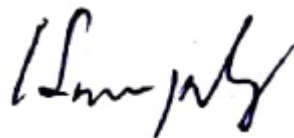
.....**FINAL CONCLUSION: (NEED TO BE CLEARLY STATE):**

Approval

Approval with some conditions

Reject

Reviewer



Dr. Vanhphanom Sychareun

ANNEX VII. Minutes of Explanation

MINISTRY OF HEALTH
HANOI UNIVERSITY OF PUBLIC HEALTH

MINUTES OF EXPLANATION AFTER THESIS/PROPOSAL DEFENCE

Full name: Sengdaly Xayhonthkham

Thesis title: Pornography Watching and Factors Associated among University Students at University of Health Sciences, Lao PDR 2019

TT	Comments <i>(List all comments followed by outline/dissertation/thesis/thematic structure)</i>	Student's explanations detail <i>(Clearly state how, which part, page that student edits. if students disagree, reasons should be indicated)</i>
1	Orientation and specialized codes	
	
2	Thesis topic	
	The topic should be changed to Factors associated with watching pornography among students at the University of Health Sciences, Lao PDR	The similar meaning with original topic. I will use original
3	Abstract	
	The dependent variable was categorized of what? Pornography and frequency of watching pornography. "Recommendation should be more specific	The dependent variable is erotic (page ii)
4	Introduction	

	Introduction is too long	I was edit and develop introduction in page1
5	Objectives	
	...	
6	Review of Literature/Theoretical framework	
	What is different between pornography watching and pornography consumption?	<p>Edit this point:</p> <p>They really have the same meaning. Pornography consumption has meant pornography using/watching, while pornographic watching has also meant pornography using/watching. So why do some researchers use the word 'watch' instead of 'consumption'. Usually the word "consumption" makes people think of food consumption. However, it related to the habitual usage of a particular consumable which in this instance is SEM that stimulates a demand.</p>
7	Objects and research methods	
	<p>1. Why do you select UHS</p> <p>2. Not clear about 86 questionnaires, you mean the numbers of students or the number of questions. Please clarify that why 86 questionnaires remained in the analysis and how many questions that you delete, why you delete.</p> <p>3. Please indicate which type of logistic regression used such as backward or forward method.</p> <p>4. Structure: you could</p>	<p>Explain this point:</p> <p>1. There are few reasons. The most important, is the convenient selection for researcher as coming from health sector and most familiar to UHS than other university. The second reason is to explore how the knowledge, attitudes and behavior of health science students toward pornography watching. With assumption that health students are more knowledgeable on human biology and might be familiar to accessing to PW, therefore the level will be high. (Method part. p. 22).</p> <p>2. I was writ mistake 86 question not questionnaire</p>

	<p>structure this part in this order (this is suggestion):</p> <ul style="list-style-type: none"> - Definition - Effects of pornography watching - Situation of pornography watching (in general, among students) in the world and in Lao PDR - Factors affecting pornography watching behaviour - Conceptual framework <p>5. You already have percentage of youth watching (89% with males and 57% with female), why did you choose $p = 0.5$?</p> <p>6. In the sample size you should not write down “163 men and 202 women” as in page 25</p> <p>7. In page 26 you stated that you expect to see differences in two faculties => if so you should have other kind of sampling calculation.</p> <p>8. Variable and definition: you should arrange in the order of objectives 1 and 2 step by step</p>	<p>3. We used backward.</p> <p>4. I was edit and arrange by step as below:</p> <ol style="list-style-type: none"> 1. definition (p.4) 2. Effects of pornography watching (p. 9) 3. Situation of pornography watching (in general, among students) in the world and in Lao PDR (p. 11-12) 5. I was estimate $P=0.5$ because this is first research (89% with males and 57% with female were from other study in other country, it is not in Lao). 6. I will cut it out. 7. I was change sampling calculate to be other formula (the result of calculate is not change). 8. I have revised variable and arrange follow objective 1 and 2. (p.61) and move this heading to the end of thesis (Annex I)
8	Study results	
	<p>1. I am interesting in the dependent variable, why did you choose only the third category, could you run analysis for all category and putting the category in one</p>	<p>Explain this point: The researchers could use all three types of pornography watching for their analysis. This was because mild pornography and moderate pornography were not regarded as serious and only</p>

	<p>table in landscape.</p> <p>2. Table 1 and 16 are too long, you should divide them in smaller tables</p> <p>3. Results should be arranged by objectives, now you present them not in order</p> <p>4. Page 48: do not repeat about 5 ranking questions</p>	<p>having indirect significance to public health concerns about pornography watching amongst youth.</p> <p>Therefore, the researcher chose the erotic pornography type to be the dependent variable for examining the associated factors of pornography watching. This type has seriously affected personal lives, physical well-being and has made youths change their behavior to become fascinated pornography addicts.</p> <p>2. I have revised those tables to shorten the first version</p> <p>3. The result revises and arranges by objective 1 and 2.</p> <p>4. I have deleted those sentences out</p>
9	Discuss	
	<p>explain more in this chapter because it is too short and compare age group of watching pornographies</p>	<p>I have added more discussion of frequency of pornography watching in the discussion part (p. 46)</p> <p>For the factors associated I have added information in each factor (p. 47-50)</p>
10	Conclusions	
	Need to rewrite	<p>This point I have edited based on the results of this study (p. 61). The findings of this study indicated that pornography watching among students at the UHS was a common behavioral aptitude among males who sought out pornographic content for reasons of curiosity, to extend their sexual knowledge, to relieve their mindset when feeling sexually inadequate and to satisfy sexual fantasies. Furthermore, the results indicated a relatively high frequency of erotic pornography use among students at the UHS.</p>

		<p>Factors associated with watching pornography based on gender, showed males were 4.6 times more significantly associated with watching erotic pornography compared to female participants. Participants who had partners were significantly associated with watching erotic pornography compared to singles. Participants who had positive attitudes were significantly associated with watching erotic pornography compared to those with negative attitudes. Finally participants who had friends were significantly associated with watching erotic pornography compared to those who were loners.</p>
11	Recommendations	
	<p>Need more specific recommendation.</p>	<p>Explain this point: My recommendation base on the finding followed: This research showed that university students had a high frequency of watching erotic pornography. This issue should not be overlooked, although pornography does not directly affect people's health like infectious diseases. The results of pornography watching may cause long term effects on the personal life of the viewer, which in turn often require appropriate public health interventions and preventative treatments. Therefore, policy makers should develop policies and programs to create deterrents to accessing pornography. At the same time, public health authorities should deliver information about the dangers of viewing pornography among youth, especially males who generally have a deeper</p>

		<p>interest and more active pursuit of pornography. Furthermore, education programs have a duty to offer knowledge of the harms of pornography watching among youth who have partners since there is a link between having multiple partners and an increased risk of STDs. In addition, programs should provide an awareness of the potentially negative impacts of pornography watching to mitigate carefree attitudes among youth. Moreover, programs and campaigns should be organized by the government and non-government agencies to effectively address the influence of peer groups, trends in social media and commercial factors which put unwanted pressure on youth to watch pornography.</p> <p>The findings from the current study need to be investigated further. Subsequent research might focus more on qualitative aspects to identify the metaphysical (psychological, sociological and aesthetic) factors which encourage addictive tendencies to watch pornography among youth in other educational institutions in Laos.</p>
12	References	
	...	
13	Questionnaire	
	...	
14	Other comments	
	...	

Notes:

- Use lines to separate each comments and explanations. Comments and equivalent explanations stay at the same row.
- Explanations should be written by following thesis structure (if any). Students do not mention the examiners' name

Day month year 2019

Student

(Sign and full name)



Sengdaly Xayhongkham

1st supervisor

(Sign and full name)



Professor Bui Thi Thu Ha

2nd supervisor

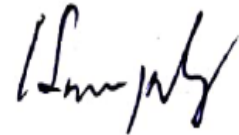
(Sign and full name)



Dr. Kongmany Chaluenvong

Supporting lecture (if any)

(Sign and full name)



Dr. Vanhphanom Sychareun

Examiners' comments (if any):

.....

Day month year

On behalf of the committee

(Sign and full name)



Assoc. Prof. Ha Van Nhu