SAFER SEX PRACTICES OF MALE VOCATIONAL STUDENTS IN NAKHON PATHOM PROVINCE

NAPATSAWAN WATRONACHAI

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE (PUBLIC HEALTH)
MAJOR IN PUBLIC HEALTH NURSING
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2005

ISBN 974-04-5959-5

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Entitled

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N. Watronachai
.....
Mrs. Napatsawan Watronachai
Candidate

P. Kerdmongkol
.....
Lecturer Patcharaporn Kerdmongkol, D.N.Sc.
Major-Advisor

.....
Asst. Prof. Arpaporn Powwattana, Ph.D. (Nursing)
Co-Advisor

Priyakamon Khan
.....
Lecturer Priyakamon Khan, Ph.D. (Demography)
Co-Advisor

Ramm Hoon
.....
Assoc. Prof. Rassmidara Hoonsawat, Ph.D. (Physics)
Dean
Faculty of Graduate Studies

.....
Asst. Prof. Arpaporn Powwattana, Ph.D. (Nursing)
Chair
Master of Science (Public Health)
Major in Public Health Nursing
Faculty of Public Health

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was submitted to the Faculty of Graduate Studies, Mahidol University
For the degree of Master of Science (Public Health)
Major in Public Health Nursing
on
April 18, 2005

N. Watronachai
.....
Mrs. Napatsawan Watronachai
Candidate

P. Kerdmongkol
.....
Lecturer Patcharaporn Kerdmongkol,
D.N.Sc.
Chair

.....
Asst. Prof. Arpaporn Powwattana,
Ph.D. (Nursing)
Member

Phitaya Ch.
.....
Assoc. Prof. Phitaya Charupoonphol,
M.D., Dip. Thai Board of Fam. Med.
Member

Priyakamon Khan
.....
Lecturer Priyakamon Khan,
Ph.D. (Demography)
Member

Ramm Hoon
.....
Assoc. Prof. Rassmidara Hoonsawat,
Ph.D. (Physics)
Dean
Faculty of Graduate Studies
Mahidol University

C. Chaikittiporn
.....
Assoc. Prof. Chalermchai Chaikittiporn,
Dr. P.H. (Epidemiology)
Dean
Faculty of Public Health
Mahidol University

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude and deep appreciation to Dr. Patcharaporn Kerdmongkol, my major advisor and special thank are given to Asst. Prof. Arpaporn Powwattana and Dr. Priyakamon Khan, the co-advisor team, for their guidance, invaluable advice, constructive comments, supervision and encouragement.

I would also like to thank all of the experts who gave helpful suggestion about the research instrument. I would like to express my appreciation to Assoc. Prof. Sunee Lagampan, Asst. Prof. Surinthorn Kalampakorn, Asst. Prof. Chanuantong Tanasugarn, Dr. Sathja Thato, Mrs. Kobkarn Mahuttano, and Assoc. Prof. Phitaya Charupoonphol for their constructive comments and recommendations for this study.

Special thank also goes to male vocational students for their participation in my study as well as to the school directors and teachers of the schools under the Department of Vocational Education in Nakhon Pathom Province for their permission and support in this study. The information provided by the participants in data collecting process had been very helpful for my study.

I wish to deeply thank Dr. Utsanee Tepvorachai the director of Boromrajonani College of Nursing, Chang Wat Nonthaburi for allowing me to pursue my master. I would also like to thank my colleagues for their support and encouragement through this study. I am also grateful to all the lecturers, staffs and friends at the Public Health Nursing Department, Mahidol University for their valuable advice and kind support.

I have a special thank to the Thesis Grant, Faculty of Graduate Studies, Mahidol University and Commission on Higher Education and Faculty of Graduate Studies, Mahidol University. Without their financial support, I would not have my degree.

Finally, I am grateful to my family, especially my husband, my son and daughter, my mother and sister for their understanding, love and caring.

Napatsawan Watronachai

SAFER SEX PRACTICES OF MALE VOCATIONAL STUDENTS IN NAKHON PATHOM PROVINCE

NAPATSAWAN WATRONACHAI 4536266 PHPH/M

M.Sc. (PUBLIC HEALTH) MAJOR IN PUBLIC HEALTH NURSING

THESIS ADVISORS: PATCHARAPORN KERDMONGKOL, D.N.Sc., ARPAPORN POWWATTANA, Ph.D. (NURSING), PRIYAKAMON KHAN, Ph.D. (DEMOGRAPHY).

ABSTRACT

This research aimed to examine safer sex practices and related factors among male vocational students in Nakhon Pathom Province, as conceptualized by Pender's Health Promotion Model. This study used a cross-sectional descriptive research design and Cluster sampling. A total of 500 male vocational students aged between 15 and 19 years, studying at certificate level (years 1-3) from four schools under the Department of Vocational Education in Nakhon Pathom Province were interviewed. 214 out of 500 were sexually active and were included in the study for analysis. Data were collected by self-administered questionnaires during September to October, 2004. Pearson's product moment correlation coefficient and stepwise multiple regression were used for the statistical analysis.

Results revealed that male vocational students followed safer sex practices. Regarding the safer sex practices, avoidance of risky behaviors was practiced more than the use of condom and assertiveness skills. The factors significantly related to safer sex practices were perceived barriers of safer sex: execution and relationship concerns ($r=-0.243$, $p<0.001$ and $r=-0.146$, $p<0.05$), perceived self-efficacy of safer sex: say no and precaution ($r=0.326$ and 0.405, $p<0.001$), peer norm ($r=0.304$, $p<0.001$), partner norm ($r=0.287$, $p<0.001$), social support of peer: confidence ($r=0.211$, $p<0.01$), social support of partner: confidence, information, and instrument ($r=0.311$, $p<0.001$, $r=0.215$, $p<0.01$, and 0.178, $p<0.01$), and alcohol consumption ($r=-0.138$, $p<0.05$). Only perceived barriers of safer sex: execution, perceived self-efficacy of safer sex: precaution and say no, peer norm, social support of peer: information, and social support of partner: confidence, were predictors of safer sex practices with 32 percent of the variance.

These findings contribute to better understanding of safer sex practices among male vocational students and can guide educational programs to promote safer sex. The program should promote sexual self-efficacy and decrease perceived barriers. Moreover, special attention should be paid to the influence of social norms and social support from friends and sexual partners.

KEY WORDS: SAFERR SEX PRACTICES / MALE VOCATIONAL STUDENTS

119 p. ISBN 974-04-5959-5

พฤติกรรมทางเพศที่ปลอดภัยของนักเรียนอาชีวศึกษาชาย จังหวัดนครปฐม
(SAFER SEX PRACTICES OF MALE VOCATIONAL STUDENTS IN NAKHON PATHOM PROVINCE)

นภัสวรรณ วัฒน์รณชัย 4536266 PHPH/M
วท.ม. (สาธารณสุขศาสตร์) สาขาวิชาเอกพยาบาลสาธารณสุข
คณะกรรมการควบคุมวิทยานิพนธ์ : พัชราพร เกิดมงคล, D.N.Sc., อาภาพร เผ่าวัฒนา, Ph.D. (NURSING), ปรียากมล ข่าน, Ph.D. (DEMOGRAPHY).

บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาพฤติกรรมทางเพศที่ปลอดภัยของนักเรียนอาชีวศึกษาชาย จังหวัดนครปฐม โดยประยุกต์ใช้แบบจำลองพฤติกรรมส่งเสริมสุขภาพของเพนเดอร์เป็นกรอบแนวคิดในการวิจัย การวิจัยครั้งนี้เป็นการวิจัยเชิงพรรณนา และเลือกกลุ่มตัวอย่างแบบแบ่งกลุ่ม กลุ่มตัวอย่างเป็นนักเรียนอาชีวศึกษาชาย อายุ 15-19 ปี กำลังศึกษาอยู่ระดับชั้น ปวช. ปีที่ 1-3 จากวิทยาลัยอาชีวศึกษา 4 แห่งในจังหวัดนครปฐม จำนวน 500 คน แต่นำมาวิเคราะห์เฉพาะผู้ที่มีประสบการณ์การมีเพศสัมพันธ์ จำนวน 214 คน เก็บข้อมูลโดยใช้แบบสอบถามในระหว่างเดือนกันยายน-ตุลาคม พ.ศ.2547 วิเคราะห์ข้อมูลโดยใช้สถิติสัมประสิทธิ์สหสัมพันธ์ของเพียร์สัน และการวิเคราะห์ถดถอยพหุแบบขั้นตอน

ผลการศึกษาพบว่า นักเรียนอาชีวศึกษาชายกลุ่มนี้มีพฤติกรรมทางเพศที่ปลอดภัย เมื่อพิจารณาเป็นรายด้านพบว่า ด้านการหลีกเลี่ยงพฤติกรรมเสี่ยงทางเพศ มีการปฏิบัติที่สูงกว่าด้านการใช้ถุงยางอนามัย และการใช้ทักษะการยืนยันในความคิดของตนเอง ปัจจัยที่มีความสัมพันธ์กับพฤติกรรมทางเพศที่ปลอดภัย ได้แก่ การรับรู้อุปสรรคด้านข้อแก้ตัวและสัมพันธภาพ ($r=-0.243$, $p<0.001$ และ $r=-0.146$, $p<0.05$) การรับรู้สมรรถนะของตนเองด้านการปฏิเสธและการมีเพศสัมพันธ์ที่ปลอดภัย ($r=0.326$ และ 0.405, $p<0.001$) บรรทัดฐานของเพื่อน ($r=0.304$, $p<0.001$) บรรทัดฐานของคู่เพศสัมพันธ์ ($r=0.287$, $p<0.001$) แรงสนับสนุนทางสังคมจากเพื่อนด้านการให้ความมั่นใจ ($r=0.211$, $p<0.01$) แรงสนับสนุนทางสังคมจากคู่เพศสัมพันธ์ด้านการให้ความมั่นใจ การให้ข้อมูลข่าวสาร และการให้อุปกรณ์ ($r=0.311$, $p<0.001$, $r=0.215$, $p<0.01$, และ 0.178, $p<0.01$) และการดื่มแอลกอฮอล์ ($r=-0.138$, $p<0.05$) ปัจจัยที่ทำนายพฤติกรรมทางเพศที่ปลอดภัย ได้แก่ การรับรู้อุปสรรคด้านข้อแก้ตัว การรับรู้สมรรถนะของตนเองด้านการมีเพศสัมพันธ์ที่ปลอดภัย และด้านการปฏิเสธ บรรทัดฐานของเพื่อน แรงสนับสนุนทางสังคมจากเพื่อน ด้านการให้ข้อมูลข่าวสาร และแรงสนับสนุนทางสังคมจากคู่เพศสัมพันธ์ ด้านการให้ความมั่นใจ โดยทั้งหมดสามารถร่วมกันทำนายพฤติกรรมทางเพศที่ปลอดภัยได้ร้อยละ 32

จากผลการวิจัยครั้งนี้มีข้อเสนอแนะว่า ควรมีการสนับสนุนให้มีความเข้าใจที่ถูกต้องเกี่ยวกับพฤติกรรมทางเพศที่ปลอดภัยในกลุ่มนักเรียนอาชีวศึกษาชาย และมีการจัดโปรแกรมให้ความรู้เพื่อส่งเสริมและสนับสนุนให้มีพฤติกรรมทางเพศที่ปลอดภัย โดยในโปรแกรมนี้ควรมีการส่งเสริมการรับรู้ความสามารถของตนเองในเรื่องเพศและลดการรับรู้อุปสรรค นอกจากนั้นสิ่งที่ควรตระหนักถึงเป็นพิเศษ คืออิทธิพลของบรรทัดฐานทางสังคม และการสนับสนุนทางสังคมจากกลุ่มเพื่อนและคู่เพศสัมพันธ์

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CHAPTER I
INTRODUCTION

Background and significance of the study

Adolescence is a significant part of the society and plays an important role for national economic, social, and political development. At present, it is found that Thai adolescents are likely to have premarital sexual intercourse and unsafe sex which can lead to many negative consequences such as Sexually Transmitted Infections (STIs), HIV/AIDS, unwanted pregnancy, and illegal abortion (Kanchana, S. 2003: 16). These serious consequences are major public health concerns resulting from inappropriate Thai adolescent sexual practices. They affect not only adolescents themselves, but also their families and society.

Among the negative consequences of unprotected premarital sexual behavior, Sexually Transmitted Infections (STIs) has an impact on many adolescents. Individuals who are infected sometimes disable or even die. Rates of STIs are significantly high among adolescents. In Thailand, 29% of people infected with STIs are youth aged between 10 and 24 (Kanchana, S. 2003: 18). About 6.7% of sexually active vocational students were investigated having had STIs (Thato, S. 2002: 98). Approximately, 8.5% of high school students reported having contracted STIs (Itsaranulux, S. & Techavanitpong, W. 2000: 58). Especially, AIDS is one of the most serious diseases for this group. Recent data indicated that adolescents have a significantly higher risk of acquiring HIV infection than any other group (Burke et al., 1990: 2074). About 11.1% of those infected with AIDS were 10-24 year-old-adolescents (Kanchana, S. 2003: 18). As a record from Nakhon Pathom provincial health office, 42.5% of people aged between 21 and 30 infected HIV infection (Nakhon Pathom provincial health office, 2004: 3).

Another consequence of unprotected premarital sexual intercourse is unwanted pregnancy. In Thailand, about 11.9% of young mothers are under 19 years old which is higher than the goal of 10% as expected in national economic and social development

plan (Patthachai, S. 2003: 97). Especially, in Nakhon Pathom province, there was an increase of teenage mothers age under 20 years old from 1,730 in 2001 to 1,775 in 2002 (Nakhon Pathom provincial health office, 2003). There was a study conducted among urban vocational students, 22% of sexually active male students reported impregnating somebody and 28% of sexually active female students had been pregnant (Thato, S., 2002: 98). Of these unwanted pregnancies, 83% of male students' partners had decided to terminate their pregnancies by having an abortion (Thato, S. 2002: 98). In 1999, survey on abortive situation in Thailand revealed that 28.5% of all abortions were illegal, whereas 46.8 % was performed in mothers age 24 years old or younger and almost 30% was under 20 years old. About 28.8% of illegal abortions resulted in serious medical conditions such as infection, uterine perforation, sterility or even death (Vorakamin, S. & Boonthai, N. 2001: 5). Additionally, 20 out of 443 abortions (5%) in Nakhon Pathom province were illegal (Nakhon Pathom provincial health office, 2003).

In summary, premarital sexual intercourse is increasing among Thai adolescents, particularly for vocational students. Negative outcomes such as STIs/HIV/AIDS and unplanned pregnancies are increasing among this population as a result of unprotected sexual activity (Thato, S. 2002: 4). The best way to prevent these problems is to avoid sexual intercourse or abstinence. Recently, adolescents are more exposed to media and telecommunication whereas they can be easily influenced from risky behavior. As a nature of adolescents, they like to try something new and natural sexual drive is the major motivation to premarital sex (Triemchaisri, S. 2002:60). It is not easy for them to avoid sexual experiment that often leads to sexual intercourse. Instead of restraining them from having sex, it is more important to provide them appropriate sex education to adopt safer sex practices.

From the empirical studies, safer sex was viewed exclusively as the use of condom during sexual intercourse. This narrow definition of safer sex excludes other behaviors that may reduce one's likelihood of contracting AIDS. More recently, investigators have called for the exploration of other types of safer sex practices such as: the use of assertiveness and interpersonal skills in negotiating and protecting during sexual intercourse, the avoidance of alcohol and drug use before or during sexual

intercourse, the avoidance of contact with body fluids, and the avoidance of those persons at greatest risk (Dilorio et al., 1992: 204). The researcher concerned the importance of the safer sex behavior among adolescents, particularly vocational students. Therefore, a study was conducted to identify sexual behavior and to explore factors influencing safer sex behavior as conceptualized by Pender's health promotion model. Accordingly, this study will concentrate on vocational male students who have sexual experience because empirical studies have shown that they are considered a high-risk group (Saisung, P. 1998: iv-v; Noparat, P. 2000: 63-65; Srisawang, R. 2002: iv; Saipan, N. 2003: 47; Thato, S. 2002: iii).

Pender's health promotion model provides the framework for this study to explore the complex biopsychosocial processes that motivate individuals to engage in behaviors directed toward the enhancement of health (Pender, et al., 2002: 60). This study focuses on behavior-specific cognitions and affect because this set of variables is considered to be a major motivational significance. Thus, these variables constitute a critical "core" for future intervention, because they are subject to modification through nursing actions (Pender, et al., 2002: 69). Behavior-specific cognitions and affect consists of six concepts: (a) perceived benefits of action, (b) perceived barriers of action, (c) perceived self-efficacy, (d) activity-related affect, (e) interpersonal influences, and (f) situational influences. However, this study concentrates on perceived benefits and barriers of action, perceived self-efficacy, and interpersonal influences because the empirical studies have demonstrated only these variables having relationship with safer sexual behavior (Diclemente et al., 1992: 197; Mahuttano, K. 1996: ii; Chaipathum, W. 1997: iii; Poka, S. 1998: v; Saipan, N. 2003: 46; Thato, S. 2002: iii).

The result of this study could be practically used as a guideline to assess sexual behavior of adolescents and to develop sex education programs to promote safer sex among young adolescents. It can also be used as reference data for further study and can significantly be useful for related organization to practice health-promotion activity in the community, especially among teenagers. Lastly, it can be useful for public organization to set up a policy for national development, whereas young adolescent is a substantial part of

the society and will play an important role for national economic, social, and political development.

Research questions

What are the safer sex practices among male vocational students? and Whether or not the perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, and interpersonal influences can predict safer sex practices?

Research objective

General objective: To study the safer sex practices and related factors among male vocational students in Nakhon Pathom province.

Specific objectives:

1. To study sexual behaviors among male vocational students in Nakhon Pathom province.
2. To examine relationship between perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, interpersonal influences, and safer sex practices among male vocational students in Nakhon Pathom province.
3. To examine predictors of safer sex practices among male vocational students in Nakhon Pathom province.

Research hypothesis

1. There is a positive relationship between perceived benefits of safer sex and safer sex practices among male vocational students in Nakhon Pathom province.
2. There is a negative relationship between perceived barriers of safer sex and safer sex practices among male vocational students in Nakhon Pathom province.

3. There is a positive relationship between perceived self-efficacy of safer sex and safer sex practices among male vocational students in Nakhon Pathom province.
4. There is a positive relationship between interpersonal influences and safer sex practices among male vocational students in Nakhon Pathom province.
    4.1 Peer norm has positive relationship with safer sex practices among male vocational students in Nakhon Pathom province.
    4.2 Partner norm has positive relationship with safer sex practices among male vocational students in Nakhon Pathom province.
    4.3 Social support of peer has positive relationship with safer sex practices among male vocational students in Nakhon Pathom province.
    4.4 Social support of partner has positive relationship with safer sex practices among male vocational students in Nakhon Pathom province.
5. Perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, and interpersonal influences can predict safer sex practices among male vocational students in Nakhon Pathom province.

Variables in this study

Independent variables consisted of:

1. Perceived benefits of safer sex
2. Perceived barriers of safer sex
3. Perceived self-efficacy of safer sex
4. Interpersonal influences
    4.1 Peer norms
    4.2 Partner norms
    4.3 Social support of peer
    4.4 Social support of partner

Dependent variables consist of:

Safer sex practices:

1. Use of condom
2. Use of assertiveness skills
3. Avoidance of risky behaviors

Scope of the study

This study focuses on behavior-specific cognitions and affect of Pender's health-promotion model. The sample in this study was male vocational students in certificate level (year 1-3), 1st semester of academic years 2004 in Nakhon Pathom province.

Operational definitions

1. Perceived benefits of safer sex: refer to directed motivating behaviors that are mental representations of the positive or reinforcing consequences of a behavior (Pender, et al., 2002: 69). In this study, perceived benefits refer to perception of benefits of safe sex practices that can reduce chance of contracting Sexually Transmitted Infections (STIs) including human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) and unwanted pregnancies. Perceived benefits of safer sex consist of three dimensions: (1) decrease risk factors, (2) protection against pregnancy and STIs/AIDS, and (3) reduce anxiety.

2. Perceived barriers of safer sex: refer to perceptions concerning the unavailability, inconvenience, expense, difficulty, or time-consuming nature of a particular action. Barriers are often viewed as the blocks, hurdles, and personal costs of undertaking a given behavior and usually arouse motives of avoidance in relation to a given behavior (Pender, et al., 2002: 70). In this study, perceived barriers refer to perception of difficulties associated with safer sex practices consisting of four aspects: (1) turnoffs, (2) hassles, (3) execution, and (4) relationship concerns in use of condom, use of assertiveness skills, and avoidance of risky behavior (Thato, S. 2002: 10).

3. Perceived self-efficacy of safer sex: refer to expectation about one's ability to perform a specific behavior (Bandura, 1977: 191). In this study, Perceived self-efficacy refers to male student's perception in their capability to practice sexual activities consisting of three aspects: (1) perception of confidence in the ability to say no to sex, (2) perception in ability to be assertive in achieving sexual satisfaction, and (3) perception in ability to use any protection when engaging in sexual activity (Rosenthal, et al., 1991: 82).

4. Interpersonal influences: refer to the cognitions concerning the behaviors, belief, or attitudes of others. Interpersonal influences consist of norms (expectations of significant others), social support (instrumental and emotional encouragement), and modeling (vicarious learning though observing others engaged in a particular behavior) (Pender, et al., 2002: 72). In this study, interpersonal influences refer to perception towards peer and partner norms and social support of peer and partner as follows:

4.1 Peer and partner norms: in this study, refer to male vocational student's attitudes about their peer opinions and partner opinions whether they agree with safer sex practices such as use of condom, use of assertiveness skills, and avoidance of risky behavior.

4.2 Social support of peer and partner: refer to resources offered by peer and partner to engage in safer sex practices. In this study, social support consists of three aspects: (1) instrument, (2) confidence, and (3) information.

5. Safer sex practices: in this study, refer to male vocational student's practices to protect infection of the sexually transmitted infections (STIs), human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) and unwanted pregnancies. Safer sex practices consist of three aspects: (1) use of condom, (2) use of assertiveness skills, and (3) avoidance of risky behaviors such as avoidance of homosexual practices/anal sex, avoidance of contact with body fluids such as partner's semen/vaginal secretions and partner's blood, avoidance of alcoholic consumption prior to or during sexual intercourse, avoidance of having sexual intercourse with risky infected person, and avoidance of having sexual intercourse on a first date (Dilorio, et al., 1992: 205).

CHAPTER II
LITERATURE REVIEW

This study explored safer sex practices of male vocational students in Nakhon Pathom province. Relevant literature on factors related to safer sex practices of male vocational students were reviewed as follows:

1. Adolescent's sexual behavior
    1.1 Sexual behavior
    1.2 Sexual attitude
2. Sexual behavior among male vocational students
3. Safer sex behaviors
4. Theoretical framework related safer sex practices
    4.1 Pender's health promotion model
5. Relevant research
    5.1 Relevant research on safer sex behaviors
    5.2 Relevant research on variables of the study
6. Conceptual framework

Adolescent's sexual behavior

Sexual development is a crucial stage of change for teenagers and also plays significant role in developing personality. In addition, sexual development also indicates adolescents' sexual behavior as sexual hormone significantly influences body changes. Once the sexual drive is stimulated, adolescent will be sexually developed and encouraged to pay more attention on sexual activities (Kaewkudan, S. 2000: 15).

Sexual behavior includes covert behavior which has significant influences on overt behavior. Covert behavior refers to any unexpressed behavior such as thoughts and perceptions about their sexual behavior while overt behavior refers to any behavior that is clearly expressed from dating to having sexual intercourse. Certainly, male and female adolescents express their sexual behavior differently. Benjapolpitak

claimed that 95% of male adolescents masturbate while only 60% of female adolescents practice masturbation to achieve their own sexual satisfaction (Benjapolpitak, A. 2003: 67).

Despite physical differences, social condition and cultural belief also affect adolescent's sexual behavior. For instance, Katchadourian stated that Western adolescents usually have their first sexual intercourse in their early and middle teens (Benjapolpitak, A. 2003: 67). In 1998, another study by Brook Advisory Service in The UK also supported that most of teenagers has their first sexual intercourse before age 17 while about 20% of them has their first sex before age 16 (Benjapolpitak, A. 2003: 67). Capaldi and colleague founded that first sexual intercourse of male adolescents associated with following factors: Rapid change of physical condition, marital status of parents (eg. divorce, second marriage), aggressive and risky behavior, and drug use (Capaldi et al., 1996: 344).

According to Ford & Kittisuksathit, S. (1996: 28), male and female adolescents have different sexual attitudes and behavior as shown in Table 1:

Table 1: Sexual behavior and attitudes to sexual activity of young men and young women

Dimension	Young Men	Young Women
Social acceptability of pre-marital intercourse	Commonly, first sexual experience was wet dreams or masturbation. Pre-marital intercourse accepted and expected for young men. Young men who are virgins are ridiculed by their peers.	Masturbation uncommon, considered negatively. Pre-marital intercourse strictly unacceptable for 'respectable' women. Such activity considered to be highly damaging to the reputation of the young women and her family.
Attitudes to sexual feelings	Positive, open. Strong psychological sense of sexual drive which demands 'release' and justifies coercion occasionally. Sex is for enjoyment. A subject discussed with humor and much slang.	Generally negative attitude to sexual feelings. Great reluctance to admit having such feelings. In the rare admission of sex taking place, justifies in terms of pleasing partner and sustaining relationship.
Actual sexual experience	Practically universal. Often first (and much subsequent) intercourse taking place with prostitutes. Belief that the level of non-commercial sex is increasing.	Very difficult to identify because of extreme reticence on the part of young woman to admit sexual experience. Articulate definite steps and limits in sexual interaction-holding hand, hugging, kissing.
Attitudes to condom use and contraception	Condoms used in varying degrees of consistency with prostitutes but not with (non-commercial) girlfriends. Contraception viewed as the woman's responsibility.	Would like to know more about contraception. Generally not consider seeking or requesting contraception because they would fear being stigmatized as sexually active.
Attitudes to negative consequences of sexual activity	The core of men's sexual freedom is that such activity has no impact upon their reputation. Mixed attitudes to the risk of HIV from prostitutes. Pregnancy is the women's problem.	The greatest perceived harm revolves around the women's reputations. Pregnancy feared because shows evidence of 'sinful' behavior. HIV/STDs not perceived as salient issues.

Source: Ford & Kittisuksathit, S. (1996: 28)

Sexual behavior among male vocational students

There are several empirical studies exploring premarital sexual behavior among Thai adolescent. Most literature has focused on high school students and vocational students; especially in male adolescents and young adults. Most of sexual issues focus on sexual experience, age at first sexual intercourse, status of first sexual partner, and condom use. In this part, I will elaborate findings in each issue.

1. Sexual experience

Saisung examined risky behavior among 314 vocational students in Nan province. She found that 33.4% of all students reported having had premarital sexual intercourse (47.3% for males and 8.1% for females) (Saisung, P. 1998: 43).

Nopparat examined factors associated with risky sexual behavior among 360 vocational students and 360 high school students. She reported that 25.18% of high school males and 4.07% of high school female and 32.30% of vocational males and 8.21% of vocational females reported having had premarital sexual intercourse (Nopparat, P. 2000: 62-63).

Ramkarun studied attitude towards sexual activities and preventive behavior among 360 vocational students in Trang province. The study revealed that 37.2% of male and 9.4% of female respondents reported having had premarital sexual intercourse (Ramkarun, S. 2001: 59).

Srisawang assessed risky behavior among 464 vocational students in Muang District, Chiang Mai province. She reported that 54.53% of vocational students reported having had premarital sexual intercourse (Srisawang, R. 2002: 108).

Thato identified predictors of condom use among 425 Thai vocational students aged between 18 and 22 years. She found that 49.9% of participants identified themselves as sexually active, 64.8% in males and 32% in females (Thato, S. 2002: iii).

In summary, from these studies, it should be concluded that the prevalence of premarital sexual intercourse among Thai adolescents is increasing. Thai adolescents, especially vocational male students, had the high rate engaging in premarital sexual behavior. Major factors that influence Thai adolescents to engage in premarital sexual activity were influences of western culture, peer pressure, media, substance use,

parent-child relationship, parental supervision, having a girl/boyfriend, and psychosocial traits (Thato, S. 2002: 31).

2. Age at first sex

Patiyoot studied values associated with sexual behavior and health locus of control in STD-risk behaviors among 163 vocational student adolescents in Nakorn srithammarat province. She reported that 74.2% of male vocational students had their first sexual intercourse when they were at age between 15 and 17. The average age at first sex of male vocational students was 15.7 years old (Patiyoot, K. 1998: 80).

Nopparat examined factors associated with risky behavior among 360 vocational students and 360 high school students. She reported that male vocational students because sexually active at age between 13 and 18, the average age was 15.7, where as female vocational students became sexually active at older (age 14 and 17 years old with the average age was 15.5 (Nopparat, P. 2000: 63).

Srisawang examined risky behavior among 464 vocational students in Muang District, Chiang Mai province. The study revealed that 49.01% of vocational students had their first sexual intercourse at early age (Srisawang, R. 2002: iv).

Lastly, Saipan explored sexual behavior and factors associated with sexual intercourse among 760 adolescents aged 15 to 25 years under the Vocational Education Department in Muang District, Yasothon province. She reported that 64.7% of the samples had their first sexual intercourse between age 16 and 19, and the average age was 16.6 (Saipan, N. 2003: 46).

In summary, premarital sexual behavior among Thai adolescents had gradually changed. Mostly, adolescents had their first sexual experience at younger age compare to previous studies. Especially, young men did start their first sexual intercourse earlier than young women.

3. Status of first sexual partner

Saisung surveyed risky behavior among 314 vocational students in Nan province. She reported that 74.2% of students had their first sexual intercourse with their lover/girlfriend, 16.2% with female friend, and 4.2% with sex workers (Saisung, P. 1998: 43).

Nopparat examined factors associated with risky behavior among 360 vocational students and 360 high school students. The study revealed that 56.2% of male students and 81.8% of female students reported having had first sexual intercourse with their lover, 42.5% of male students and 18.2% of female students had their first sex with friend, and only 1.4% of male students had their first sexual experience with sex workers (Nopparat, P. 2000: 63).

Ramkarun studied attitude towards information about sexual activities and prevention of risky behavior among 360 vocational students in Trang province. She found that 33.1% of male students reported having had first sexual intercourse with their lover, 33.1% with friend, and 28.1% with sex worker, while 59.3% of female students reported having had first sexual intercourse with their lover and 40.7% with friend (Ramkarun, S. 2001:59).

Srisawang explored risky behavior among 464 vocational students in Muang District, Chiang Mai province. She found that 92.1% of students reported having had first sexual intercourse with their lover and 46.7% with friend (Srisawang, R. 2002: 108).

Lastly, Saipan explored sexual behavior and associated factors among 760 adolescents aged 15 to 25 years under the Vocational education department in Muang district, Yasothon province. The study founded that 79.4% of vocational students reported having had first sexual intercourse with their lover/girlfriend, and only 1.4% had sex with sex workers (Saipan, N. 2003: 46).

In summary, it has shown that adolescents were likely to have their first sexual intercourse with their lover or friend instead of having sex with sex workers as presented in the past. This trend has been changed since the Sexually tranmitted infections were mostly found in sex industry. Furthermore, it is considerably cheaper to have sexual intercourse with lover and friend comparing to the cost of having sex service from prostitute.

4. Condom use

Chaiprathom examined relationship between knowledge, attitude and practice of condom use to protect AIDS among 334 vocational students in Karasin Technical College. It was found that most of students had a moderate level of knowledge of

condom use. About 63.6% had moderate level of attitude towards condom use as they reported using condoms could be an efficient way in contraception and prevent STIs. Despite the benefit of condom use, most adolescent feel ashamed to carry condoms. Furthermore, 54.5% of the sample group either forgot or were drunk reported having sexual intercourse with sex worker without using a condom (Chaipathom, W. 1997: iii).

Saisung found that 29.5% of the samples reported never using condoms, 43.2% reported using condoms with every act of sexual intercourse, and 56.8% reported using condoms only from time to time. In the past three month, she found that 61.9% of the samples had sex with friend and 12.5% with sex worker and about a quarter of each group reported never using condom in any act of sexual intercourse (Saisung, P. 1998: 43).

Ramkarun reported that 44.4% of vocational students had sexual intercourse with the prevention of risky behavior by using condom every time with sex worker, 26.6% using condom every time with friend, and 19.2% using condom every time with lover. Surprisingly, more than half of them reported having distorted instruction and practicing of condom use incorrectly (Ramkarun, S. 2001: 59).

Srisawang found that 40.7% of vocational students reported using a condom sometimes when had sex with friend, and 39.5% reported using a condom sometimes when had sex with lover (Srisawang, R. 2002: 111).

Thato found that only 6.3% of vocational students reported using condom every time in the beginning of the relationship, and 10.2% rarely use a condom in later times. Regarding reasons for using condoms, 86.3% of sexually active participants reported that they used a condom to prevent unwanted pregnancy, 46.3% to prevent AIDS, and 44.2% to prevent STDs (Thato, S. 2002: 111).

Lastly, Saipan, N. (2003: 46) found that 54% of the sample reported using a condom to prevent STDs or for the purpose of contraception in their first sexual intercourse. The major reasons not using a condom were: they had no thought of sexual intercourse, they were not ready or not having a condom. On the other hand, a few of them reported not having clear information about how to use condom properly, not feeling naturally when having sexual intercourse, not being aware of premarital pregnancy and STIs/AIDS transmission, not having intention to practice contraception

and lastly were confident in sexual partner that he/she did not have sexually risky behavior.

In summary, most of male vocational students perceived benefits of condom use but felt embarrassed to put on. Most of them felt uncomfortable to use with their lover or friend but used with sex worker or unknown partner. They concerned that condom would reduce sensation and make sex feel different. They also believed that it was safe to have sexual intercourse with their friend or lover who had least risk of sexual infection. Furthermore, by using condom, partner might not trust if they insist or refuse to use one.

Safer sex behavior

Definition of safer sex

Dilorio and colleagues developed measurement of safe sex behavior in adolescents and young adults. They defined that safe sex behaviors were sexually related practices that avoid or reduce the risk of exposure to HIV and the transmission of HIV. Safe sex behavior in their studies includes: (a) use of condom, (b) Avoidance of homosexual practices (anal intercourse), (c) Use of assertiveness skills, (d) Avoidance of body fluids, and (e) Avoidance of risky behaviors (Dilorio et al., 1992: 204-205).

Modhok and colleagues defined that safer sex refer to frequent use of condom and having sexual intercourse with monogamous partner (Modhok et al., 1993: 121)

Ichikawa defined safer sex such as dry kissing, hugging, genital touching, and masturbation, etc. are primary meanings and activities of safer sexual behavior. Yet, safer sex behaviors also refer to condom use for the purpose of AIDS prevention (Ichikawa, 1997: 9).

Kaewkudan stated that safer sex usually referred to any practices associated with sexual activities that either prevent or minimize the risk of STIs/AIDS to achieve sexual satisfaction (Kaewkudan, S. 2000: 23).

In the same year, according to the research conducted by Hla Tun Oo (2000: 9), safer sex was the reported condom use at first sex intercourse in life and the

consistent condom use with any type of sexual partner in every act of sexual intercourse.

Lastly, Poyah also conducted another study of analysis of the Zimbabwe demographic and health surveys on safe sex practice in the context of HIV/AIDS and also defined safer sex practice as the behavior or actions taken by the respondent to avoid or minimize the risk of HIV transmission or infection. She also mentioned that safe sexual practice was measured respectively through the four dichotomous variables of 'stopped all sex', 'only one sex partner', 'reduced partners' and 'stated using condom' (Poyah, 2000: 26).

In this study, safer sex behaviors refer to male vocational student's practices to protect infection of the Sexually Transmitted Infections (STIs), Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) and unwanted pregnancies. Safer sex practices consist of three aspects: (1) use of condom, (2) use of assertiveness skills, and (3) avoidance of risky behavior such as avoidance of homosexual practices/anal sex, avoidance of body fluids such as partner's semen/vaginal secretions and partner's blood, drink alcohol prior to or during sexual intercourse, have sexual intercourse with risky infected person, and have sexual intercourse on a first date.

There are several empirical studies exploring premarital sexual behavior among adolescents (Saisung, P. 1998; Nopparat, P. 2000; Ramkarun, S. 2001; Thato, S. 2002; Saipan, N. 2003). They found that Thai adolescents, especially vocational students, had increased premarital sexual intercourse such as first sexual experiences occurred at younger ages, and risk-taking behaviors. For instance, those who having sexual intercourse without a condom, having many sexual partners, and drinking alcohol before or during sexual intercourse. The negative consequences of adolescents' engaging in premarital sexual behavior are STIs, including HIV/AIDS, an unwanted teenage pregnancy, and illegal abortion (Kanchana, S. 2003: 16). Therefore, it is important for adolescents to understand effective methods to prevent themselves from the problems of premarital sexual intercourse. The following safer sex guidelines have been recommended by Rojpithayakorn, W. & Sudkasame, W. (1990: 116-117), including as follows:

1. Having sexual relationship with mutually monogamous partners or only practicing sexual activities with someone who has no risk of STIs/AIDS infection such as those who are promiscuous or use drugs.
2. Using condom every time when having oral, anal or fellatio sexual intercourse. Condom should be used since the initial of any sexual intercourse to prevent HIV transmission.
3. Avoidance of oral sex (cunnilingus) that contacts with body fluids from vagina because HIV can be transmitted through the sores.
4. Avoidance of contact with sexual partner's semen or vaginal secretion.
5. Avoidance of oral-anal or finger-anal contact because HIV can be transmitted through the sores or scratches.
6. Do not use instrument such as Dildos and Vibrator.
7. Avoidance of contact with partner's blood especially for those who are sadism which have higher risk of HIV transmission.
8. Use a spermicide as well as a condom with each act of sexual intercourse to prevent STIs/AIDS.
9. Avoidance of French kissing that contacts with saliva of partner

Among the couple who does not infect HIV/AIDS (investigate from the sexual history and blood test), although they do not perform either one as mentioned above, they won't be vulnerable to HIV/AIDS infection.

Sex at no risk of AIDS (Rojpithayakorn, W. and Sudkasame, W. 1990: 117)

1. Masturbation or Mutual Masturbation
2. Kissing such as Social Dry Kissing
3. Hugging
4. Massaging
5. Having body contact without sexual intercourse

Sex at least risk of AIDS

1. Practicing Cunnilingus or Fellatio
2. French kissing
3. Having vaginal or Anal intercourse with using a condom

Sex at highest risk of AIDS

1. Oral-anal or finger-anal intercourse
2. Use of Dildos or Vibrator
3. Vaginal intercourse without using a condom
4. Anal intercourse without using a condom
5. Sadism or Sado-Maso Chistic Practice

Despite the practices given above to prevent any problems that would occur among adolescents, avoidance of drinking alcoholic beverages before or during sexual intercourse also minimizes the risk of getting sexually transmitted infection. Drinking alcoholic beverages before or during sexual intercourse also reduces the use of condom as alcohol usually leads to unconsciousness in decision making. According to Srisawang, R. (2002: 111), 36.4% of the sample group reported drinking alcoholic beverages before having sex intercourse. After drinking alcoholic beverages the probability of condom use decreased by 6.06%. As can be seen, drinking was one of the factors that increased risk of getting STIs/AIDS and unwanted pregnancy. Additionally, Thato also supported that one of the predictors for actual condom use was alcohol consumption among vocational students (Thato, S. 2002, iii). Therefore, adolescents should be aware of negative consequences of drinking when having sexual intercourse to reduce chance of having risky behavior.

Theoretical Framework related to Safer Sex Practices

In this study, Pender's Health Promotion Model has been used as a conceptual framework. The concept of Pender's Health Promotion Model explained biopsychosocial processes that influence health promoting practices as processes that motivate people to increase health and life standard. Repetition of behaviors is a crucial part of the process to promote good health without fear or threat as they would not practice if there is no fear or threat anymore. For the best result, this process of behavior should be considered as a pattern of life style. Pender suggested that higher health standard was a significant motivator for the group to behave (Pender, et al., 2002: 60-61; Hanujaruenkul, S. 1999: 1). Health Promoting Model was effectively used to explain how to live away from sickness and to promote healthy behavior.

Pender also explained factors associated with and influenced health promoting behavior were individual characteristics and experiences, behavior-specific cognition and affect, and behavioral outcome as shown in figure 1:

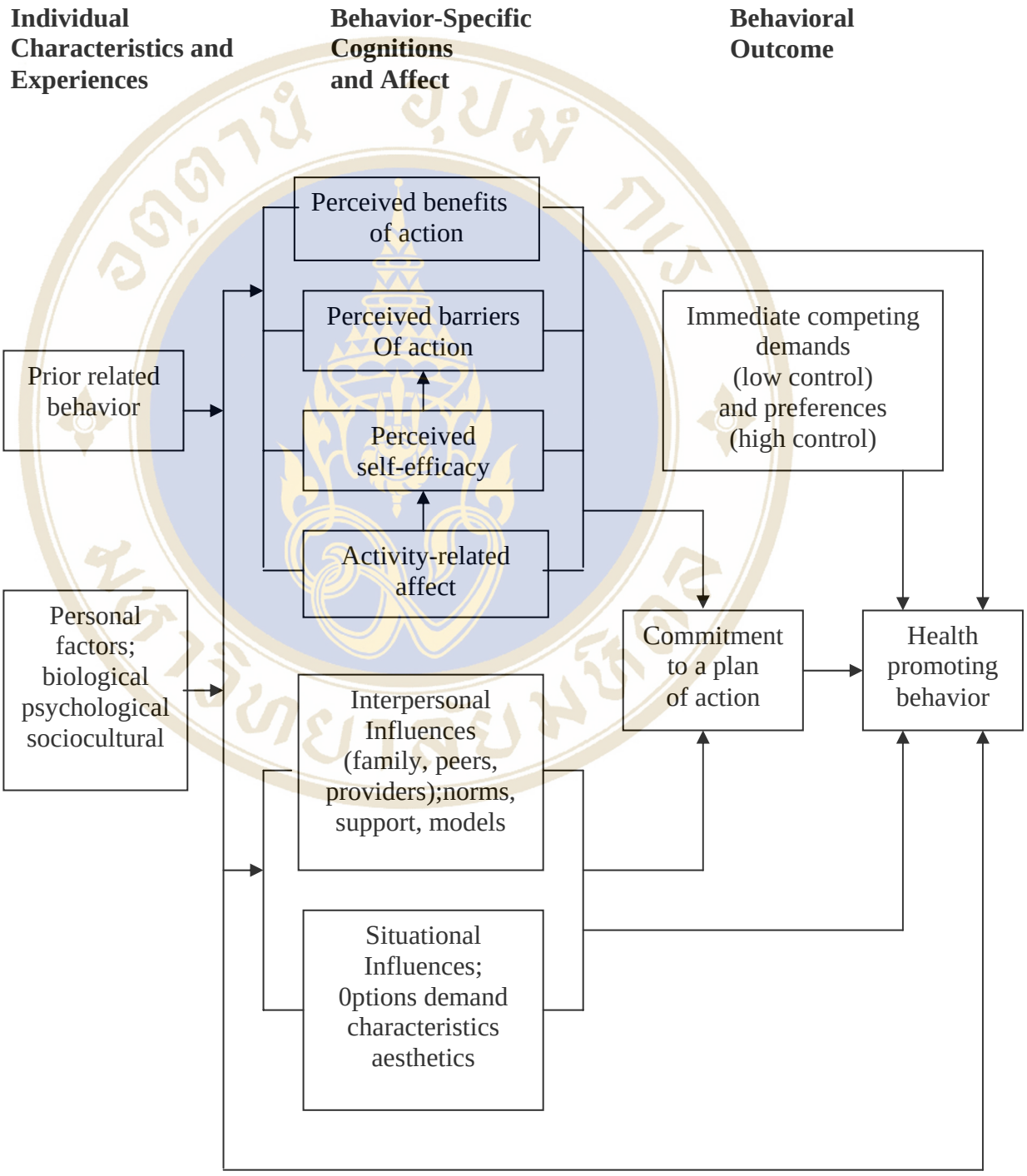

Figure 1: Revised health promotion model (Pender, et al., 2002: 60)

Individual characteristics and experiences

Each person has unique personal characteristics and experiences that affect subsequent actions. The importance of their effect will depend on the target behavior being considered (Pender, et al., 2002: 68). Factors in this group such as prior related behavior, and personal factors:

- **Prior related behavior**

Empirical studies indicate that often the best predictor of behavior is the frequency of the same or a similar behavior in the past. Prior behavior is proposed as having both direct and indirect effects on the likelihood of engaging in health-promoting behavior may be due to habit formation, predisposing one to engage in the behavior automatically, with little attention to the specific details of its execution. On the other hand, indirect influence on health-promoting behavior is through perceptions of self-efficacy, benefits, barriers, and activity-related affect. Prior behavior is proposed as shaping all of those behavior-specific cognitions and affect (Pender, et al., 2002: 68-69).

- **Personal factors**

The relevant personal factors predictive of a given behavior are shaped by the nature of the target behavior being considered. In the health promotion model, personal factors have been categorized as biologic, psychologic, and sociocultural. Biologic factors include but are not limited to variables such as age, body mass index, pubertal status, menopausal status, aerobic capacity, strength, agility, or balance. Psychologic factors can include variables such as self-esteem, self-motivation, and perceived health status. Sociocultural factors include variables such as race, ethnicity, acculturation, education, and socioeconomic status. Although personal factors may influence cognitions, affect, and health behaviors, some personal factors cannot be changed; thus, they cannot be incorporated as variables to be modified in nursing interventions (Pender, et al., 2002: 69).

Behavior-specific cognitions and affect

This set of variables is considered to be a major motivational significance. Thus, these variables constitute a critical "core" for intervention, because they are subject to modification through nursing action (Pender, et al., 2002: 69). This set of variables consists of:

- **Perceived benefits of action**

One's plan to engage in a particular behavior is proposed as hinging on the anticipated benefits or outcomes that will occur. Anticipated benefits of action are mental representations of the positive or reinforcing consequences of a behavior. The motivational importance of anticipated benefits is based on personal outcomes from prior direct experience through observational learning from others engaging in the behavior. Individuals tend to invest time and resources in activities with a high likelihood of increasing their experience of positive outcomes. Beliefs in benefits or positive outcome expectations have generally been show to be a necessary although not sufficient condition for engagement in a specific health behavior. In the Health Promotion Model, perceived benefits are proposed as directly motivating behavior as well as indirectly motivating behavior through determining the extent of commitment to a plan of action to engage in the behaviors from which the anticipated benefits will result (Pender, et al., 2002: 69-70).

- **Perceived barriers of action**

Anticipated barriers have been affected intentions to engage in a particular behavior and actual execution of the behavior. In relation to health-promoting behaviors, barriers may be imagined or real. They consist of perceptions concerning the unavailability, inconvenience, expense, difficulty, or time-consuming nature of a particular action. Barriers are often viewed as the blocks, hurdles, and personal costs of undertaking a given behavior and usually arouse motives of avoidance in relation to a given behavior. Perceived barriers to action as depicted in the health promotion model affect health-promoting behavior directly by serving as blocks to action as well

as indirectly through decreasing commitment to a plan of action (Pender, et al., 2002: 70).

- **Perceived self-efficacy**

Bandura (cited in Pender, et al., 2002: 70) defined that self-efficacy is the judgment of personal capability to organize and execute a particular course of action. It is concerned not with the skill one has but with judgment of what one can do with whatever skills one possesses. Judgments of personal efficacy are distinguished from outcome expectations. Perceived self-efficacy is a judgment of one's abilities to accomplish a certain level of performance, whereas an outcome expectation is a judgment of the likely consequences (e.g., benefits, costs) such behavior will produce. Perceptions of skill and competence in a particular domain motivate individuals to engage in those behaviors that they excel in. Feeling efficacious and skilled in one's performance is likely to encourage one to engage in the target behavior more frequently than is feeling inept and unskilled. Self-efficacy is proposed as influencing perceived barriers to action, with higher efficacy resulting in lowered perception of barriers to the performance of the target behavior. Self-efficacy motivates health-promoting behavior directly by efficacy expectations and indirectly by affecting perceived barriers and determining level of commitment or persistence in pursuing a plan of action.

- **Activity-related affect**

Subjective feeling states occur prior to, during, and following an activity, based on the stimulus properties associated with the behavioral event. These affective responses may be mild, moderate, or strong and are cognitively labeled, stored in memory, and associated with subsequent thoughts of the behavior. Activity-related affect consists of three components: emotional arousal to the act itself (act related), the self acting (self related), or the environment in which the action take place (context related). The resultant feeling state is likely to affect whether an individual will repeat the behavior again or maintain the behavior long term. The affect associated with the behavior reflects a direct emotional reaction or gut-level response to the thought of the behavior, which can be positive or negative - is it fun, delightful, enjoyable, disgusting, or unpleasant. Behaviors associated with positive affect are likely to be

repeated, whereas those associated with negative affect are likely to be avoided. For some behaviors, both positive and negative feeling states will be induced. Thus, the relative balance between positive and negative affect prior to, during, and following the behavior is important to ascertain. Activity-related affect is proposed as influencing health behavior directly as well as indirectly through self-efficacy and commitment to plan of action (Pender, et al., 2002: 71).

- **Interpersonal influences**

Interpersonal influences are cognitions concerning the behaviors, beliefs, or attitudes of others. These cognitions may or may not correspond with reality. Primary sources of interpersonal influence on health-promoting behaviors are family (parents or siblings), peers, and health care providers. Interpersonal influences include norms (expectations of significant others), social support (instrumental and emotional encouragement), and modeling (vicarious learning through observing others engaged in a particular behavior). These three interpersonal processes have been shown to affect individuals' predisposition to engage in health-promoting behaviors in a number of studies. Social norms set standards for performance that individuals can adopt or reject. Social support for a behavior taps the sustaining resources offered by others. Modeling portrays the sequential components of the health behavior and is an important strategy for behavior change in social cognitive theory. Interpersonal influences are proposed as affecting health-promoting behavior directly as well as indirectly through social pressures or encouragement to commitment to a plan of action (Pender, et al., 2002: 72).

- **Situational influences**

Personal perceptions and cognitions of any situation or context can facilitate or impede behavior. Situational influences on health-promoting behavior include perceptions of options available, demand characteristics, and aesthetic features of the environment in which a given behavior is proposed to take place. Situational influences may be an important key to developing new and more effective strategies for facilitating the acquisition and maintenance of health-promoting behaviors in diverse populations (Pender, et al., 2002: 72).

Commitment to plan of action

Commitment to plan of action initiates a behavioral event. This commitment will propel the individual into and through the behavior unless a competing demand that the individual cannot avoid or a competing preference that the individual dose not resist intervenes. Commitment to plan of action implies the underlying cognitive processes: (1) commitment to carry out a specific action at a given time and place and with specified person or alone, irrespective of competing preferences; and (2) identification of definitive strategies for eliciting, carrying out, and reinforcing the behavior. Commitment alone without associated strategies often results in "good intentions" but failure to perform a valued health behavior (Pender, et al., 2002: 73).

Immediate competing demands and preferences

Immediate competing demands or preferences refer to alternative behaviors that intrude into consciousness as possible courses of action immediately prior to the intended occurrence of a planned health-promoting behavior. Competing demands are viewed as those alternative behaviors over which individuals have a relatively low level of control because of environmental contingencies such as work or family care responsibilities. Failure to respond to a demand may have untoward effects for the self or for significant others. Competing preferences are viewed as alternative behaviors with powerful reinforcing properties over which individuals exert a relatively high level of control. They can derail a health-promoting behavior in favor of the competing behavior. The extent to which an individual is able to resist competing preferences depends on his or her ability to be self-regulating. Strong commitment to a plan of action may sustain dedication to complete a behavior in light of competing demands or preferences. Immediate competing demands and preferences are proposed as directly affecting the probability of occurrence of health behavior as well as moderating the effects of commitment (Pender, et al., 2002: 73-74).

Behavioral outcome

- **Health-promoting behavior**

Health-promoting behavior is the endpoint or action outcome in the health promotion model. However, it should be noted that health-promoting behavior is ultimately directed toward attaining positive health outcomes for the client. Health-promoting behavior, particularly when integrated into a healthy lifestyle that pervades all aspects of living, should result in improved health, enhanced functional ability, and better quality of life at all stages of development (Pender, et al., 2002: 74).

The set of these variables related to each other and has been influenced health promoting behavior. In this study, the researcher only studied behavior-specific cognitions and affect and focused on these related variables:

1. Perceived benefits of safer sex
2. Perceived barriers of safer sex
3. Perceived self-efficacy of safer sex
4. Interpersonal influences consisting of four aspects as follows:
    - 4.1 Peer norms
    - 4.2 Partner norms
    - 4.3 Social support of peer
    - 4.4 Social support of partner

The researcher only focused on behavior-specific cognitions and affect because this set of variables was considered to be a major motivational significance and a core for intervention in health-behavioral modification (Pender, et al., 2002: 69). Thus, only four related variables that have been obtained from literature, from domestic and international sources, were used in this study.

Relevant research on safer sex behavior

In fact, there have not been many studies on safer sex behavior among vocational students. However, most of literatures that have been found focused on risky behavior, how to prevent risky behavior, perceived behavior of safer sex and safer sex intentions. In this study, the researcher have been investigated relevant literatures on safer sex behavior and summarized as follows:

Tiemtad studied effectiveness of health education program on safe sex behavior among 138 noncommissioned officers in Surathampitak Fort, Nakorn Rajasrima province. The findings showed that the health education program provided for those noncommissioned officers significantly contributed higher achievement prior to the program launched in terms of perceived susceptibility, benefit, intention and safer sex behavior. Self-efficacy was significantly found the best predictors of safe sex behavior and the demographic variables explained a variance of perceived severity (Tiemtad, P. 1992: iv).

Pattarawanit studied Effect of cultural factors on safer sexual behavior among 449 adolescents aged 15 to 24 years. The findings showed that female adolescents were more likely to have conversation about sexual activity and more likely to negotiate and refuse a sexual intercourse. However, not many people were willing to persuade sexual partner to use condom (Pattarawanit, U. 1995: v).

Ichikawa studied gender differences in HIV-related sexual beliefs and safer sex intentions among 480 vocational students aged 15 to 26 years in Bangkok Metropolitan, Thailand. The study indicated the most significant predictor of safer sex intentions was cues to action for males while it was risk perception and risk reduction attitude toward HIV/AIDS for females. In addition, Social norm and self-efficacy were respectively second and third predictors of intentions for both genders. Overall, social norm was revealed to play an important role to enhance safer sex intentions (Ichikawa, 1997: i-ii).

Hla Tun Oo explored safer sex behavior of military men in Southern Thailand and found that condom use at first sex was statistically significantly associated to age, educational status, father’s education and salary (Hla Tun Oo, 2000: iv).

Poyah surveyed safe sex practice in the context of HIV/AIDS: An analysis of the 1988 and 1994 Zimbabwe demographic and health surveys. Target group was

female aged between 15 and 49. In 1988, Social-economic power and AIDS knowledge were considered to be safer sex practice predictors. In 1994, perceived self-risk and gender relationship was added to the predictors consequently (Poyah, 2000: iv).

Viratey examined intentions to safer sex among factory workers in Sampharn district, Nakhon Pathom province. The researcher found that male workers had safer sexual activity than female and the married couples were more aware of having safer sex than those who were single (Viratey, 2000: iv).

Kaewkudan, S. (2000: iv) studied relationships between personal factors, information exposure behaviors, sex education from guardians, institutional environment, and perceived safer sex behaviors of nursing students, Governmental nursing institutes, Bangkok Metropolis. She found that institutional environment and sex education from guardian has positive relationship with perceived safer sex behaviors. Additionally, institutional environment, age, student dormitory, sex education from guardian, information exposure behaviors can also predicted 13% of the variance in perceived safer sex behaviors of nursing students.

As can be seen, there were many different directions and sample groups engaged in the studies of safer sex behavior. Several factors were found to have relation and influences on safer sex practice. Thus, Pender's concept about safer sex behavior has been considered as the most appropriate theory to be a conceptual framework for this research. This theory was used to study related factors that could predict safer sex behavior. Related factors that could predict safer sex behavior have positive motivation in promoting healthy behavior, especially the attempt to prevent risky behavior and encourage safer sex practices.

Relevant research on variables of the study

In this study, the researcher has been examined relevant research on related variables of safer sexual behavior and therefore summarized as follows:

Perceived benefits of safer sex

According to Pender, one's plan to engage in a particular behavior is proposed as hinging on the anticipated benefits or outcomes that will occur. Perceived benefits of actions are directly motivating behavior as well as indirectly encouraging them to repeat their behavior (Pender, et al., 2002: 69).

Similarly, Hingson and colleagues (1990: 295) surveyed beliefs about AIDS, use of alcohol and drugs, and unprotected sex among 1,773 Massachusetts adolescents aged 16 to 19 years. The investigators found that adolescents who believed that condoms are effective in preventing HIV transmission and who were worried that they can get AIDS were 3.1 and 1.8 times, respectively, more likely to use condoms all the time. Thirty-one percent of 1,080 sexually active respondents reported always using a condom. The main reason was perceived benefits of condom use that was convenient, would not decrease sexual satisfaction and could prevent HIV transmission (Hingson, et al., 1990: 295).

Orr and Langefeld examined factors associated with condom use by 116 sexually active male adolescents aged 15 to 19 years who at risk for STD. The researchers found that condom use was less likely among those reporting other health risk behaviors. The investigators concluded that perceived benefits of condom use, namely prevention of unwanted pregnancy and avoidance of STIs, including AIDS, influences adolescents' condom use (Orr & Langefeld, 1993: 873).

Chaipratum examined relation between knowledge, attitude and condom use for AIDS prevention among 334 vocational male students in Karasin province. The researcher showed that students believed in the benefits of condom as contraceptive tool and STIs/AIDS prevention (Chaipratum, W. 1997: iii).

Lastly, Thato identified predictors of condom use among 425 vocational students aged 18 to 22 years. The researcher found that perceived benefits from condom use was a significant predictor for actual condom use among vocational

students. The major reasons for condom use intention were to prevent pregnancy, AIDS, and STDs (Thato, S. 2002: iii).

From the empirical studies, perceived benefits of safer sex were significant predictors of safer sex practice among adolescents. Thus, perceived benefits of safer sex was included as an independent variable in this study.

Perceived barriers of safer sex

In relation to health promoting behaviors, Pender stated that barriers of action are associated with intention to behave in a certain way. The barrier may be imagined or real. They consist of perceptions concerning the unavailability, inconvenience, expense, difficulty, or time-consuming nature of a particular action. Barriers usually arouse motives of avoidance in relation to a given behavior (Pender, et al., 2002: 70).

Similarly, Basen-Engquist examined psychosocial predictors of safer sex behavior among 275 undergraduate students. The researcher found that perceived barriers of condom use was inversely associated with intention to use a condom. Students who perceived fewer barriers of condom use had higher intention to use condoms (Basen-Engquist, 1992: 120).

Ford and colleagues surveyed sexual behavior and condom use among 1,435 black low income populations in urban area and Hispanic youth in Detroit aged between 15 and 24. Only 30% of all participants engaged in condom use for the purpose of contraception and to STIs/AIDS prevention while unavailability of condom was the main barrier of those who did not use condom (Ford, et al., 1994: 219).

Mahuttano examined factors influencing condom use among 310 vocational male students in Bangkok. The researcher found that only 11.3% used condom every time they had sexual intercourse and condom price was one of the variables influencing condom use (Mahuttano, K. 1996: ii).

Thato identified predictors of condom use among 425 vocational students aged 18 to 22 years. The researcher found that only 6.3% of heterosexually active students indicated that they used condom every time when having sexual intercourse. The major reason not using them was that they used other methods, condoms were not

natural, they were at no risk for pregnancy, at no risk for AIDS/STDs, and though that condoms were not convenient (Thato, S. 2002: 110-112).

Lastly, Saipan examined sexual behavior and factors associated to sexual intercourse among 760 vocational students aged 15 to 25 years in Yasothon province. The researcher found that half of the sample group was not concern about STIS prevention and contraception at their first sex because: they never had thought of sexual intercourse, unavailability of condom, they did not understand how to use condoms properly, condoms were not natural, they were not concern about unwanted pregnancy and were confident in their partner that was sexually uninfected (Saipan, N. 2003: 46).

From the empirical studies, perceived barriers of condom use were strong predictors of safer sex behavior among adolescents, especially vocational students. Statistically, perceived barriers of safer sex were likely to influence safer sexual behavior, and therefore were included as another independent variable in this study.

Perceived self-efficacy

Perceived self-efficacy is one judgment of one's ability to achieve a certain level of performance, whereas an outcome expectation is a judgment of the likely consequences such behavior will produce. According to Bandura, self-efficacy is defined as the judgment of personal capability to organize and execute a particular action. Confidence and perception of skill and competence motivate individuals to engage in particular behaviors. More importantly, feeling efficacious and skilled in one's performance is likely to encourage one to engage in the target behavior more frequently than is feeling inept and unskilled (cited in Pender, et al., 2002: 70). Pender also supported that perceived self-efficacy arouses motive to engage in particular behavior and to support individuals to accomplish the goal faster than ones feeling incapable (Pender, et al., 2002: 70).

Rosenthal and colleagues explained relation between perceived self-efficacy and ability to say no to sex, ability to assertive in achieving sexual satisfaction and ability to use any protection when engaging in sexual activity among 1,008 adolescents aged between 17 and 20. The investigators found that perceived self-

efficacy in ability to say no to sex is related in predicting safer sexual behavior in both male and female adolescents (Rosenthal, et al., 1991: 77).

Brafford and Beck developed and validated a scale for college students that measures self-efficacy in using condoms. A scale was administered to a sample of 768 college students. One of the significant finding was the scale correlated with a measure of intention to use condoms. Students who had high self-efficacy in using condoms were likely to use them (Brafford & Beck, 1991: 219).

Ichikawa studied gender differences in HIV-related sexual beliefs and safer sex intentions among 480 vocational students aged 15 to 26 years in Bangkok Metropolitan, Thailand. The researcher found that self-efficacy was one of the predictors of safer sex intentions for both genders (Ichikawa, 1997: ii).

Noparat examined related factors of risky behavior among high school students and vocational students. Perceived self-efficacy and risky behavior had negative relationship. Perceived self-efficacy predicted 9.6% of the variance in risky behavior. Therefore, if individuals have high perceived self-efficacy, they were likely to have sexual behavior at lower risk (Noparat, P. 2000: iv-v).

Lastly, Thato identified predictors of condom use among 425 vocational students aged 18 to 22 years. She found that condom self-efficacy regarding condom use predicted 14% of the variance in condom use intentions among Thai vocational students (Thato, S. 2002: iii).

From the empirical studies, it is clearly seen that perceived self-efficacy were significant predictors to safer sexual behavior and therefore were included in this study as one of the independent variables.

Interpersonal influences

According to Pender, et al., (2002: 72), interpersonal influences are cognitions concerning the behaviors, beliefs, attitudes and etc, whereas motivating health promoting behavior. Interpersonal influences consist of norms (expectations of significant others), social support (instrumental and emotional encouragement) and modeling (vicarious learning through observing others engaged in a particular behavior).

Fisher studied predicting contraceptive behavior among university men: The role of emotions and behavioral intentions. Primary sources of interpersonal influences on health-promoting behaviors are family (parents or siblings), partners, peers, and health care provider. Comparing to all the sources, peers and partners have the most influence on condom use intention among vocational male students (Fisher, 1984: 104).

Strader and Beaman explained interpersonal influences on condom use intention among male students that a sexual partner usually refused to use a condom while peers, parents and health care provider always encouraged them to use one (Strader & Beaman, 1991: 584).

Jemmott and Jemmott III surveyed condom using behavior among black female and found that their friend, as a sexual partner, usually disagreed to use a condom when having sexual intercourse. As a result, the percentage of black female not using condom in sexual intercourse is likely to be high (Jemmott & Jemmott III, 1991: 228).

Wilson and colleagues studied attitudes, knowledge, and behavior regarding condom use in urban black adolescent females and found that rate of condom use is depending on contraceptive communication as condom use is the matter between sexual partners, whereas both of them must come up with an agreement regarding relationship concern (Wilson, et al., 1994: 13).

Mahuttano examined factors influencing condom use among 310 vocational male students in Bangkok and found that sexual partner's support was a significant variable supporting condom use in sexual intercourse (Mahuttano, K. 1996: ii).

Kirby and Diclemente studied social network and risk reduction in sexual behavior among homeless adolescents. Teenagers that received clearly suggestion about safer sexual practice from peers and sexual partners are likely to constantly use condom, rated about four times more than those who never receive health-promoting information (cited in O'Hara, et al., 1996: 176)

Ichikawa studied gender differences in HIV-related sexual beliefs and safer sex intentions among 480 vocational students aged 15 to 26 years in Bangkok Metropolitan, Thailand. The researcher found that social norm was one of the

predictors, which was revealed to play an important role in enhancing safer sex intentions in both genders (Ichikawa, 1997: ii).

Poka examined sexual behavior and factors related to condom use intentions to prevent AIDS of male adolescents. The researcher found that belief and peer norms about condom use were a significant variable to motivate male student to use a condom with their lover for STIs/AIDS prevention (Poka, S. 1998: v).

Noparat examined related factors of risky behavior among high school students and vocational students. Perceived peer norms and risk behavior had significant negative relationship and predicted 9.60% of variance of risky behavior among high school and vocational male students (Noparat, P. 2000: iv-v).

Lastly, Thato identified predictors of condom use among 425 vocational students aged 18 to 22 years. The researcher found that peer norms regarding condom use predicted 27% of the variation in condom use among Thai vocational students (Thato, S. 2002: iii).

From the empirical data, interpersonal influences were significant predictors to safer sexual behavior and therefore were also included in this study as one of the independent variables.

In conclusion, perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex and interpersonal influences are likely to have significant influence on safer sexual behavior. These variables have been summarized into conceptual framework as shown in figure 2:

Independent variables **Dependent variable**

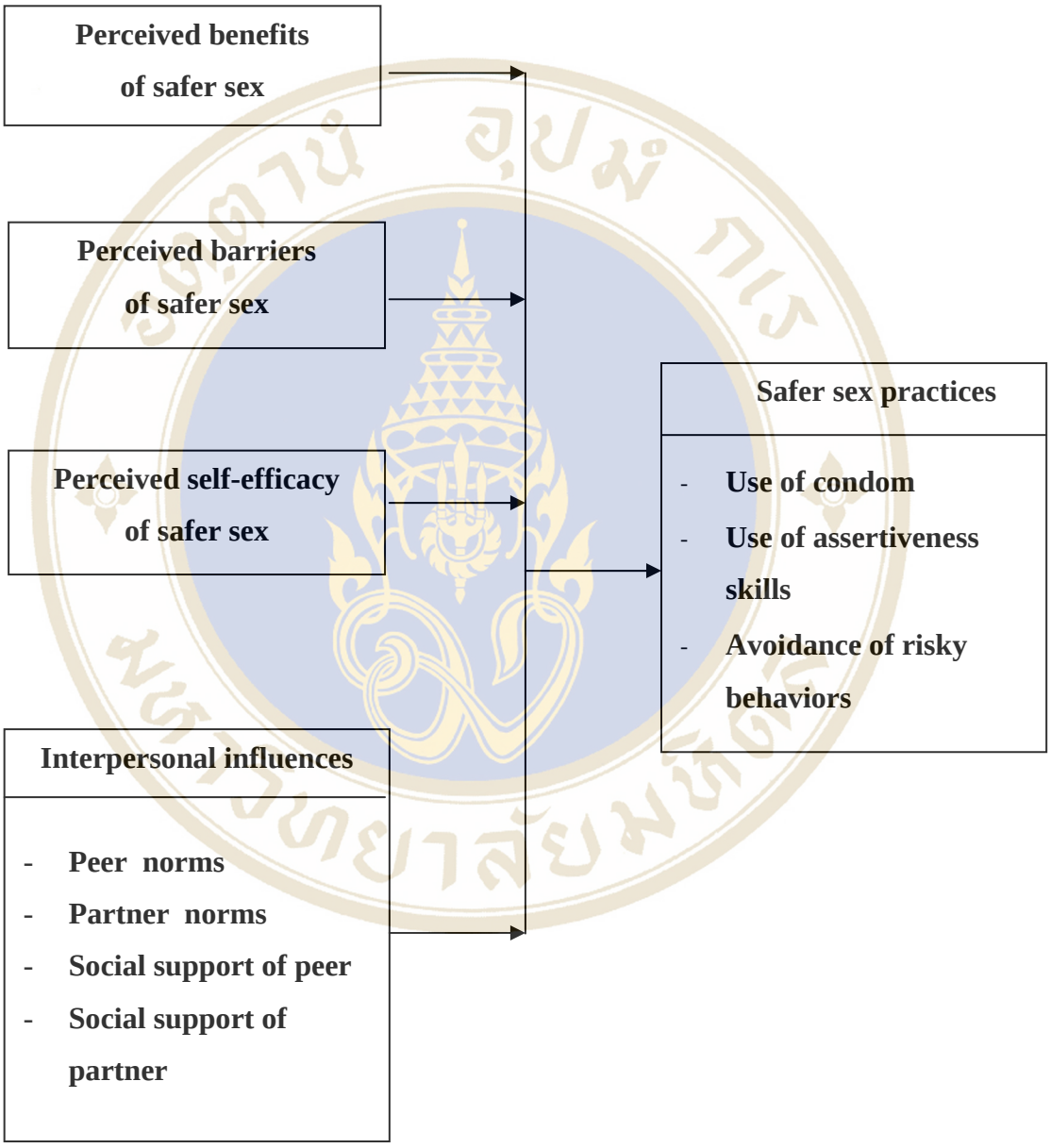

Figure 2: Conceptual framework

CHAPTER III
MATERIALS AND METHODS

The purpose of this study was to assess safer sex practices among male vocational students in Nakhon Pathom province as conceptualized by Pender's health-promotion model: (a) describe sexual behavior among male vocational students; (b) examine the bivariate relationship between behavior-specific cognitions and affect of Pender's health-promotion model (perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, and interpersonal influences) and safer sex practices among male vocational students; and (c) identify the predictors of safer sex practices among male vocational students. The methodology has respective details as follows:

1. Research design
2. Population and sample group
3. Research instruments
4. Protection of human right
5. Data collection
6. Data analysis

Research design

This research was a cross-sectional descriptive. Data were collected by self-administered questionnaires during September to October, 2004.

Population and sample group

The total population was 3,121 male vocational students aged between 15 and 19 who were studying in certificate level 1-3 from six schools under the Department of vocational education in Nakhon Pathom province.

The sample group was calculated from this formula (Daniel, 1995: 177-179)

$$n = \frac{NZ^2\sigma^2}{d^2(N-1) + Z^2\sigma^2}$$

When n = Required sample size

N = Total population = 3,121(6 schools)

Z = Standard Z score at $\alpha/2 = 0.025$, Z = 1.96

d = Accepted error of the sample (d = 0.5)

σ^2 = Variation (estimated variation = 3.85, Mahuttano, K. 1996: 71)

$$n = \frac{(3{,}121)\,(1.96)^2\,(3.85)^2}{(0.5)^2(3{,}121-1) + (1.96)^2(3.85)^2}$$

$$= 212$$

From a pilot study, 50% of the sample reported experiencing sexual intercourse. Thus, the required sample size in this study is (212 x 2) / 50 = 424 male vocational students. In addition, 10% of the calculated sample size was added to ensure any error such as incomplete and non-response in data collection. Therefore, total sample size was 466 male vocational students.

Inclusion criteria are as follows:

1. Aged between 15 and 19 years old
2. The first, second and third year male students in certificate level, 1st semester of academic year 2004
3. Having had sexual experience
4. Voluntarily participate in this study

Selection of sample

The sample of 2,442 male students was selected by the cluster sampling technique from four out of six schools under the Department of vocational education in Nakhon Pathom province: (a) Nakhon Pathom Technical College, (b) Nakhon Pathom Industrial and Community Education College, (c) Nakhon Pathom Vocational College, and (d) Nakhon Pathom Polytechnic College.

Then, the sample size from each school was calculated by sample size for proportion allocation formula (Piriyakul, M. 1993: 190)

$$n^h = \frac{n \times N^h}{N}$$

When n^h = Required sample size

n = Calculated sample size = 466

N^h = Total population (in each school)

N = Total population = 2,442 (4 schools)

a) Nakhon Pathom Technical College $n^h = \frac{466 \times 1,551}{2,442} = 295$

b) Nakhon Pathom Industrial and Community Education College $n^h = \frac{466 \times 492}{2,442} = 94$

c) Nakhon Pathom Vocational College $n^h = \frac{466 \times 219}{2,442} = 42$

d) Nakhon Pathom Polytechnic College $n^h = \frac{466 \times 180}{2,442} = 35$

Finally, the sample group in this study was limited by the proportion of the total sample from each college, as follows:

Vocational schools	**Total population**	**Required sample size**
Nakhon Pathom Technical College	1,551	295
Nakhon Pathom Industrial and Community Education College	492	94
Nakhon Pathom Vocational College	219	42
Nakhon Pathom Polytechnic College	180	35
Total	2,442	466

After acquiring the required sample size, the researcher divided students into equal proportion in each level of certificate in each school.

After that, the researcher randomly selected students from the whole class, which had more than the calculated sample size, resulting in the total sample of 500 students in the actual data collection.

Research instruments

Self-administered questionnaire, as a research instrument, was developed from the questionnaires obtained from literature review. The questionnaire consisted of 7 parts as follows:

Part 1: Demographic data

The demographic data were personal characteristics of the respondents. This part was constructed by the researcher to gather information regarding: age, educational level, living status, living with, monthly stipend and source of monthly stipend, amount of money and alcohol consumption. The format of this part was close and open-ended question.

Part 2: Perceived benefits of safer sex

This questionnaire was selected to represent the construct of perceived benefits of safer sex in the Pender's health promotion model (Pender, et al., 2002: 69). These 15 item-questionnaire composed of three domains of Decrease risk factors (five items), Protect against pregnancy and STIs/AIDS (five items), and Reduce anxiety (five items). Each item was scored on a 5-point Likert-type response ranging from "strong disagree" (scored as 1) to "strong agree" (scored as 5). A summation of items from all three dimensions gave a possible range of a composite score from 15 to 75. The composite score was used for analysis with higher scores indicating higher perceived benefits of safer sex. Subscale scores ranging from 5 to 25 for Decrease risk factors, from 5 to 25 for Protect against pregnancy and STIs/AIDS, and from 5 to 25 for Reduce anxiety could be derived.

From the pilot study, perceived benefits of safer sex was examined for its internal consistency in 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.80.

Part 3: Perceived self-efficacy of safer sex

This part of questionnaire was developed by Rosenthal, et al. (1991: 82), and represented the construct of perceived self-efficacy of safer sex in Pender's health-promotion model. There were 20 items with five levels of the ranging scale consisting of three aspects: (1) male vocational student's perception about confidence in their ability to say no to sex, (2) male vocational student's perception about ability to assertive in achieving sexual satisfaction, and (3) male vocational student's perception about ability to use any protection when engaging in sexual activity. The scoring of the meaning of the statements is as follows: "very unsure" (scored as 0) to "very sure" (scored as 4). The possible range of score is 0 to 80, whereas higher score indicates higher self-efficacy. Subscale scores ranging from 0 to 32 for "Say no", from 0 to 16 for "Assertive", from 0 to 20 for "Precaution", and from 0 to 12 for "other could be derived". The Sexual self-efficacy scale was examined for internal consistency in a sample of 1,788 males and females aged 17 to 20 years (Rosenthal, et al., 1991: 79). Cronbach's alpha coefficients were 0.75 for Say no, 0.77 for Assertive, and 0.69 for Precaution.

From the pilot study, the Sexual self-efficacy scale was examined for internal consistency in a sample of 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.80 for the total scale.

Part 4: Sexual intercourse experience and sexual behavior

This part of questionnaire was constructed by the researcher to gather information regarding: sexual orientation, having girl/boyfriends, age at first sexual intercourse, status of first sexual partner, STIs/AIDS prevention at first sexual intercourse, condom use in sexual intercourse, and number of partners in past 6 months. The format of the items was close and open-ended question.

Part 5: Perceived barriers of safer sex

This part of questionnaire was selected to represent the construction of perceived barriers of safer sex in the Pender's health-promotion model. These 20 item-questionnaire composed of four domains: (1) Turnoffs (five items), (2) Hassles (five items), (3) Execution (five items), and (4) Relationship Concerns (five items) (Thato,

S., 2002: 74). Each item was scored on a 5-point Likert-type response ranging from "strongly disagree" (scored as 1) to "strongly agree" (scored as 5). A summation of all items from three dimensions gave a possible range of a composite score from 20 to 100. The composite score was used for analysis, whereas higher scores indicate higher perceived barriers of safer sex. Subscale scores ranging from 5 to 25 for "Turnoffs", from 5 to 25 for "Hassles", from 5 to 25 for "Execution", and from 5 to 25 for "Relationship Concerns" could be derived.

The Perceived barriers of safer sex was tested for internal consistency in a vocational sample of 391 aged 18-22 years (Thato, S. 2002: 75). Cronbach's alpha coefficient was 0.82 for Turnoffs, 0.72 for Hassles, 0.69 for Execution, 0.79 for Relationship Concerns, and 0.83 for the total scale. In the pilot study, the Perceived Barriers of safer sex was tested for internal consistency in a sample of 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.71 for the total scale.

Part 6: Interpersonal influences

This part of questionnaire was modified from "health-promotion model" by Pender, et al., (2002: 72) consisted of: (6.1) peer norms, (6.2) partner norms, (6.3) social support of peer, and (6.4) social support of partner. Peer norms and partner norms were used to assess male vocational student's opinions about their peer opinions and partner opinions if they agree with safer sexual practices.

6.1 A peer norm was assessed by five items. Each item was scored on a 4-point Likert-type response ranging from "none of my friends" (scored as 0) to "all of my friends" (scored as 3). The total composite score of peer norms ranged from 0 to 15, whereas higher score indicates greater peer norms.

From the pilot study, peer norms were examined for internal consistency in 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.60.

6.2 A partner norm was assessed by five items. Each item was scored on a 4-point Likert-type response ranging from "strongly disagree" (scored as 0) to "strongly agree" (scored as 3). The composite score of partner norms ranged from 0 to 15, whereas higher score indicates greater partner norms.

From the pilot study, partner norms were examined for internal consistency in 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.65.

According to Pender, et al., (2002: 72), social support questionnaire was constructed and used to investigate social support from peers and partners. It consisted of three aspects: (1) instrument (money, labor force, and time), (2) emotional encouragement (confidence) and (3) information.

6.3 Social support of peer was assessed by 11 items composed of three domains: (1) Instrument (one item), (2) Confidence (seven items), and (3) Information (three items). Each item was scored on a 4-point Likert-type response ranging from "never" (scored as 0) to "every time" (scored as 3). A summation of all items from three dimensions gave a possible range of a composite score from 0 to 33. The composite score was used for analysis, whereas higher score indicates higher social support of peer. Subscale scores ranging from 0 to 3 for "Instrument", from 0 to 21 for "Confidence", and from 0 to 9 for "Information" could be derived.

From the pilot study, social support of peer was examined for internal consistency in 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.81.

6.4 Social support of partner was assessed by 11 items composed of three domains of (1) Instrument (one item), (2) Confidence (seven items), and (3) Information (three items). Each item was scored on a 4-point Likert-type response ranging from "never" (scored as 0) to "every time" (scored as 3). A summation of all items from three dimensions gave a possible range of a composite score from 0 to 33. The composite score was used for analysis, whereas higher score indicates higher social support of partner. Subscale scores ranging from 0 to 3 for "Instrument", from 0 to 21 for "Confidence", and from 0 to 9 for "Information" could be derived.

From the pilot study, social support of partner was examined for internal consistency in 30 male vocational students aged 15-19 years. Cronbach's alpha coefficient was 0.89.

Part 7: Safer sex practices

This part of questionnaire was selected to represent the construction of safer sex practices in the Pender's health-promotion model. These 19 item-Safer sex

behavior questionnaire (SSBQ) was developed by Dilorio, et al., (1992: 204). It consisted of three domains: (1) Use of condom (six items), (2) Use of assertive skills (four items), and (3) Avoidance of risky behavior (nine items). A 4-point Likert-type response ranging from “never” (scored as 0) to always (scored as 4) was designed. The composite score of three domains of safer sexual practice ranged from 0 to 57. The composite score was used for analysis, whereas higher score indicates greater safer sexual practices. Subscale scores ranging from 0 to 18 for “Use of condom”, from 0 to 12 for “Use of assertive skills”, and from 0 to 27 for “Avoidance of risky behavior” could be derived. Safer sex behavior questionnaire (SSBQ) was examined for internal consistency in a sample of 89 college freshmen aged 18 to 20 years (Dilorio, et al., 1992: 205). The Cronbach’s alpha was 0.82 for the total scale.

In the pilot study, Safer sex behavior questionnaire (SSBQ) was tested for internal consistency in a sample of 30 male vocational students aged 15-19 years. Cronbach’s alpha coefficient was 0.73 for Use of condom, 0.63 for Use of assertive skills, 0.71 for Avoidance of risky behavior, and 0.62 for the total scale.

Validity

After the instruments was approved by the thesis committee, the researcher had consulted five experts (two experts who were familiar with the literature and were working with adolescents and young adults regarding sexual behavior, one expert who was working about human behaviors, and two nursing instructors who were familiar with Pender’s health-promotion model). They examined the content validity and appropriateness of language use in the instruments.

Protection of human rights

This study was approved by the Committee of Human Right Related to Human Experimentation, Mahidol University on September 1, 2004 (No. 98/2004). Subjects who met the criteria were invited to participate in the study. Potential subjects received a full explanation of all aspects of the study, including risks of uncomfortable feeling due to the sensitive nature of some items. Confidentiality and anonymity have been maintained by the assignment of numbers to all participants and recording all data

based on these numbers. All results are reported as a group data. The participants also have the right to refuse, or withdraw from the study at any time.

Data collection

The steps of data collection are as follows:

1. After the Committee of Human Right Related to Human Experimentation Mahidol University approved the proposed study, the researcher collected the data by submitting a Faculty of Graduate Studies letter to the directors of four vocational schools requesting their permission for data collection. Duration of data collection was on official working days.

2. The researcher met with the directors of four vocational schools to explain purpose and details of the study.

3. The researcher cooperated with the academic deputy directors, class advisors and other teachers who were given responsibilities to and coordinate in collecting data at the right time.

4. The researcher cooperated with the liaison to schedule a convenient period for data collection. Potential subjects received an explanation of the study and subjects who agreed to participate in the study were asked to complete the consent form. Confidentiality and anonymity of the questionnaires were also emphasized prior to the distribution of questionnaire.

5. The set of self-administered questionnaires was completed by the respondents in a setting and handed back to the researcher. Approximate completing time was 30 minutes.

6. Due to working experience course of 3rd year student, the researcher could not collect data herself. Therefore, the research assistants (eg. class advisor) would be responsible of the data collection. Importantly, the objectives of the study and data collecting method were clearly explained by researcher, to make sure that the research assistants understand and know how to collect the data correctly.

7. Upon the completion, the questionnaires were checked by the researcher to minimize missing data.

Data analysis

Statistical program utilized to analyze the data, with a significant level of 0.05. The statistics used for data analysis are as follows:

1. Descriptive statistics:

Demographic characteristics and other background information were examined for frequency, percentage, arithmetic mean, standard deviation, minimum and maximum values, and range.

2. Analytical statistics:

2.1 Pearson's product moment correlation was used to examine relation between perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, interpersonal influences, and safer sex practices of male vocational students.

2.2 Stepwise multiple regression was used to analyze predictors to safer sex practices of male vocational students.

CHAPTER IV
RESULTS

The purpose of this cross-sectional descriptive design was to study safer sex practices, and examine relationships between independent variables (behavior-specific cognitions and affect) and dependent variable (safer sex practices), and to examine predictors of safer sex practices as conceptualized by the Pender's health promotion model. In this study, the researcher collected data from 500 male vocational students (age 15-19) in certificate level in year 1-3 under the Department of vocational education in Nakhon Pathom province. Of those, only 42.8% (n = 214) were sexually active subjects and were utilized for data analysis in this study.

The results of the study were divided into three parts as follows:

Part 1: Personal characteristics, sexual behavior, independent variables (behavior-specific cognitions and affect) such as perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, and interpersonal influences (peer norm, partner norm, social support of peer, and social support of partner) and dependent variables (safer sex practices).

Part 2: Relationship between independent variables (behavior-specific cognitions and affect) and dependent variables (safer sex practices).

Part 3: The predictors of safer sex practices.

Part 1: Personal characteristics, sexual behavior, independent variables (behavior-specific cognitions and affect) and dependent variables (safer sex practices)

1.1 Personal characteristics

The results show that the mean age of participants were 17.7 years with a standard deviation of 0.98 and age range of 15 to 19 years. The students were from three different academic levels (year 1-3) in the proportion of 33.6%, 32.7% and 33.6%, respectively. The majority of the sample (84.6%) lived with their parents. Eighty five percent of the sample indicated that they had monthly stipends between 1,000 and 3,000 baht with an average of 2,243 baht. Most of them (75.2%) received their monthly stipends from their parents. The majority of the sample (52.8%) indicated that a monthly stipend was sufficient but not enough to collect. About 48.1% of the sample reported drinking alcohol “sometimes” (Table 2).

Personal characteristics

Table 2. Personal characteristics of male vocational students (n=214)

Personal characteristics	Number	Percentage
Age (years)		
15	10	4.7
16	42	19.6
17	80	37.4
18	66	30.8
19	16	7.5
Mean = 17.7 years, SD = 0.98, Min – Max = 15-19		
Educational level		
First year	72	33.6
Second year	70	32.7
Third year	72	33.6
Living place		
Parents’ house	181	84.6
Relatives’ house	17	7.9
Apartment/dormitory	13	6.1
Friends’ house	2	0.9
Girlfriends’ house	1	0.5

Table 2. Personal characteristics of male vocational students (Cont.) (n=214)

Personal characteristics	Number	Percentage
Living with (n=213)		
Parents	180	84.5
Relatives	23	10.8
Boyfriend	4	1.9
Girlfriend	3	1.4
Myself	3	1.4
Monthly stipend (baht) (n=209)		
< 1,000	2	1.0
1,000-3,000	183	87.5
>3,000	24	11.5
Mean = 2,243.06, SD = 950.84, Min-Max = 500-6,000		
Source of monthly stipend		
Parents	161	75.2
Parents & Work	34	15.9
Relatives	6	2.8
Work	4	1.9
Parents & Girlfriend	4	1.9
Brother & Sister	2	0.9
Parents & Work & Girlfriend	1	0.5
Mother & Brother	1	0.5
Parents & Scholarship	1	0.5
Amount of money (baht/month)		
Yes, but not have collected money	113	52.8
Yes, have collected money	80	37.4
No	21	9.8
Alcohol consumption		
Never	28	13.1
Rarely	56	26.2
Sometimes	103	48.1
Usually	19	8.9
Always	8	3.7

1.2 Sexual behavior

Overall, 95.8% of sexually active subjects identified their sexual orientation as heterosexual, 3.7% as bisexual, and 0.5% as homosexual. Most of them (62.6%) had girlfriends. Regarding to their age at first sexual intercourse, the mean age was 15.21 years with a standard deviation of 1.44 and age range of 8 to 18 years. Most of them (78.8%) were between 15 and 18 years old. The majority of sexually active subjects (72.9%) identified their sexual partners at first sexual intercourse as lover/girlfriends, 18.7% as friend, 6.5% as acquaintance, and only 1.9% as sex workers. Regarding to STIs/AIDS prevention at first sexual intercourse, 58.7% of sexually active subjects reported that they "never" use any protection at first sexual intercourse. However, 36.2% of these sexually active subjects reported using a condom to prevent STIs/AIDS and pregnancy at first sexual intercourse, 2.3% reported using a protection but did not notify, 1.4% using withdrawal, 0.9% using pills, and 0.5% using a combination of condom and pills respectively. In regard to condom use when having sexual intercourse, only 15% of sexually active subjects indicated that they used condoms "every time" when having sex. About 22% of them reported they had "never" used a condom, 12.6% reported they had "rarely" used a condom, and 35% reported that they had "sometimes" used a condom. The mean number of sexual partners during past six months was two with a standard deviation of 3.11. Most of them (80.4%) had number of partner between one and five (Table 3).

Sexual behavior

Table 3. Sexual behavior of male vocational students (n=214)

Sexual behavior	Number	Percentage
Sexual Orientation		
Heterosexual	205	95.8
Bisexual	8	3.7
Homosexual	1	0.5
Having girl/boyfriend		
Yes	134	62.6
Used to have	53	24.8
No	27	12.6
Age at first sexual intercourse (n=208)		
≤ 10	2	1.0
11-14	42	20.2
15-18	164	78.8
Mean = 15.21, SD = 1.44, Min-Max = 8-18		
Status of first sexual partner		
Lover/girlfriend	156	72.9
Friend (female)	40	18.7
Acquaintance	14	6.5
Sex worker	4	1.9
STIs/AIDS prevention at first sexual intercourse (n=213)		
None	125	58.7
Condom use	77	36.2
Withdrawal	3	1.4
Pill	2	0.9
Condom use and Pill	1	0.5
Use a protection but did not notify	5	2.3
Condom use in sexual intercourse		
Never	47	22.0
Rarely	27	12.6
Sometimes	75	35.0
Usually	33	15.4
Always	32	15.0
Number of sexual partners in past 6 months (n=189)		
None	24	12.7
1	97	51.3
> 1	68	36.0
Mean = 2, SD = 3.11		

1.3 Independent variables (behavior-specific cognitions and affect)

In this study, behavior-specific cognitions and affect were included as independent variables. The mean score of each item was used to describe each variable based on Pender's health promotion model.

In this study, perceived benefits of safer sex were divided into three components: decrease risk factors, reduce anxiety, and protection against pregnancy and STIs/AIDS. As presented in Table 4, the male vocational students agreed about the benefits of safer sex ($\bar{X}$ (SD) = 4.00 (0.54), 3.85 (0.56), and 3.84 (0.57), respectively). Regarding the decrease risk factors, all male vocational students agreed that safer sex can reduce risk factors. Especially, they agreed that condom use can reduce risk of STIs/AIDS.

In terms of reduce anxiety, male vocational students agreed that safer sex can reduce anxiety. However, data indicated that those students were not sure that avoidance of anal sexual intercourse can reduce anxiety.

As of presented in the first two components, male vocational students perceived benefits of safer sex as a protection. Interestingly, they were not sure that avoidance of sexual intercourse on the first date can prevent STIs/AIDS and unwanted pregnancy (Table 4).

Perceived barriers of safer sex in this study were divided into four components: turnoff, execution, relationship concerns, and hassles. As presented in Table 5, the male vocational students were not sure about perceived barriers of safer sex ($\bar{X}$ (SD) = 3.15 (0.60), 3.10 (0.61), 3.08 (0.62), and 3.06 (0.60), respectively). Regarding turnoff, the male vocational students were not sure whether the barriers of safer sex make them embarrassed. Especially, they disagreed that avoidance of alcoholic beverages consumption before sexual intercourse makes them not confidence.

In term of execution, the male vocational students were not sure that the barriers of safer sex as it take time or it is ridiculous. However, they disagreed that it is ridiculous for men to have sexual intercourse with a single partner.

In term of relationship concerns, the male vocational students were not sure if the barriers of safer sex may break relationship. Especially, they disagreed that it might break relationship if they insisted to use a condom.

As of presented in the three components, the male vocational students were not sure if the barriers of safer sex is a troublesomeness or difficulty. Interestingly, they disagreed that it is difficult to avoid anal intercourse (Table 5).

Perceived self-efficacy of safer sex in this study was divided into four components: say no, assertive, precaution, and others. As presented in Table 6, the male vocational students perceived in their capability to practice safer sex but did not confidence ($\bar{X}$ (SD) = 1.74 (0.62), 2.45 (0.74), 2.13 (0.68), and 2.09 (0.87), respectively). Regarding to say no, the male vocational students perceived in their ability to say no to sex without confidence. Interestingly, data indicated that they cannot refuse a sexual advance by their partner.

In term of assertiveness, the male vocational students perceived about ability to assert in achieving sexual satisfaction with moderate confidence. However, data indicated that they perceived in their ability to ask your partner to provide the sexual stimulation them require without confidence.

In term of precaution, as presented in previous mention, the male vocational students perceived about ability to use any protection when engaging in sexual activity with moderate confidence. However, data indicated that they perceived in their ability to carry condoms around with them “in case” without confidence.

In term of other, the male vocational students perceived in their capability to others practice safer sex with moderate confidence. However, data indicated that they perceived in their ability to ask someone other than their partner for a date without confidence (Table 6).

Peer norms, as presented in Table 7, the male vocational students having some of friends have positive opinions about safer sex practices ($\bar{X}$ = 1.76, SD = 0.63). Especially, data indicated that some of their friends agreed avoid to having anal intercourse without a condom.

Partner norms, as presented in Table 8, the male vocational students who had a partner have positive opinion about safer sex practices ($\bar{X}$ = 2.02, SD = 0.54). However, data indicated that their partner disagree that use of condom in every sexual intercourse.

Social support of peer in this study was divided into three components: confidence, information, and instrument. As presented in Table 9, the male vocational

students received support from their friends to engage in safer sex practices from time to time ($\bar{X}$ (SD) = 1.31 (0.56), 1.23 (0.66), and 0.85 (0.78), respectively). Regarding to confidence, the male vocational students received support from their friends from time to time. Especially, they received support of confidence that avoidance of sexual intercourse on a first date can reduce risk of STIs/AIDS and unwanted pregnancy.

In term of information, the male vocational students received support of information from their friends from time to time. Especially, data indicated that they received support of information that sexual intercourse with homosexual person contains risks of contracting STIs/AIDS.

In term of instrument, the male vocational students never received support of instrument from their friends. Interestingly, data indicated that they never received support of condom from their friends (Table 9).

Social support of partner in this study was divided into three components: confidence, information, and instrument. As presented in Table 10, the male vocational students received support from their partner to engage in safer sex practices from time to time ($\bar{X}$ (SD) = 1.32 (0.68), 1.26 (0.81), and 0.72 (0.92), respectively). Regarding to confidence, the male vocational students received support of confidence from their partner from time to time. Especially, they received support of confidence that avoidance of sexual intercourse on a first date can reduce risk of STIs/AIDS and unwanted pregnancy.

In term of information, as presented in previous mention, the male vocational students received support of information from their partner from time to time. Especially, data indicated that they received support of information that sexual intercourse with homosexual person contains risks of contracting STIs/AIDS.

In term of instrument, the male vocational students never received support of instrument from their partner. Interestingly, data indicated that they never received support of condom from their partner (Table 10).

Table 4 Perceived benefits of safer sex

Perceived benefits of safer sex	Mean	SD
1. Decrease risk factors (1-5)	**4.00**	**0.54**
1.1 Use of condom can reduce risk of STIs/AIDS	4.44	0.67
1.2 Having sexual intercourse with only one sexual partner can reduce risk of STIs/AIDS	4.03	0.95
1.3 Avoidance of sexual intercourse when partner or you have sores in genital area can reduce risk of STIs/AIDS	3.79	1.03
1.4 Refusing to have sexual intercourse with someone who has many sexual partners or those who use drugs can reduce risk of STIs/AIDS	4.03	0.96
1.5 Avoidance of alcoholic beverages consumption before or during sexual intercourse can reduce risk of STIs/AIDS	3.73	1.03
2. Reduce anxiety (1-5)	**3.85**	**0.56**
2.1 Condom use in every sexual intercourse can reduce anxiety	4.28	0.74
2.2 Avoidance of anal intercourse can reduce anxiety	3.45	1.20
2.3 Avoidance of direct contact with sexual partner's blood can reduce anxiety	3.70	0.90
2.4 Discussion on sexual issues with sexual partner in preventing STIs/AIDS and unwanted pregnancy can reduce anxiety	3.79	0.79
2.5 Avoidance of sexual intercourse with someone who uses drugs can reduce anxiety	4.00	1.07
3. Protection (1-5)	**3.84**	**0.57**
3.1 Use of condom can prevent unwanted pregnancy	4.27	0.87
3.2 Avoidance of sexual intercourse with someone who is homosexual can prevent STIs/AIDS	3.83	1.06
3.3 Avoidance of direct contact with sexual partner's semen or vaginal secretion when you have sores in genital area can prevent STIs/AIDS	3.64	1.06
3.4 Insistence to use a condom in every sexual intercourse can prevent STIs/AIDS and unwanted pregnancy	4.20	0.92
3.5 Avoidance of sexual intercourse on a first date can prevent STIs/AIDS and unwanted pregnancy	3.29	0.97

Table 5 Perceived barriers of safer sex

Perceived barriers of safer sex	Mean	SD
1. Turnoffs (1-5)	**3.15**	**0.60**
1.1 Condom reduces sensation	3.56	1.12
1.2 It is embarrassing to initiate a discussion on condom use with sexual partner	3.07	1.05
1.3 It is embarrassing to avoid direct contact with sexual partner's blood	3.05	1.05
1.4 It is embarrassing to refuse when sexual partner insists to have anal intercourse	3.16	1.14
1.5 Avoidance of alcoholic beverages consumption before sexual intercourse makes you not confidence	2.91	1.11
2. Execution (1-5)	**3.10**	**0.61**
2.1 It takes time to put on a condom	3.24	1.05
2.2 It is privacy to ask sexual partner about a history of sexual practices	3.29	1.08
2.3 No information supports that avoidance of direct contact with sexual partner's semen or vaginal secretion can reduce risk of AIDS	3.24	0.94
2.4 No clear information explains that avoidance of anal intercourse can reduce risk of AIDS	2.91	1.11
2.5 It is ridiculous for men to have sexual intercourse with only one sexual partner	2.83	1.28
3. Relationship concerns (1-5)	**3.08**	**0.62**
3.1 Sexual partner may not trust if you insist to use a condom	3.07	1.10
3.2 It may break relationship if you insist to use a condom	2.91	0.99
3.3 It may cause misunderstanding if you avoid sexual intercourse when sexual partner or you have sores in genital areas	3.29	1.12
3.4 It may break relationship if you refuse sexual intercourse with sexual partner who is homosexual	3.16	1.20
3.5 It may break relationship if you refuse sexual intercourse on a first date	2.99	1.05
4. Hassles (1-5)	**3.06**	**0.60**
4.1 It is troublesome to put on and take off a condom	3.16	1.12
4.2 It is difficult to ask sexual partner about a history of homosexual practices, drug use, and STIs	3.20	1.20
4.3 It is difficult to avoid direct contact with sexual partner's semen or vaginal secretion	3.13	1.01
4.4 It is difficult to avoid anal intercourse	2.86	1.30
4.5 It is difficult to refuse sexual intercourse with sexual partner who used to inject drugs	2.94	1.04

Table 6 Perceived self-efficacy of safer sex

Perceived self-efficacy of safer sex	Mean	SD
1. Say no (0-4)	**1.74**	**0.62**
1.1 Refuse a sexual advance by your partner	0.90	1.09
1.2 Have a sexual encounter without feeling obliged to have intercourse	2.30	1.20
1.3 Ask a potential partner to wait if precaution are not available at the time	1.53	1.12
1.4 Control your sex urges while under the influence of alcohol or drugs	1.59	1.28
1.5 Choose when and with whom to have sex	2.13	1.24
1.6 Refuse to do something sexually which you don't feel comfortable about	1.87	1.27
1.7 Admit being inexperienced to your sexually experienced peers	1.98	1.21
1.8 Reject an unwanted sexual advance from someone other than your partner, e.g. an acquaintance	1.59	1.30
2. Assertive (0-4)	**2.45**	**0.74**
2.1 Put a condom on an erect penis	2.99	1.04
2.2 Initiate sexual activities	2.79	1.07
2.3 Tell your partner how to treat you sexually	2.10	1.18
2.4 Ask your partner to provide the sexual stimulation you require	1.92	1.28
3. Precaution (0-4)	**2.13**	**0.68**
3.1 Discuss using condoms and/or other contraceptives with a potential partner	2.35	1.16
3.2 Carry condoms around with you "in case"	1.74	1.41
3.3 Discuss with a partner use of condoms for AIDS protection when other means of contraception are already being used	2.23	1.11
3.4 Be able to buy condoms/contraceptives	2.50	1.15
3.5 Discuss precautions with a doctor or health professional	1.83	1.16
4. Others (0-4)	**2.09**	**0.87**
4.1 Meet your own sexual needs by masturbation	2.09	1.25
4.2 Watch sexually explicit movies without embarrassment	2.33	1.32
4.3 Ask someone other than your partner for a date	1.85	1.30

Table 7 Peer norm

Peer norm	Mean (0-3)	SD
Peer norm	**1.76**	**0.63**
1. Use of condom in every sexual intercourse	1.68	0.88
2. Avoidance of sexual intercourse when having sores in genital areas	1.91	0.91
3. Avoidance of anal intercourse without a condom	1.64	1.16
4. It is appropriate to discuss prevention of STIs/AIDS and unwanted pregnancy	1.77	0.95
5. Alcohol consumption reduces ability to control oneself and increases risk to have sexual intercourse without protection	1.81	0.95

Table 8 Partner norm

Partner norm	Mean (0-3)	SD
Partner norm	**2.02**	**0.54**
1. Use of condom in every sexual intercourse	1.93	0.86
2. Avoidance of sexual intercourse when having sores in genital areas	2.10	0.80
3. Avoidance of anal intercourse without a condom	2.00	1.06
4. It is appropriate to discuss prevention of STIs/AIDS and unwanted pregnancy	2.04	0.71
5. Alcohol consumption reduces ability to control oneself and increases risk to have sexual intercourse without protection	2.01	0.87

Table 9 Social support of peer

Social support of peer	Mean	SD
1. Confidence (0-3)	**1.31**	**0.56**
1.1 Confidence that condom use can prevent STIs/AIDS and unwanted pregnancy	1.66	0.90
1.2 Encouragement to carry a condom	1.29	0.92
1.3 Confidence that avoidance of anal intercourse can reduce risk of STIs/AIDS	1.30	0.96
1.4 Confidence that avoidance of direct contact with sexual partner's blood can reduce risk of STIs/AIDS	1.29	0.96
1.5 Encouragement to initiate a discussion on condom use	1.27	0.90
1.6 Confidence that avoidance of sexual intercourse without a condom can reduce risk of STIs/AIDS	1.22	0.93
1.7 Confidence that avoidance of sexual intercourse on a first date can reduce risk of STIs/AIDS and unwanted pregnancy	1.16	0.85
2. Information (0-3)	**1.23**	**0.66**
2.1 Information that sexual intercourse with homosexual person contains risks of contracting STIs/AIDS	1.20	0.92
2.2 Information that direct contact with semen or vaginal secretion when sexual partner or you have sores in genital areas contains risks of contracting STIs/AIDS	1.23	0.93
2.3 Information that alcohol consumption before or during sexual intercourse reduces ability to control oneself and increases risk of sexual intercourse without any protection	1.25	0.90
3. Instrument (0-3)	**0.85**	**0.78**
3.1 Support of condom	0.85	0.78

Table 10 Social support of partner

Social support of partner	Mean	SD
Confidence (0-3)	**1.32**	**0.68**
1.1 Confidence that condom use can prevent STIs/AIDS and unwanted pregnancy	1.62	0.94
1.2 Encouragement to carry a condom	1.33	1.06
1.3 Confidence that avoidance of anal intercourse can reduce risk of STIs/AIDS	1.23	1.02
1.4 Confidence that avoidance of direct contact with sexual partner's blood can reduce risk of STIs/AIDS	1.35	0.95
1.5 Encouragement to initiate a discussion on condom use	1.27	1.00
1.6 Confidence that avoidance of sexual intercourse without a condom can reduce risk of STIs/AIDS	1.25	0.98
1.7 Confidence that avoidance of sexual intercourse on a first date can reduce risk of STIs/AIDS and unwanted pregnancy	1.21	0.99
2. Information (0-3)	**1.26**	**0.81**
2.1 Information that sexual intercourse with homosexual person is risky of contracting STIs/AIDS	1.17	1.05
2.2 Information that direct contact with semen or vaginal secretion when sexual partner or you have sores in genital areas is risky of contracting STIs/AIDS	1.21	0.99
2.3 Information that alcohol consumption before or during sexual intercourse reduces ability to control oneself and increases risk of sexual intercourse without any protection	1.39	1.00
3. Instrument (0-3)	**0.72**	**0.92**
3.1 Support of condom	0.72	0.92

1.4 Dependent variables (safer sex practices)

Safer sex practices are dependent variables in this study. The mean score of the items of safer sex practices was moderate on a Likert scale of 0 to 3 ($\bar{X}$ = 1.63, SD = 0.28). The mean item score of avoidance risky behaviors was 2.14, which was higher than the other two practices; whereas the mean item score of use of condom and use of assertiveness skills were lower (1.20 and 1.14, respectively) (Table 11).

Table 11 Safer sex practices

Safer sex practices	Mean	SD
Safer sex practices (0-3)	**1.63**	**0.28**
1. Avoidance of risky behaviors (0-3)	**2.14**	**0.57**
1.1 I use cocaine or other drugs before or during sexual intercourse	0.42	0.76
1.2 I have had sexual intercourse with someone who injects drugs (IV drugs) into his/her veins	0.50	0.84
1.3 I have sexual intercourse on a first date	1.01	0.96
1.4 I have sexual intercourse even when I do not know my partner's history	1.06	0.88
1.5 I do not have sexual intercourse when I have sores in my genital areas	1.64	1.05
1.6 I engage in oral sex without using protective barriers such as condom or rubber dam	0.99	0.93
1.7 I have sexual intercourse with someone who I know is a homosexual person	0.70	0.93
1.8 I take part in anal intercourse without using a condom	0.68	0.93
1.9 I drink alcoholic beverages before or during sexual intercourse	1.04	0.96
2. Use of condom (0-3)	**1.20**	**0.61**
2.1 I insist on condom use when I have sexual intercourse	1.53	1.03
2.2 I stop foreplay long enough to put on a condom (or for my partner to put on a condom)	0.99	0.86
2.3 My partner and I use a spermicide as well as a condom with each act of sexual intercourse	0.77	0.94
2.4 I carry a condom with me if I know a meeting may lead to sexual intercourse	1.46	0.98
2.5 I have a plan to practice safer sex if I know a meeting may lead to sexual intercourse	1.44	0.96
2.6 I refuse to have sexual intercourse if my partner insists on sexual intercourse without a condom	1.04	0.94
3. Use of assertiveness skills (0-3)	**1.14**	**0.64**
3.1 I ask possible sexual partners about their sexual histories	1.20	0.94
3.2 I ask possible sexual partners about a history of homosexual practices	0.79	0.90
3.3 I state my point of view if I disagree with information that my partner presents on safer sex practices	1.30	0.86
3.4 I introduce the topic of safer sex with my sexual partners	1.29	0.89

Part 2: Relationship between behavior-specific cognitions and affect and safer sex practices

Pearson's product moment correlation coefficient was employed to describe the associations between independent variables (behavior-specific cognitions and affect) and dependent variable (safer sex practices).

The results showed that perceived benefits of safer sex not significantly related to safer sex practices (Table 12).

Perceived barriers of safer sex had significantly negative relationship with safer sex practices ($r = -0.243$, $p<0.001$ for execution and $r = -0.146$, $p=0.033$ for relationship concerns, respectively).

Perceived self-efficacy of safer sex had significantly positive relationship with safer sex practices ($r = 0.326$, $p<0.001$ for say no and $r = 0.405$, $p<0.001$ for precaution, respectively).

Peer norm had significantly positive relationship with safer sex practices ($r = 0.304$, $p<0.001$) and partner norm had significantly positive relationship with safer sex practices ($r = 0.287$, $p<0.001$).

Social support of peer had significantly positive relationship with safer sex practices ($r = 0.211$, $p=0.002$ for confidence).

Social support of partner had significantly positive relationship with safer sex practices ($r = 0.178$, $p=0.009$ for instrument, $r = 0.311$, $p<0.001$ for confidence, and $r = 0.215$, $p=0.002$ for information, respectively).

Moreover, alcohol consumption had significantly negative relationship with safer sex practices ($r = -0.138$, $p=0.044$ for always) (Table 12).

Table 12: Correlation between behavior-specific cognitions and affect and safer sex practices

Behavior-specific cognitions and affect	Safer sex practices	
	r	p-value
Perceived benefits of safer sex		
decrease risk factors	0.107	0.120
reduce anxiety	0.079	0.252
protection against pregnancy and STIs/AIDS	0.074	0.280
Perceived barriers of safer sex		
turnoffs	-0.115	0.093
execution	-0.243	<0.001
relationship concerns	-0.146	0.033
hassles	-0.088	0.200
Perceived self-efficacy of safer sex		
say no	0.326	<0.001
precaution	0.405	<0.001
assertive	0.022	0.747
others	0.011	0.875
Peer norm	0.304	<0.001
Partner norm	0.287	<0.001
Social support of peer		
confidence	0.211	0.002
information	0.074	0.278
instrument	0.099	0.149
Social support of partner		
confidence	0.311	<0.001
information	0.215	0.002
instrument	0.178	0.009
Alcohol consumption *		
never	0.057	0.404
rarely	0.128	0.061
sometimes	-0.028	0.682
usually	-0.125	0.068
always	-0.138	0.044

* In terms of alcohol consumption, the factors (never, rarely, sometimes, usually and always) had been transferred into dummy prior to the analysis by Pearson's product moment correlation.

Part 3: The predictors of safer sex practices.

Stepwise multiple regression was utilized to identify the predictors of safer sex practices and to analyze the influence of independent variables of the study. The relationship between independent variables was carried out to see whether it was in line with the assumption of the multiple regression analysis. If a pair of the independent variables had a relationship with correlation coefficient value higher than 0.75, multicollinearity problems will arise (Pasitrajtasin, S. and Sukasame, K. 1993: 45-47). In this study, there was no relationship among independent variables with the value higher than 0.75. Accordingly, all variables were utilized to examine the predictors of safer sex practices.

As of the results in part 2, there was a significantly relationship between alcohol consumption and safer sex practices. Therefore, there were two models for explaining safer sex practices.

First model, independent variables were entered in the equation to identify the predictors of safer sex practices. As of the final step, there were six predictive variables, which could predict safer sex practices. First, there was a positively significant relationship between perceived self-efficacy of safer sex in term of precaution and safer sex practices ($b=0.251$, $p<0.05$). It meant that the higher male vocational students have perceived self-efficacy of safer sex in term of precaution, more likely they were going to have safer sex practices, when the other independent variables were controlled. Second, there was positively significant relationship between peer norm and safer sex practices ($b=0.392$, $p<0.001$). It meant that male vocational student who had friends believing and having positive opinion about safer sex practices were more likely to engage in safer sex practices, when the other independent variables were controlled. Third, there was negatively significant relationship between perceived barriers of safer sex in term of execution and safer sex practices ($b= -0.438$, $p<0.001$). It meant that male vocational students who had low perceived barriers of safer sex in term of execution were likely to have safer sex practices, when the other independent variables were controlled. Forth, there was positively significant relationship between social support of partner in term of confidence and safer sex practices ($b=0.302$, $p<0.001$). It meant that male vocational students who received high support about safer sex from their partner in term of

confidence were likely to practices safer sex, when the other independent variables were controlled. Fifth, there was negatively significant relationship between social support of peer in term of information and safer sex practices (b= -0.416, p<0.05). It meant that male vocational students who received high support about safer sex from their friends in term of information were likely to practices safer sex, when the other independent variables were controlled. Lastly, there was positively significant relationship between perceived self-efficacy of safer sex in term of say no and safer sex practices (b=0.157, p<0.05). It meant that the higher male vocational students have perceived self-efficacy of safer sex in term of say no, more likely they were going to have safer sex practices, when the other independent variables were controlled (Table 13).

In conclusion, six independent variables; perceived self-efficacy of safer sex in term of precaution and say no, peer norm, perceived barriers of safer sex in term of execution, social support of partner in term of confidence, and social support of peer in term of information were significantly related to safer sex practices. The full predictor set explained 32 percent of the variance in safer sex practices (R^2 = 0.320).

The predictors safer sex

Table 13: The multiple regression of stepwise method between the predicting factors of safer sex practices (model 1)

Variable	B	R^2	R^2 change	t	p-value
Perceived self-efficacy: precaution	0.251	0.164	0.164	2.335	0.020
Peer norm	0.392	0.203	0.039	3.734	<0.001
Perceived barriers: execution	-0.438	0.246	0.043	-4.203	<0.001
Social support of partner: confidence	0.302	0.287	0.041	3.909	<0.001
Social support of peer: information	-0.416	0.303	0.016	-2.319	0.021
Perceived self-efficacy: say no	0.157	0.320	0.017	2.263	0.025
Constant = 28.253					

Second model, the independent variables in first model including alcohol consumption was entered in the equation to identify the predictors of safer sex

practices. The results showed that alcohol consumption had no influence on safer sex practices. While, the other independent variables had influences on safer sex practices (Table 14).

The predictors safer sex

Table 14: The multiple regression of stepwise method between the predicting factors of safer sex practices (model 2)

Variable	B	R^2	R^2 change	t	p-value
Perceived self-efficacy: precaution	0.251	0.164	0.164	2.335	0.020
Peer norm	0.392	0.203	0.039	3.734	<0.001
Perceived barriers: execution	-0.438	0.246	0.043	-4.203	<0.001
Social support of partner: confidence	0.302	0.287	0.041	3.909	<0.001
Social support of peer: information	-0.416	0.303	0.016	-2.319	0.021
Perceived self-efficacy: say no	0.157	0.320	0.017	2.263	0.025
Constant = 28.253					

From both models, independent variables such as perceived self-efficacy of safer sex in term of precaution and say no, peer norm, perceived barriers of safer sex in term of execution, social support of partner in term of confidence, and social support of peer in term of information were predictors of safer sex practices. There was no change between the result from model 1 and 2 ($R^2_{model\ 1}$ = 0.320, $R^2_{model\ 2}$ = 0.320)

Therefore, the best equation of regression for explaining the variance safer sex practices of male vocational students is;

Safer sex practices of male vocational students = 28.253 + 0.251 (Perceived self-efficacy of safer sex: precaution) + 0.392 (Peer norm) - 0.438 (Perceived barriers of safer sex: execution) + 0.302 (Social support of partner: confidence) - 0.416 (Social support of peer: information) + 0.157 (Perceived self-efficacy of safer sex: say no) +e

CHAPTER V
DISCUSSION

This study aims to assess safer sex practices among male vocational students in Nakhon Pathom province. Research result is discussed according to each objective and hypothesis as follows:

Objective 1 To study sexual behaviors among male vocational students in Nakhon Pathom province

In this study, safer sex practices were measured in terms of (1) Use of condom, (2) Use of assertive skill and (3) Avoidance of risky behavior. Regarding to "Use of condom", male vocational students tended to have poor safer sex practices (1.20 on a 0 to 3-Likert scale). Although having a meeting or party may lead to having sex, only 36% sometimes carried a condom with them. About 41.1% refused to have sexual intercourse only from time to time if their sexual partner insisted not to use a condom. As can be seen, students in this group did not realize the danger of not using a condom. According to Mahuttano, Saisung and Srisawang, most of vocational students sometimes used condom when having sex, which was considered risky behavior and would increase the chances of STIs/AIDS and unwanted pregnancy (Mahuttano, K. 1996: ii, Saisung, P. 1998: 43, & Srisawang, R. 2002: iv). Thus, male vocational students in this study revealed to have low safer sex practice regarding to condom use.

Regarding "Use of assertive skills", most of the sample did not adopt safer sex practices (1.14 on a 0 to 3-Likert scale). The students reported asking sexual partner about their sexual history (39.7%) and giving their opinion when disagreed with sexual partner about unsafe sex practices (44.4%) only from time to time. In addition, some of them never (19.2%), sometimes (43%) initiated a discussion about safer sex practices. Similarly, Pattarawanit found that three out of five male adolescents did not usually talk about sex with their girlfriend, whereas over 70% never refused partner's intention to have sex (Pattarawanit, U. 1995: 41). Mahuttano also supported that vocational male students normally had less talk with sexual partner about condom use:

average three out of ten episode of sexual intercourse (Mahuttano, K. 1996: 96). Overall, there is only a small portion of sexual partners to have conversation and interpersonal communication about safer sex practices resulting in more risky sexual behavior.

Regarding "Avoidance of risky behavior", the researcher found that most of male vocational students had high safer sex practice (2.14 of a 0 to 3-Likert scale). High portion of the sample would use some protection when having sex with person(s) at high risk. For example, they were likely to adopt some protection when having sex with a partner on the first date, with a person who ever used drug before and practiced oral-sexual intercourse without condom. In addition, having sex with unknown partner (43%) and drinking alcoholic beverage before or during sexual intercourse (37.9%) were also considered high-risk behaviors for STIs/AIDS and unwanted pregnancy.

From the study, the researcher found that 42.8% reported having had sex experience. About 95.8% of the samples were heterosexual, whereas 3.7% and 1.5% were bisexual and homosexual persons, respectively. Among the sample group, 62.6% of them reported having a girlfriend. The mean age at first sex was 15 years old; 78.8% of the sample had their first sex during 15-18 years and there was only one person having his first sex when he was eight years old. The first sexual partner was their lover/girlfriend, which was similar to what Patiyoot, K. (1998: 80) had found in her study. She found that 37% of sample group of male vocational students already had sex and 74.2% of them had their first sex at age between 15 and 17 years (mean age = 15.7 years old). Only 1.8% had sex when they were 12 years old. Similar to Patiyoot's study, the research result also showed that the first sexual partner who was mostly found was lover/girlfriend. This result was consistent to Noparat, P. (2000: 63) which found that 32.3% of male vocational students had their first sex at age between 13 and 18 years (mean age = 15.75 years old). From her study, 56.16% of male vocational students had their first sex with lover.

The results showed that male vocational students had high tendency to have sex at younger age and were likely to have sexual intercourse with their lover/girlfriend instead of sex worker. This may be because the change in physical hormone and the nature of adolescent to try something new motivated sex at younger age. Risk of getting STIs/AIDS might be another reason for avoiding sex with sex

worker since having sex with lover was considered safer and cheaper (Saipan, N. 2003: 46). Despite the age and partner at first sex, according to Ford and Kittisuksathit, S. (1996: 28), the study revealed that attitudes of adolescents towards sex had changed and influenced their sexual behavior. Premarital sex was accepted among young men and it was believed that such activity had no impact upon their reputation. Young men had mixed attitudes about HIV and premarital pregnancy. While they were worried about the risk of HIV from prostitutes, they are unlikely to be aware of premarital sex since pregnancy is women's problem. Young men aged between 13 and 15 years have the most aggressive sexual emotion and are easily motivated even when there are no stimuli (Triemchaisri, S. 2002: 58). Moreover, other reasons that young adolescents have inappropriate sexual behaviors may be that they do not understand their role, culture, social and mutuality (Triemchaisri, S. 2002: 57).

Regarding prevention of contracting STIs/AIDS and unwanted pregnancy at first sexual intercourse, the researcher found that 58.7% of male vocational students did not adopt any protective practices, as of the study by Vuttikul, Y. (2001: 111). Vuttikul found that 31.3% of military males reported having had sexual experience and 22.7% of these students did not use any protection, 3.1% of them did sometimes and 5.5% always adopt one or more protection(s) when having sex. Saipan, N. (2003: 46) also conducted a research among vocational students in both genders and found that 54.1% of the sample never adopted any protection to prevent STDs or for the purpose of contraception at their first sex. It is clear that most of adolescents were not likely to adopt any protection to prevent STIs or unwanted pregnancy in their first sexual intercourse. At first sex, some of them never had a thought of having sexual intercourse so there was no preparation of condom. They perceived benefits of condom use but they either did not know how to use it properly or not feeling naturally when using it. Most of them felt uncomfortable to use a condom with their lover or friend but intended to use one with sex worker or unknown partner. Additionally, Ford and Kittisuksathit also explained attitudes of young men towards contraception that it was women' responsibility to prevent unwanted pregnancy therefore there was no adoption of condom use among men (Ford & Kittisuksathit, S. 1996: 28). Another reason not using a condom was that they were quite sure that their partner was at no

risk of contracting STIs/AIDS and had no chance to get pregnant during that period (Saipan, N. 2003: 46).

For those who practiced protective activity, 36.2% used a condom and the rest used several methods such as withdrawal, contraceptive pill or the combination of condom use and pill. Saipan also supported that 54% of the sample in her study used a condom and 26% practiced withdrawal in the first sex (Saipan, N. 2003: 46). It is clearly seen that this group of adolescents tended to use some protections to prevent STIs/AIDS and for contraceptive purpose at the first sex such as the use of condom. Obviously, young adolescents perceived benefits of condom use as it was believed to be effective for prevention STIs and unwanted pregnancy. Nowadays, it was more convenient to purchase and much easier to use a condom than ever as the government and private organizations had adopted several campaigns and promotions on condom use to prevent STIs/AIDS among young adolescents. Itsarapukdee, P. (2000: vii) supported this point as she found that the sample of male adolescents agreed that it was easy and cheap to purchase a condom. Additionally, Thato, S. (2002: 111) had investigated the main reasons to use a condom in vocational students and found that they tended to use one to prevent unwanted pregnancy, AIDS and STDs in proportion of 86.3%, 46.3% and 44.2%, respectively.

Regarding condom use, the researcher found that vocational male students never (22%), rarely (12.6%), sometimes (35%) and always (15%) used condom when having sexual intercourse. The result is consistent to the study by Mahuttano, Saisung and Srisawang that most of male vocational students sometimes used condom (Mahuttano, K. 1996: ii, Saisung, P. 1998: 43, & Srisawang, R. 2002: iv). Results of this study showed that the study group reported having negative attitude towards condom use because condom could reduce sensation and take time to stop to put it on. Additionally, they thought that it was difficult to put on and take off the condom as well as to make partner did not trust in them. (Table 17)

Regarding the number of sexual partner during the past six months (March-August 2004), the average number of partner of male vocational students was two. The majority of the sample (80.4%) had one to five sexual partners and 23 was the highest number found in this study. Similar to previous studies, young adolescents indicated having sexual partner more than one person (Mahuttano, K. 1996: 92,

Srisawang, R. 2002: iv, & Saipan, N. 2003: 46). According to previous studies, male vocational students had tendency to have many sexual partners which increased the risk of contracting STIs/AIDS. Adolescents believed that having sex with lover was normal while having many sexual partners was increasing and more acceptable among men whereas it was ashamed among women. Moreover, without proper way of protection, the more sexual partners they have the higher chance they would get STIs (Triemchaisri, S. 2002: 57).

In general, male vocational students in this study have high ability to avoid risky behavior while having low ability to assert their thought about safer sex practices including condom use with sexual partner. In addition, the researcher found that this group of adolescents had risky behavior for STIs/AIDS and unwanted pregnancy. For instance, most of them had their first sex at younger age and had sex with their own lover. Despite these reasons, male students are unlikely to adopt any protective practice because they are afraid that their partner would not trust them and are confident that their partner is clean. They did not always use a condom when they had sexual intercourse, making them high risk of contracting STIs/AIDS.

Objective 2 To examine relationship between perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, interpersonal influences and safer sex behaviors among male vocational students in Nakhon Pathom province.

Hypothesis 1: Perceived benefits of safer sex were positively related to safer sex practices among male vocational students in Nakhon Pathom province

According to Pender, et al., (2002: 70), one plan to engage in a particular behavior is proposed as hinging on the anticipated benefits or outcomes that will occur. Orr and Langerfeld also claimed that the factors to use a condom were that male vocational students perceived the benefits of condom that could prevent unwanted pregnancy, STIs including AIDS (Orr & Langerfeld, 1993: 837). Chaipratum also found that male vocational students believed in the benefits of condom that could prevent STIs including AIDS and as contraceptive tool (Chaipratum, W. 1997: iii). Similarly, Thato found that there was positive relationship between perceived benefits

of condom use and actual condom use among male vocational students (Thato, S. 2002: 121). However, Mahuttano supported this study that perceived benefits of condom use did not have relationship with actual condom use among male vocational students (Mahuttano, K. 1996: 101).

The researcher found that male vocational students had high perceived benefits of safer sex but low safer practices among this group. The results showed no relationship between perceived benefits of safer sex and safer sex practices; therefore, rejected hypothesis 1. Moreover, it did not support Pender's health promotion model that perceived benefits of action are direct motivation and encourage individuals to invest time and resources in such activities.

However, the researcher found that the results showed similarity with Pender's health promotion model. According to Pender, the main motivation of anticipated benefits is based on personal outcomes from prior direct experience with the behavior or vicarious experience through observational learning from others engaging in the behavior (Pender, et al., 2002: 70). From the study, it can be explained that perceived benefits of safer sex does not influence or cannot change sexual behavior among male vocational students. The students including their friends might not have direct experience of contracting STIs/AIDS and unwanted pregnancy. Moreover, the results of this study revealed that male vocational students did not sure that avoidance of sexual intercourse on the first date can prevent STIs/AIDS and unwanted pregnancy and they did not sure that avoidance alcoholic beverages before or during sexual intercourse can reduce risk of STIs/AIDS (Table 4). Accordingly, there is insufficient information for them to realize benefits of safer sex and to encourage safer sex practices because of this reason; they are not likely to adopt safer sex practices consequently.

Hypothesis 2: Perceived barriers of safer sex were negatively related to safer sex practices among male vocational students in Nakhon Pathom province.

The results showed that students who had low perceived barriers of safer sex were likely to have safer sex practices thus accepted hypothesis 2. Basen-Enquist (1992: 120) supported that perceived barriers of condom use had negative relationship with condom use intention, whereas those who had low perceived barriers tended to

use condom for safer sex intention. Thato, S. (2002: 121) supported that perceived barriers of condom use had negative relationship with condom use intention among vocational students. Saipan, N. (2003: 46) also addressed that most of students under the Department of vocational education did not adopt any protection for STIs including AIDS and unwanted pregnancy in their first sex. The main reason for not using any protection was that they never thought of sexual intercourse (62.7%). Some of the sample (22.9%) reported did not know how to use condom properly, not feeling naturally, not being aware of contracting STIs including contraception and were confident that sexual partner was not sexually infected. This was consistent to Pender's health promotion model that anticipated barriers of health-promoting practices affect intentions to engage in a particular behavior. Barriers may be real or imagined and they usually arouse individual to avoid health-promoting behavior (Pender, 2002: 70)

In this study, perceived barriers of safer sex consisted of (1) turnoffs, (2) hassles, (3) execution and (4) relationship concerns of sexual behavior among male vocational students. From the results of this study, it can be explained that adolescents, who perceived fewer barriers of safer sex, were likely to have safer sex practices. Anticipated barriers that arouse avoidance of safer sex practices among male vocational students had influence on safer sex intention. Some barriers were just what they imagined. For instances, regarding relationship concerned, nearly 32% of the sample agreed that avoidance of sexual intercourse while having sores or scratches at genital organs may lead to misunderstand between sexual partners. Regarding execution barrier, almost 40% of male vocational students agreed that asking sexual partner about their sexual history was considered violation of personal privacy. There were some other tangible barriers such as inconvenience and unavailability. Regarding hassles barrier, nearly 30% of male vocational students perceived that it was troublesome to put the condom on and take off. Regarding turnoffs barrier, nearly 40% of male vocational students perceived that condom could reduce sensation which aroused them to avoid safer sex practices (Table 17).

Hypothesis 3: Perceived self-efficacy was positively related to safer sex practices among male vocational students in Nakhon Pathom province.

Similar to previous studies, the researcher found that the more male vocational students perceived self-efficacy; they were more likely to have safer sex practices; therefore, accepted hypothesis 3. Rosenthal, et al., (1991: 77) claimed that perceived self-efficacy had moderate relationship with safer sex practice. Also, there was relationship between perceived self-efficacy in ability to say no to sexual intercourse and safer sex practice. Perceived self-efficacy was revealed as a safer sex predictor among vocational students in both genders. Ichikawa (1997: i-ii) explained that the important factors in predicting safer sex practice among male vocational students were social norms and self-efficacy. Previous study explained that perceived self-efficacy had negative relationship with risky sex behavior among high school students and vocational students (Noparat, P. 2000: iv-v). Another study also supported that perceived self-efficacy had positive relationship with actual condom use among vocational students (Thato, S. 2002: 122). According to Pender, perceived self-efficacy is a significant motivation which arouses individuals to engage in particular behavior. More importantly, feeling efficacious and skilled in one's performance is more likely to encourage one to achieve the goal than ones' feeling incapable and unskilled (Pender, et al., 2002: 70). Bandura explained perceived self-efficacy as a judgment of personal capability to manage a particular action and perception of skill has influence in choosing behavioral model, initiating and repeating such behavior constantly (Bandura, 1977: 191).

According to the results, it should be explained that there was relationship between safer sex practices and perceived self-efficacy in every dimensions including (1) perception about confidence in their ability to say no to sex, (2) perception about ability to assert in achieving sexual satisfaction and (3) perception about ability to use any protection when engaging in sexual activity. In conclusion, male vocational students who perceive self-efficacy and their ability to say no to sex but still can achieve sexual satisfaction in their sexual activity are likely to be confident in their capability to manage such action.

Hypothesis 4: Interpersonal influences were positively related to safer sex practices among male vocational students in Naphon Pathom province.

4.1 Peer norms From the results, male vocational students having friends believe and have positive opinion about safer sex practice were likely to engage in safer sex practices; therefore accepted hypothesis 4. Fisher supported this point that friends and sexual partner had significant influence on condom use intention among male vocational students more than any other groups (Fisher, 1984: 104). Mahuttano also found that there was a positive relationship between condom use intention among male vocational students and actual condom use of their close friends (Mahuttano, K. 1996: ii). Similarly, Noparat indicated that perception about peer norms had negative relationship with risky behavior and could explain the variance of such behavior among high school students and male vocational students (Noparat, P. 2000: iv-v). Thato, S. (2002: 116) also found that peer norms were significant predictors that had relationship with actual condom use among male vocational students which supported Pender's statement that interpersonal influences are cognitions concerning the behavior, beliefs and attitudes of others, whereas motivating health-promoting behavior (Pender, et al., 2002: 72).

This study explains perceptions about behaviors, beliefs and attitudes of vocational male students that have influence on motivation to safer sex practice. Young adolescents consider friends as very important and reliable source of information because their friends usually respond to their needs better than other groups. For instance, they want to be independent, confident and accepted by the group, etc (Songchaikul, J. 1997: 228). Bany and Johnson also supported that a group of friends had influence on adolescents' perceptions because they usually perceived and received the idea from how they were treated. Naturally, young adolescents perceive peer norm as a model for their behavior (cited in Songchaikul, J. 1997: 238). Accordingly, friends are very important and influence on young adolescents, it can be explained that some of their behaviors are likely to imitate from their peers.

4.2 Partner norms From the results, male vocational students having partner believe and have positive opinion about safer sex practice was likely to engage in safer sex practices; therefore accepted hypothesis 4. This also supported the study of Fisher that friend and sexual partner had significant influence on condom use intention

among male vocational students more than any other groups (Fisher, 1984: 104). According to previous study, black women' partner was the most influential in condom use intention among black women. Almost 42% of their sexual partner did not usually agree to use condom resulting in no use of condom in sexual intercourse among this female group (Jammott & Jemmott III, 1991: 228). Similarly, Poka found that perception about condom use with lover and significant others' norms could predict intention of male adolescents to use a condom with their lover for AIDS prevention (Poka, S. 1998: v). This supported Pender's theory that interpersonal influences are cognitions concerning the behavior, beliefs and attitudes of others leading to health-promoting behavior. These cognitions may or may not correspond with reality (Pender, et al., 2002: 72)

As of the results, perceptions about behaviors, beliefs and attitudes of sexual partner had influence on decision making on personal matter between sexual partners such as intention to have sexual intercourse. According to the research, it should be explained that interpersonal influences had an influence on encouraging safer sex among male vocational students. In late adolescents, they usually spend more time and give special care to opposite gender to satisfy themselves instead of holding group's interests with their friends (Thongdee, S. 1997: 166). Therefore, it is clearly seen that boyfriend/girlfriend, lover, and partner have influences on young adolescents to perceive and behave a particular action.

4.3 Social support of peer From the results, male vocational students who received high support about safer sex from their friends were likely to practice safer sex, therefore accepted hypothesis 4. This result was supported by previous studies. Jiemprachanarakorn J. (1988: 146) explained that sexual practice of close friend had relationship with sexual behavior and AIDS prevention of the sample, and support of peer had a positive relationship with their actual condom use. Perception about condom use supported by friends encouraged adolescents to use a condom more constantly: about four times more than those who never received any information support from others (Kirby & Diclemente as cited in O'Hara, et al., 1996: 176). Similarly, Mahuttano, K. (1996: 104) supported that peer support had a positive relationship with actual condom use among male vocational students significantly.

Social support by peer is comprised of (1) Instrument support, (2) Emotional encouragement and (3) Information support. This study explained that these supports had influence on perception about safer sex practices as young adolescents were seeking for their own identity. For social development, they chose to learn from friends as they believed in and relied on their friends. Besides that, adolescents tended to form a group and followed the norms of the group in order to gain acceptance from other members (Thongdee, S. 1997: 163). Peer influences were divided into (1) Information influence; friends giving information and knowledge about group norms, attitudes, perceptions and possible outcomes to other members of the group and (2) Normative influence; friends using pressure of the society encouraging others to follow the group norms (Sprinthall and Collins as cited in Songchaikul, J. 1997: 236-237).

In this study, the researcher found that social supports of peer about condom use and assertiveness skills were employed only sometimes. This may result in risky behavior in condom use and assertiveness skills among male vocational students. However, emotional support (confidence) on avoidance of risky behavior was always provided. This shows that social support from peers was important and relatively influenced behavior of male vocational students (Table 20).

4.4 Social support of partner From the results, male vocational students who received high support about safer sex from their partner were likely to practice safer sex, therefore, accepted hypothesis 4. This was similar to previous studies that casual conversation and agreement on condom use of sexual partner had relationship with actual condom among adolescents (Wilson et al., 1994: 13). Mahuttano also supported this point that one of significant predictors of condom use among male vocational students was social support of partner (Mahuttano, K. 1996: ii).

Social support by partner is comprised of (1) Instrumental support (2) Emotional encouragement and (3) Information support. This study explained that these supports have influence on perception about safer sex practices among male vocational students as sexual intercourse was a personal matter between sexual partners. As a result, appropriate support of partner was a significant motivation leading to safer sex practices. In this study, the researcher found that social supports of partner were relatively low in all aspects (Table 21). This could result in low safer sex

practices among male vocational students ($\bar{X}$ = 1.63; of a 0 to 3-Likert scale). This was also similar to previous studies. Interpersonal influences had impact on decision making in condom use, whereas sexual partner usually opposed to use a condom while friends, parents and health providers always encouraged condom use among male students (Strader & Beaman, 1991: 584). This shows that social support from partner plays important role and is relatively influencing decision making of male vocational students.

Objective 3 To examine predictors of safer sex practices among male vocational students in Nakhon Pathom province.

Hypothesis 5: Perceived benefits of safer sex, perceived barriers of safer sex, perceived self-efficacy of safer sex, and interpersonal influences were predictors of safer sex practices among male vocational students in Nakhon Pathom province.

From the study, the influential factors that were able to predict safer sex practice among male vocational students were comprised of six factors dividing into four groups. Perceived self-efficacy of safer sex (precaution and say no) were the factors that had positive relationship with safer sex practices at $p<0.05$. Also, peer norms and social support of partner (confidence) had positive relationship with safer sex practices at $p<0.01$. While, social support of peers (information) had negative relationship at $p<0.05$ and perceived barriers of safer sex (execution) had negative relationship with safer sex practices at $p<0.01$). Accordingly, all of these factors together could explain that having influences on sexual practices among male vocational students (32%).

Perceived barriers of safer sex, perceived self-efficacy of safer sex and interpersonal influences (peer and partner norms and social support of peer and partner) were parts of behavior-specific cognitions and affect. Behavior-specific cognitions and affect, one of the variables in health-promotion model, were related and had influence on safer sex practice of male vocational students. This study definitely supported health-promotion model of Pender whereas health-promoting behavior was explained as the motivational factor in promoting healthy practice, particularly when

integrated into lifestyle. This should result in improved health, enhanced functional ability and better quality of life (Pender, et al., 2002: 69)

This study could explained that young adolescents who had low perceived barriers of safer sex and high perceived self-efficacy in precaution were likely to have safer sex practices. These two factors were related to health-promotion model of Pender which indicated that perceived self-efficacy had relationship with perceived barriers of action. The higher individuals perceived their self-efficacy, the lower they were likely to perceived barriers of action (Pender, et al., 2002: 71). Friends and partners were considered to have influence on adolescents' thoughts, beliefs and behavior extremely. With social support from peer and partner (emotional encouragement, instrumental and information support), teenage students were likely to adopt safer sex practices accordingly.

Using Pearson's product moment correlation coefficient, partner norms had relationship with safer sex practice but did not include in the final regression equation. This might be because of low relationship without control on other variables. However, with stepwise multiple regression, the most influential variable was included into the equation when other variables were controlled, partner norms showed low relationship with safer sex, resulting in insufficient ability on behavioral change among male vocational students. In addition, the researcher also found that perceived benefits of safer sex did not have any relationship with safer sex practice among male vocational students.

CHAPTER VI
CONCLUSION

Summary of the Study

This study was a Cross-sectional survey research. The purpose of this study was to examine safer sex practices of male vocational students in Nakhon Pathom province as conceptualized by Pender's health-promotion model. The result can be used as a guideline to develop public health and health-promoting program, especially sexual development among adolescents whereas reducing problems of risky behavior among young adolescents in the future.

This study was conducted in 500 male vocational students in certificate level (year 1-3), 1st semester of academic year 2004 from four randomly selected vocational schools in Nakhon Pathom province. Only 42.8% (n=214) sexually active students were utilized for data analysis. The data was collected during September-October 2004 by self-administered questionnaires.

The instruments for collecting data consisted of seven parts as follows:

Part 1: Demographic data

Part 2 Perceived benefits of safer sex

Part 3 Perceived self-efficacy of safer sex

Part 4 Sexual intercourse experience and sexual behavior

Part 5 Perceived barriers of safer sex

Part 6 Interpersonal influences consists of

- 6.1 Peer norm
- 6.2 Partner norm
- 6.3 Social support of peer
- 6.4 Social support of partner

Part 7 Safer sex practices

The statistics used for examining demographic characteristics and other background information were percentage, arithmetic mean, and standard deviations. While, Pearson's product moment correlation was used to examine bivariate

relationships between behavior-specific cognitions and affects variables and safer sex practices of male vocational students, and stepwise multiple regression was used to analyze predictors to safer sex practices of male vocational students.

The findings of the study can be summarized as follows:

1. Demographic characteristics and other background information

Only 214 out of 500 male vocational students reported having had premarital sexual intercourse which is about 42.8% of the target population. Most of them were between 15-19 years old (mean age = 17.7 years old). The sample was students from three different academic levels in the same proportion. The majority (84.60%) of the sample lived with their parents. Eighty five percent of the sample indicated that they had monthly stipends between 1,000 and 3,000 baht, average 2,243 baht. About 75.20% of the sample received their monthly stipend from their parents. About 52.8% of the sample reported having enough money to spend but no collected money. Nearly 50% of the sample reported consuming alcoholic beverages from time to time (Table 2).

2. Safer sex practices of male vocational students

From the results, regarding to the use of condom, the subjects had relatively low practice of condom use. The majority of male vocational students sometimes carried a condom and refused to have sexual intercourse when potential partner insisted on sexual intercourse without a condom. Similarly, the subjects were examined also having low practice of assertiveness skill (Table 22). The majority of male vocational students rarely discussed sexual issues and safer sex practices with potential partner. Furthermore, most of male vocational students were revealed to adopt other practices such as having sexual intercourse without knowledge of partner's history and drinking alcoholic beverages before or during sexual intercourse from time to time whereas leading to greater risk of contracting of STIs/AIDS.

3. Relationship between behavior-specific cognitions and affect and safer sex practices

Perceived barriers (execution and relationship concerns) was revealed to have negative relationship while perceived self-efficacy (precaution and say no) of safer sex, peer norm, partner norm, social support of peer (confidence), and social support

of partner (confidence, information, and instrument) had relatively positive relationship with safer sex practices (Table 12).

4. The predictors of safer sex practices.

Perceived barriers of safer sex (execution), perceived self-efficacy of safer sex (precaution and say no), peer norm, social support of peer (information), and social support of partner (confidence) were examined to be able to predict safer sex practices. The full predictor set explained 32% of the variance in safer sex practices ($R^2 = 0.32$) (Table 13).

Implications and application of research finding

1. Regarding to perceived self-efficacy of safer sex, precaution and say no were the main predictors of safer sex practices (Table 13). The findings showed that students had low ability to say no to sex and moderate ability to adopt precaution in sexual intercourse (Table 6). Thus, the Department of General Education of the Ministry of Education and the Ministry of Public Health should develop effective health education program to promote safer sex practices, especially to increase perceived self-efficacy of safer sex; to promote precaution and ability to say no. For instance, participatory learning and group process should be included in the leaning process to encourage students to obtain awareness and life skills for refusing and negotiating when they disagree with information that others present on safer sex practices.

2. Regarding to perceived barriers of safer sex, barriers related to execution was the predictor of safer sex practices (Table 13). School and public health nurse should hand in hand in teaching and learning activities. Effective sex education program should be integrated into the subject to reduce barriers of safer sex. Information on how to use a condom properly should be provided to reduce time consuming and problems when putting on and taking off a condom. Clear information on avoidance of risky behaviors such as avoidance of direct contact with sexual partner’s secretion and avoidance of homosexual intercourse should be provided among the students. The program should focus on how to develop personal skills to decrease these barriers.

3. Regarding to peer norm, the findings revealed that male students' perceived that their friends had positive opinion towards safer sex. In general, young adolescents tend to believe in friends and follow manners that their friends behave more than any other groups. Thus, desirable culture-based values such as condom use in every act of sexual intercourse and importance of condom in relation to prevent STIs/AIDS and unwanted pregnancy should be taught among young students. School should work with related agencies such as the provincial public health office to organize counseling clinic, mobile clinic, and health program with peer leader giving advice and building the network within and outside the school to assist students in shaping their behavior. These activities will focus on knowledge on sex and relationship with friends or partner among adolescent to promote safer sex practices.

4. The findings showed that social support of peer (information) was the predictor of safer sex practice while social support of partner (confidence) was the predictor of safer sex practice (Table 13). Generally, in romantic relationship, decision making of male students usually depends on their partner. The students should be given information on how to use protection when sex is unavoidable. Clear information on avoidance of risky behavior should be provided among students. Specially, the risks which are not obvious should be brought into concern. Additionally, public health personnel such as public health nurse and school teacher need to encourage these students to initiate discussion on safer sex practices and provide emotional encouragement to their sexual partner. The purpose of these activities is to assure that young adolescents have received correct information and appropriate value about safer sex. Another issue that of special concern is gender role. Among male students, educational program provided should have specific strategies related to how to treat females. Thus, they can support and encourage their peer and partner to practice safer sex and to prevent STIs/AIDS or unwanted pregnancy.

5. Parents or guardians should supervise adolescents' behaviors, giving advice about relationship with peers and partner, showing behavioral model, especially in regard to premarital sex prevention or protection when sexual intercourse becomes unavoidable. Parents or guardians should encourage useful hobbies such as sport and music to move their interest from sexual issues. Young adolescents should receive information about sex from books or television program under parental supervision.

Parents may also explain physical and emotional change and provide knowledge on masturbation to reduce sexual drive appropriately and to understand their sexual behavior. Teenage adolescents should be given information on how to use protection when sex is unavoidable. The parents should build up good relationship between family members so that young adolescents themselves are capable to overcome problems in the future. School and provincial public health office should launch programs and activities for parents to develop skills in sexual communication and encouraging safer sex practices among children.

Implications for further studies

1. Replicated studies in other adolescent groups, such as adolescents at over populated communities, homeless adolescents and female students should be conducted to compare and contrast the predictive models. Of these, if developed models share the same variables, effective sex education programs will be able to apply across populations.

2. Replicated studies should be carried out in other groups of population such as worker populations, who were at risk of contracting STIs/AIDS to explore factors association with safer sex practices. As the result may vary among different groups of population, this would be useful to improve their sexual behavior.

3. There should be a study examining effectiveness of health education program on development of self-efficacy, reduction of perceived barriers of safer sex, influence of peer norm, and social support of peer and partner.

4. Qualitative research method such as focus group discussion or in-depth interview should be conducted to obtain deeper and more specific information which is close to contextual situation. For instance, in regard to norm, the researcher should conduct a qualitative research in order to obtain their opinion and reason underlying instead of asking about their friends or partners' opinion which may distort information.

5. The relationship between alcohol consumption and safer sex practices should be investigated, alcohol consumption pattern (eg. once a week with number of amount taken in each time, etc) should be included in the questionnaire to clearly explain students' behavior in relation of alcohol consumption and safer sex practices.

6. Other factors such as parent norms about safer sex and situational influences on safer sex (such as adolescent prefer to have sexual intercourse on valentine day) should be further examined as well to investigate whether these factors can influence and support adolescents to practice safer sex.

Lesson learned from this study

1. Due to the nature of descriptive study using a self-administered questionnaire and asking personally sensitive information, especially the sex issue, sample might provide desirable answers in order not to disclose their private information. Thus, the researcher should be explained the descriptions of the study, including confidentiality. Questionnaire used in the study should be anonymous; only numbers were assigned to keep records. Furthermore, the study has to conduct in a private environment.

2. Regarding the instrumental construction, the sequence of the question should be appropriate, clear, close-fitting, and easy to understand.

3. A randomized cluster sample (classroom) had been used in this study instead of individual selection. This may violate generalizability of the results. Thus, the researcher should conduct a qualitative research method, such as focus group discussion or in-depth interview should be conducted to obtain deeper and more specific information which is close to contextual situation.

BIBLIOGRAPHY

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191-215.

Basen-Engquist, K. (1992). Psychosocial predictors of "safer sex" behaviors in young adults. AIDS Education and Prevention, 4, 120-134.

Brafford, L. J., & Beck, K. H. (1991). Development and validity of a condom self-efficacy scale for college students. Journal of American College Health, 39(5), 219-225.

Burke, D. S., Brundage, J. F., Goldenbaum, M., Gardner, L. I., Peterson,M., Visintine R., et al. (1990). Human immunodeficiency virus infections in teenagers. Journal of the American Medical Association, 263, 2074-2077.

Capaldi, D. M., Crosby, L., & Stoolmiller, M. (1996). Predicting the timing of first sexual intercourse for at-suisk adolescent males. Child Development, 67, 344-359.

Dilorio, C., Parsons, M., Lehr, S., Adame, D., & Carlone, J. (1992). Measurement of safe sex behavior in adolescents and young adults. Nursing Research. 41(4), 203-208.

Daniel, W. W. (1995). Biostatistics : A Foundation for analysis in the Health Sciences. (6th ed.) New York: John Wiley & Sons.

Diclemente, R. J., Drubin, M., Siegel, D., Krasnovsky, F., Lazarus, N., & Comacho, T. (1992). Determinants of condom use among junior high school students in a minority, inner-city school district. Pediatrics, 89 (2), 197-202.

Fisher, W. A., (1984). Predicting contraceptive behavior among university men: The role of emotions and behavioral intentions. Journal of Applied Social Psychology, 14, 104-123.

Ford, N. & Kittisuksathit, S. (1996). Youth sexuality : The sexual awareness, lifestyles and related health service needs of young, single, factory workers in Thailand. IPSR Publication No. 204. Nakhon Pathom: Institute of Population and Social Research, Mahidol University.

Ford, K., Rubinstein, S., & Norris, A. E. (1994). Sexual behavior and condom use among urban, low -income, African – American and Hispanic youth. AIDS Education and Prevention, 6, 219-229.

Gray, A. and Punpuing, S. (1999). Gender, Sexuality and Reproductive Health in Thailand. IPSR Publication No. 232. Nakhon Pathom: Institute of Population and Social Research, Mahidol University.

Hamilton, B. E., Joyce, A. M., & Sutton, P. D. (2003). Birth: Preliminary Data for 2002. National Vital Statistic Report, vol. 51, no.11. Hyattsville, MD: National Center for Health Statistics.

Hla Tun Oo. (2000). Safe sex Behavior Among Conscripts in Royal Military,Southern Thailand. M.A. Thesis in Primary Health Care Management, Faculty of Graduate Studies, Mahidol University.

Hingson, R. W., Strunin, L., Berlin, B. M., & Heeren, T. (1990). Beliefs about AIDS, use of alcohol and drugs, and unprotected sex among Massachusetts adolescents. American Journal of Public Health, 80, 295-299.

Ichikawa, M. (1997). Gender Differences in HIV-related Sexual Beliefs and Safer Sex Intentions among Vocational Students in the Bangkok Metropolitan, Thailand. M.A. Thesis in Primary Health Care Management, Faculty of Graduate Studies, Mahidol University.

Isarabhakdi, P. (2000). Sexual attitudes and experience of rural Thai youth. IPSR Publication No. 249. Nakhon Pathom : Institute of Population and Social Research, Mahidol University.

Jemmott, L. S., & Jommtt III, J. B. (1991). Applying the Theory of Reasoned Action to AIDS risk behavior: Condom use among black woman. Nursing Research, 40(4), 228-234.

Modhok, R., Mc Callum, A. K., Mc Ewan, R., & Bhopal, R. S. (1993). Student's Knowledge and behavior concerning safer sex: a UK study. Journal of American College Health, 42, 121-5.

O' Hara, P., Messick, B. J., Fichtner, P. R., & Parris, D. (1996). A peer-led AIDS prevention program for students in an alternative school. Journal of School Health, 66(5), 176-182.

Orr, D. P., & Langefeld, C. D. (1993). Factors associated with condom use by sexually active male adolescents at risk for sexually transmitted disease. Pediatrics, 91, 873-879.

Pender, N. J., Murdaugh, C.L. & Parsons, M.A. (2002). Health promotion in nursing practice. (4th ed.). (pp. 60-74). Upper Saddle River, New Jersey, Prentice-Hall.

Poyah, G. (2000). Safe sex practice in the context of HIV/AIDS : An analysis of the 1988 and 1994 Zimbabwe Demographic and Health Surveys. M.A. Thesis in Arts (Population and Reproductive Health Research), Faculty of Graduate Studies, Mahidol University.

Rosenthal, D., Moore, S., & Flynn, I. (1991). Adolescent Self-efficacy, Self-esteem, and Sexual Risk-taking. Journal of Community & Applied Social Psychology, 1, 77-88.

Soonthorndhada, A. (1996). Sexual attitudes and behaviors and contraceptive use of late female adolescents in Bangkok : a comparative study of students and female factory workers. IPSR Publication No. 202. Nakhon Pathom : Institute of Population and Social Research, Mahidol University.

Strader, M. K., & Beaman, M. L. (1991). Compairison of selected college students' and sexually transmitted disease clinic patients' knowledge AIDS, risk behaviors and beliefs about condom use. Journal of Advanced Nursing, 16(5), 584-590.

Thato, S. (2002). An assessment of risky health behaviors during adolescence among vocational students as conceptualized by the expanded health belief model in Bangkok, Thailand. Unpublished doctoral dissertation, University of Pittsburgh.

Viratey, K. (2000). Safe sex Intention to Prevent HIV/AIDS and Its Determinants Among Factory Workers in Sampharn District, Nakhon Pathom province, Thailand. M.A. Thesis in Primary Health Care Management, Faculty of Graduate Studies, Mahidol University.

Wilson, M. D., Kastrinakis, M., D'Angelo, L. J., & Getson, P. (1994). Attitudes, Knowledge and Behavior regarding condom use in urban black adolescent males. Adolescence, 29, 13-26.

กาญจนา ปฏิยุทธ. (2541). ค่านิยมเกี่ยวกับพฤติกรรมทางเพศและอำนาจแห่งตนในการควบคุมทางสุขภาพที่มีความสัมพันธ์กับพฤติกรรมที่เสี่ยงต่อการติดเชื้อโรคติดต่อทางเพศสัมพันธ์ของนักเรียนวัยรุ่นในจังหวัดนครศรีธรรมราช. วิทยานิพนธ์ปริญญาสังคมศาสตรมหาบัณฑิต, บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

กัลยา วานิชย์บัญชา. (2545). การใช้ SPSS for Window ในการวิเคราะห์ข้อมูล. (พิมพ์ครั้งที่ 5). กรุงเทพฯ: ภาควิชาสถิติ คณะพาณิชยศาสตร์และการบัญชี จุฬาลงกรณ์มหาวิทยาลัย.

กองกามโรค กรมควบคุมโรคติดต่อ. (2544).รายงานสถานการณ์กามโรคทั่วประเทศ ตุลาคม 2543 ถึงกันยายน 2544.

กองระบาดวิทยา สำนักงานปลัดกระทรวงสาธารณสุข. (2546).สถานการณ์ผู้ป่วยเอดส์และผู้ติดเชื้อเอดส์ที่มีอาการในประเทศไทย ณ วันที่ 30 พฤศจิกายน 2546.

กอบกาญจน์ มหัทธโน. (2539).ปัจจัยที่มีอิทธิพลต่อการใช้ถุงยางอนามัยของนักเรียนอาชีวศึกษาชายในกรุงเทพมหานคร.วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต, สาขาวิชาการเจริญพันธ์และวางแผนประชากร บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

งานควบคุมโรคเอดส์และกามโรค สำนักงานสาธารณสุขจังหวัดนครปฐม. (2546). สถานการณ์เอดส์จังหวัดนครปฐม ปี 2546. อัดสำเนา.

งานส่งเสริมสุขภาพ สำนักงานสาธารณสุขจังหวัดนครปฐม. (2546).รายงานหญิงตั้งครรภ์อายุต่ำกว่า20 ปี และรายงานการแท้ง ปี 2546. อัดสำเนา.

จารุรัตน์ เจียมประชานรากร. (2531). ปัจจัยที่สัมพันธ์กับพฤติกรรมในการป้องกันโรคเอดส์ ของนักเรียนอาชีวศึกษาชาย. วิทยานิพนธ์ปริญญาศึกษาศาสตรมหาบัณฑิต, สาขาวิชาประชากรศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

เจียรนัย ทรงชัยกุล. (2540). สังคมโรงเรียนกับนักเรียนวัยรุ่น. เอกสารสอนชุดวิชา พฤติกรรมวัยรุ่น (Adolescent Behavior). มหาวิทยาลัยสุโขทัยธรรมาธิราช สาขาวิชาศึกษาศาสตร์. (พิมพ์ครั้งที่ 3). กรุงเทพฯ: โรงพิมพ์ชวนพิมพ์.

ณัฐพร สายพันธุ์. (2546). พฤติกรรมทางเพศและปัจจัยที่มีความสัมพันธ์กับการมีเพศสัมพันธ์ของวัยรุ่นในสังกัดกรมอาชีวศึกษา อำเภอเมือง จังหวัดยโสธร. วิทยานิพนธ์ปริญญาสาธารณสุขศาสตรมหาบัณฑิต มหาวิทยาลัยขอนแก่น.

ธวัชชัย วรพงศธร. (2543). หลักการวิจัยทางสาธารณสุขศาสตร์. (พิมพ์ครั้งที่ 4). กรุงเทพฯ: สำนักพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย.

บุญใจ ศรีสถิตนรากูร. (2545). ระเบียบวิธีการวิจัยทางพยาบาลศาสตร์. (พิมพ์ครั้งที่ 2). กรุงเทพฯ: โรงพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย.

บุปผา ศิริรัศมี และคณะ. (2544). คู่มือการอบรมเชิงปฏิบัติการ โครงการพัฒนางานวิจัยด้านเพศภาวะมิติทางเพศ และอนามัยเจริญพันธุ์. กรุงเทพฯ: สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล.

ปวีณา สายสูง. (2541). พฤติกรรมเสี่ยงทางเพศของนักศึกษาระดับอาชีวศึกษา ในจังหวัดน่าน. การค้นคว้าอิสระสาธารณสุขศาสตรมหาบัณฑิต, บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

ผุสดี เทียมทัด. (2535). ประสิทธิผลของโครงการสุขศึกษาต่อพฤติกรรมทางเพศที่ปลอดภัยจากโรคเอดส์ในกลุ่มนายทหารชั้นประทวน ค่ายสุรธรรมพิทักษ์ จังหวัดนครราชสีมา. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์), สาขาวิชาสุขศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

พิมพ์พรรณ ศิลปสุวรรณ. (2535). ปัจจัยที่มีอิทธิพลต่อพฤติกรรมการมีเพศสัมพันธ์ของคนงานสตรีวัยรุ่นในเขตกรุงเทพมหานครและปริมณฑล. วิทยานิพนธ์ปริญญาดุษฎีบัณฑิต, สาขาวิชาประชากรศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

พิสมัย นพรัตน์. (2543). ปัจจัยที่เกี่ยวข้องกับพฤติกรรมเสี่ยงทางเพศของนักเรียนมัธยมศึกษาและอาชีวศึกษา จังหวัดอุตรดิตถ์. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลอายุรศาสตร์และศัลยศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

ภักดี โพธิศิริ. (2545). “กรมอนามัยกับการส่งเสริมอนามัยการเจริญพันธุ์ในวัยรุ่น”.วารสารวางแผนครอบครัวและประชากร. ปีที่ 5 ฉบับที่ 1, มกราคม-มิถุนายน, 4-10.

ภิญญา หนูภักดี. (2545).แนะนำหนังสือ Health Promotion in nursing Practice.วารสารการศึกษาพยาบาล. 13(1), 86-94.

มนตรี พิริยะกุล. (2536). เทคนิคการสำรวจด้วยกลุ่มตัวอย่าง. (พิมพ์ครั้งที่ 5). กรุงเทพฯ: โรงพิมพ์มหาวิทยาลัยรามคำแหง.

ยิ่งลักษณ์ วุฒิกุล. (2544).ปัจจัยที่มีอิทธิพลต่อพฤติกรรมทางเพศที่เสี่ยงต่อการติดเชื้อเอดส์ของนักเรียนชายที่เข้าศึกษาวิชาทหาร ในจังหวัดราชบุรี. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สุขศึกษา), บัณฑิตวิทยาลัย มหาวิทยาลัยเกษตรศาสตร์.

ยุวดี ฦาชา และคณะ. (2540). วิจัยทางการพยาบาล. (พิมพ์ครั้งที่ 6). กรุงเทพฯ: สยามศิลปการพิมพ์

รัชนี ศรีสว่าง. (2545). พฤติกรรมเสี่ยงทางเพศของนักศึกษาระดับอาชีวศึกษาในอำเภอเมืองเชียงใหม่. วิทยานิพนธ์ปริญญาศึกษาศาสตรมหาบัณฑิต, สาขาวิชาจิตวิทยาการศึกษาและการแนะแนว บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

วรรณา กรีระตระกูล.(2545).พฤติกรรมการมีเพศสัมพันธ์ของวัยรุ่นไทยในปัจจุบัน. วิทยานิพนธ์ปริญญาศิลปศาสตรมหาบัณฑิต (พัฒนาสังคม) สถาบันบัณฑิตพัฒนบริหารศาสตร์.

วิรัช ไชยประทุม. (2540). ความสัมพันธ์ระหว่างความรู้ เจตคติ และพฤติกรรมการสวมถุงยางอนามัยในการป้องกันโรคเอดส์ของนักศึกษาชายระดับประกาศนียบัตรวิชาชีพ วิทยาลัยเทคนิคกาฬสินธ์. ภาคนิพนธ์สาธารณสุขศาสตรบัณฑิต คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล.

วิวัฒน์ โรจน์พิทยากร และวิโรจน์ สุดเกษม.(2533). คู่มือการให้คำปรึกษาแนะแนวเกี่ยวกับโรคเอดส์. (พิมพ์ครั้งที่ 2). กรุงเทพฯ: โรงพิมพ์ชุมนุมสหกรณ์การเกษตรแห่งประเทศไทย.

ศจีพร พงษ์ผล. (2546).การศึกษาความสัมพันธ์ระหว่างทวิมาตรฐานทางเพศกับแนวโน้มการมีพฤติกรรมเสี่ยงเอดส์ของนักเรียนชาย ชั้นมัธยมศึกษาปีที่ 3 สังกัดกรมสามัญศึกษา กรุงเทพมหานคร.วิทยานิพนธ์ปริญญาสังคมสงเคราะห์ศาสตรมหาบัณฑิต, คณะสังคมสงเคราะห์ศาสตร์ มหาวิทยาลัยธรรมศาสตร์.

ศิริกุล อิสรานุรักษ์ และวรรณา เตชะวณิชพงษ์. (2543). ทบทวนสถานการณ์ พฤติกรรมทางเพศของเด็กและเยาวชน อายุ 6-24 ปี ที่กำลังศึกษาในสถานศึกษา พ.ศ. 2532-2542. กรุงเทพฯ: เจริญดีการพิมพ์.

ศิริพร กัญชนะ. (2546). Adolescents Health: What and Why. เอกสารการประชุมวิชาการประจำปี 2546 สมาคมอนามัยเจริญพันธุ์ (ไทย) ร่วมกับกระทรวงสาธารณสุข สุขภาวะวัยใส อนาคตของชาติไทย. กรุงเทพฯ: ห้างหุ้นส่วนจำกัด ป. สัมพันธ์พาณิชย์.

ศรีเรือน แก้วกังวาล. (2540). จิตวิทยาพัฒนาการชีวิตทุกช่วงวัย. กรุงเทพฯ: สำนักพิมพ์มหาวิทยาลัยธรรมศาสตร์.

ศรีสุดา โภคา. (2541). พฤติกรรมทางเพศและปัจจัยที่กำหนดความตั้งใจใช้ถุงยางอนามัยเพื่อป้องกันการติดเชื้อเอดส์ของเด็กวัยรุ่นชาย สังกัดกรมสามัญศึกษา จังหวัดเชียงใหม่. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลแม่และเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

สัญญา ภัทราชัย. (2546). การตั้งครรภ์วัยรุ่น. เอกสารการประชุมวิชาการประจำปี 2546 สมาคมอนามัยเจริญพันธุ์ (ไทย) ร่วมกับ กระทรวงสาธารณสุข สุขภาวะวัยใส อนาคตของชาติไทย. กรุงเทพฯ: ห้างหุ้นส่วนจำกัด ป. สัมพันธ์พาณิชย์.

สมจิต หนุเจริญกุล. (2542). แบบจำลองการส่งเสริมสุขภาพของเพนเดอร์. เอกสารประกอบการสอนภาควิชาพยาบาลสาธารณสุข. สาขาวิชาพยาบาลสาธารณสุข มหาวิทยาลัยมหิดล.

สมพร เตรียมชัยศรี. (2545). พฤติกรรมทางเพศของวัยรุ่น. วารสารพยาบาลสาธารณสุข. 16(1), 57-64

สมร ทองดี. (2540). การพัฒนาบุคลิกภาพ อารมณ์ และสังคมของนักเรียนวัยรุ่น. เอกสารสอนชุด วิชาพฤติกรรมวัยรุ่น (Adolescent Behavior). มหาวิทยาลัยสุโขทัยธรรมาธิราช สาขาวิชาศึกษาศาสตร์. (พิมพ์ครั้งที่ 3). กรุงเทพฯ: โรงพิมพ์ชวนพิมพ์.

สุชา จันทร์เอม. (2540). จิตวิทยาพัฒนาการ. พิมพ์ครั้งที่ 4. กรุงเทพฯ: ไทยวัฒนาพานิช.

สุชาติ ประสิทธิ์รัฐสินธุ์ และกรรณิการ์ สุขเกษม. (2536). การวิเคราะห์การถดถอย : แนวคิด วิธีการและการประยุกต์ใช้. (พิมพ์ครั้งที่ 1). กรุงเทพฯ: สถาบันบัณฑิตพัฒนบริหารศาสตร์.

สุปราณี แก้วกุดั่น. (2543). ความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล พฤติกรรมการเปิดรับข่าวสาร การได้รับความรู้เรื่องเพศจากผู้ปกครอง และสภาพแวดล้อมของสถาบัน กับการรับรู้พฤติกรรมทางเพศที่ปลอดภัย ของนักศึกษาพยาบาล สถาบันการศึกษาพยาบาลของรัฐกรุงเทพมหานคร. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลศึกษา คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.

สุปรียา รามการุณ. (2544). ความคิดเห็นต่อข้อมูลข่าวสารทางเพศและการป้องกันพฤติกรรมเสี่ยงทางเพศของนักศึกษาสังกัดกรมอาชีวศึกษา จังหวัดตรัง. วิทยานิพนธ์ปริญญาสาธารณสุขศาสตรมหาบัณฑิต, บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

ส่วนข้อมูลข่าวสารสาธารณสุข สำนักงานปลัดกระทรวงสาธารณสุข.(2546). สถิติสาธารณสุข พ.ศ. 2544. กรุงเทพฯ: องค์การสงเคราะห์ทหารผ่านศึก.

สุวรรณา เรืองกาญจนเศรษฐ. (2546). คลินิกวัยรุ่น. เอกสารการประชุมวิชาการประจำปี 2546 สมาคมอนามัยเจริญพันธุ์ (ไทย) ร่วมกับ กระทรวงสาธารณสุข สุขภาวะวัยใส อนาคตของชาติไทย. กรุงเทพฯ: ห้างหุ้นส่วนจำกัด ป. สัมพันธ์พาณิชย์.

สุวรรณา วรคามิน และ นงลักษณ์ บุญไทย. (2544). สรุปผลการสำรวจสถานการณ์การแท้งในประเทศไทย ปี 2542. วารสารวางแผนครอบครัวและประชากร. 4(2), 5-7.

สำนักงานคณะกรรมการพัฒนาการเศรษฐกิจและสังคมแห่งชาติ สำนักนายกรัฐมนตรี. (2544). แผนพัฒนาเศรษฐกิจและสังคมแห่งชาติฉบับที่ 9 (พ.ศ. 2545-2549). กรุงเทพฯ: โรงพิมพ์คุรุสภา.

อนงค์ ชีระพันธุ์. (2544). ปัจจัยที่มีผลต่อพฤติกรรมทางเพศของวัยรุ่น ในโรงเรียนมัธยมศึกษา สังกัดกรมสามัญศึกษา จังหวัดขอนแก่น. วิทยานิพนธ์ปริญญาศิลปศาสตรมหาบัณฑิต.

อรอุษา จันทรวิรุจ. (2544).ปัจจัยที่มีอิทธิพลต่อพฤติกรรมเสี่ยงทางเพศของนักเรียนระดับมัธยมศึกษา จังหวัดสมุทรปราการ. วิทยานิพนธ์ปริญญาวิทยาศาตรมหาบัณฑิต (สาธารณสุขศาสตร์), สาขาวิชาสุขศึกษาและพฤติกรรมศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อัมพร เบญจพลพิทักษ์. (2545). เพศศึกษากับการแนะแนว ในเปิดโลกจิตวิทยาการแนะแนวกับการศึกษาเพื่อปวงชน. สมาคมแนะแนวแห่งประเทศไทย ปทุมธานี. Sun printing.

อัมพร เบญจพลพิทักษ์. (2546). พัฒนาการวัยรุ่น. เอกสารการประชุมวิชาการประจำปี 2546 สมาคมอนามัยเจริญพันธุ์ (ไทย) ร่วมกับ กระทรวงสาธารณสุข สุขภาวะวัยใส อนาคตของชาติไทย. กรุงเทพฯ: ห้างหุ้นส่วนจำกัด ป. สัมพันธ์พาณิชย์.

อุบลรัตน์ รุ่งเรืองศิลป์. (2540). พฤติกรรมส่งเสริมสุขภาพของนักศึกษาวิทยาลัยอาชีวศึกษาจังหวัดประจวบคีรีขันธ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์), สาขาวิชาสุขศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อุมาภรณ์ ภัทรวาณิชย์. (2538). ปัจจัยทางวัฒนธรรมที่มีผลต่อพฤติกรรมทางเพศที่ไม่เสี่ยงของวัยรุ่น. กรุงเทพฯ: สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล.

APPENDIX

APPENDIX A

The list panel of expert

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รายนามผู้เชี่ยวชาญในการตรวจแบบสอบถาม

1. รศ. ดร. สุนีย์ ละกำปั่น
   ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
2. ผศ. ดร. สุรินธร กลัมพากร
   ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
3. ผศ. ดร. ชะนวนทอง ธนสุกาญจน์
   ภาควิชาสุขศึกษาและพฤติกรรมศาสตร์ คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
4. อ. ดร. สัจจา ทาโต
   สาขาวิชาพยาบาลศาสตร์ คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
5. นางกอบกาญจน์ มหัทธโน
   กองอนามัยเจริญพันธ์ กรมอนามัย กระทรวงสาธารณสุข

APPENDIX B

The instrument for data collection

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1. ชื่อโครงการวิจัย พฤติกรรมทางเพศที่ปลอดภัยของนักเรียนอาชีวศึกษาชาย จังหวัดนครปฐม
2. ผู้วิจัย นางนภัสวรรณ วัฒน์รณชัย

คำยินยอมของอาสาสมัคร

ข้าพเจ้าได้ทราบรายละเอียดของโครงการวิจัยตลอดจนประโยชน์ และข้อเสี่ยงที่จะเกิดขึ้นต่อผู้ยินยอมตนให้ทำวิจัยจากผู้วิจัยแล้วอย่างชัดเจน ไม่มีสิ่งใดปิดบังซ่อนเร้น และยินยอมให้ทำการวิจัยในโครงการที่มีชื่อข้างต้น และข้าพเจ้ารู้ว่าถ้ามีปัญหาหรือข้อสงสัยเกิดขึ้น ข้าพเจ้าสอบถามผู้วิจัยได้และข้าพเจ้าจะไม่เข้าร่วมโครงการวิจัยนี้เมื่อใดก็ได้ โดยไม่มีผลกระทบที่ข้าพเจ้าพึงได้รับ นอกจากนี้ผู้วิจัยจะเก็บข้อมูลเฉพาะกับตัวข้าพเจ้า เป็นความลับและจะเปิดเผยได้เฉพาะในรูปแบบที่เป็นสรุปผลการวิจัยต่อหน่วยงานต่างๆที่เกี่ยวข้อง

การที่ข้าพเจ้าได้ตอบคำถามและส่งคืนแบบสอบถาม เป็นการบ่งบอกว่าข้าพเจ้ามีความยินยอมที่จะเข้าร่วมในงานวิจัย

ลงชื่อ.....(พยาน)

.....(พยาน)

วันที่ เดือน กันยายน พ.ศ. 2547

คำอธิบายของผู้วิจัย

ข้าพเจ้าได้อธิบายรายละเอียดของโครงการตลอดจนประโยชน์รวมทั้งข้อเสี่ยงที่อาจจะเกิดขึ้นจากการตอบแบบสอบถามในการวิจัยแก่อาสาสมัครแล้วอย่างชัดเจนโดยไม่มีสิ่งใดปิดบังซ่อนเร้น

ลงชื่อ.....(ผู้วิจัย)

วันที่ เดือน กันยายน พ.ศ. 2547

เลขที่แบบสอบถาม

แบบสอบถาม

เรื่อง พฤติกรรมทางเพศของนักเรียนอาชีวศึกษาชาย จังหวัดนครปฐม

1. แบบสอบถามมีทั้งหมด 7 ส่วน
   - ส่วนที่ 1 ข้อมูลส่วนบุคคล
   - ส่วนที่ 2 การรับรู้ประโยชน์ของการมีเพศสัมพันธ์ที่ปลอดภัย
   - ส่วนที่ 3 การรับรู้สมรรถนะของตนเองในการมีเพศสัมพันธ์ที่ปลอดภัย
   - ส่วนที่ 4 ประสบการณ์การมีเพศสัมพันธ์
   - ส่วนที่ 5 การรับรู้อุปสรรคของการมีเพศสัมพันธ์ที่ปลอดภัย
   - ส่วนที่ 6 อิทธิพลระหว่างบุคคล ประกอบด้วย
     - 6.1 บรรทัดฐานของเพื่อนและคู่เพศสัมพันธ์
     - 6.2 แรงสนับสนุนทางสังคมจากเพื่อนและคู่เพศสัมพันธ์
   - ส่วนที่ 7 พฤติกรรมทางเพศ

2. การวิจัยครั้งนี้เป็นการศึกษาเพื่อทำวิทยานิพนธ์ของนักศึกษาปริญญาโท สาขาวิชาเอกพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล <u>การตอบคำถามของนักศึกษาจะไม่มีผลกระทบใดๆต่อตัวนักศึกษา ขอให้นักศึกษาตอบตามความเป็นจริงตามความคิดเห็นและการปฏิบัติของนักศึกษา</u> โดยไม่ต้องเขียนชื่อลงในแบบสอบถาม ผู้วิจัยขอรับรองว่าคำตอบที่ได้จะเป็นความลับ และใช้เพื่อการวิจัยเท่านั้น

3. ขอให้นักศึกษาอ่านคำชี้แจงของแบบสอบถามในแต่ละส่วนให้เข้าใจก่อนลงมือทำ

ขอขอบคุณนักศึกษาทุกท่านที่ให้ความร่วมมือ
นภัสวรรณ วัฒน์รณชัย
นักศึกษาปริญญาโท สาขาวิชาเอกพยาบาลสาธารณสุข
คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล

ส่วนที่ 1

คำชี้แจง คำถามต่อไปนี้เป็นการถามเกี่ยวกับข้อมูลส่วนบุคคล โปรดทำเครื่องหมาย ✓ หรือเติมข้อความลงในช่องว่างที่ตรงกับข้อเท็จจริงของท่านมากที่สุด

สำหรับผู้วิจัย

1. ปัจจุบันท่านอายุ.....ปี ( )

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8. ท่านเคยดื่มสุราหรือของมึนเมาหรือไม่ ( )

( ) ไม่เคยดื่ม

( ) ดื่มนานๆครั้ง

( ) ดื่มเป็นบางครั้ง

( ) ดื่มบ่อยครั้ง

( ) ดื่มเป็นประจำ

ส่วนที่ 2

คำชี้แจง คำถามในส่วนนี้เป็นการถามเกี่ยวกับการรับรู้ประโยชน์ของการมีเพศสัมพันธ์ที่ปลอดภัย โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด

	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	ไม่แน่ใจ	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1. การใช้ถุงยางอนามัยช่วยป้องกันการตั้งครรภ์ไม่พึงประสงค์					
.....					
15. การหลีกเลี่ยงการมีเพศสัมพันธ์กับผู้ที่ใช้สารเสพติดชนิดฉีด ช่วยลดความกลัว/กังวลว่าจะติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์					

ส่วนที่ 3 คำถามในส่วนนี้เป็นการถามเกี่ยวกับการรับรู้สมรรถนะของตนเองในการมีเพศสัมพันธ์ที่ปลอดภัย โปรดทำเครื่องหมาย ✓ และระบุว่าท่านสามารถทำกิจกรรมดังแสดงในตารางข้างใต้ได้หรือไม่ ถ้าทำได้จงระบุความมั่นใจในการกระทำ ถ้าท่านไม่แน่ใจโปรดระบุสิ่งที่ใกล้เคียงกับความคิดของท่านมากที่สุด

กิจกรรม	ทำไม่ได้	ทำได้แต่ไม่มั่นใจเลย	ทำได้มั่นใจพอสมควร	ทำได้มั่นใจมาก	ทำได้มั่นใจมากที่สุด
1. ปฏิเสธการมีเพศสัมพันธ์กับแฟน					
.....					
20. ขอให้แฟนกระตุ้นเร้าทางเพศตามที่ท่านต้องการ					

ส่วนที่ 4

คำชี้แจง คำถามในส่วนนี้ เป็นการถามเกี่ยวกับประสบการณ์ทางเพศ โปรดทำเครื่องหมาย ✓ หรือเติมข้อความลงในช่องว่างที่ตรงกับความเป็นจริงของท่านมากที่สุด ข้อมูลที่ได้จากท่านจะถูกเก็บเป็นความลับ และจะถูกนำเสนอในภาพรวมเท่านั้น

สำหรับผู้วิจัย

1. ในเรื่องเพศสัมพันธ์ ท่านคิดว่าท่านจัดอยู่ในประเภทไหน (แม้ว่าท่านยังไม่มีประสบการณ์ทางเพศ)

( ) รักเพศเดียวกัน (ชายกับชาย) ( ) รักต่างเพศ (ชายกับหญิง) ( ) รักทั้งสองเพศ ( )

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8. ในช่วง 6 เดือนที่ผ่านมา บุคคลที่ท่านมีเพศสัมพันธ์ด้วยมีทั้งหมด.....คน ( )

ส่วนที่ 5

คำชี้แจง คำถามในส่วนนี้เป็นการถามเกี่ยวกับการรับรู้อุปสรรคของการมีเพศสัมพันธ์ที่ปลอดภัย โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด

	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	ไม่แน่ใจ	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1. การใช้ถุงยางอนามัยทำให้ลดความรู้สึกสัมผัส					
.....					
20. การมีเพศสัมพันธ์เฉพาะกับคู่รักเพียงคนเดียวทำให้เสียเชิงชาย					

ส่วนที่ 6

6.1 บรรทัดฐานของเพื่อน

คำชี้แจง คำถามในส่วนนี้ ให้ท่านนึกถึงเพื่อนที่ท่านสนิทมากที่สุด โปรดเขียนชื่อสมมติลงในช่องว่างที่กำหนด.....**ท่านคิดว่าเพื่อนของท่านคิดอย่างไร** กับพฤติกรรมต่อไปนี้ โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด ถ้าท่านไม่แน่ใจ โปรดระบุสิ่งที่ใกล้เคียงกับความคิดเพื่อนของท่านมากที่สุด

	ไม่มีเพื่อนคนใดเห็นด้วย	เพื่อนบางคนเห็นด้วย	เพื่อนส่วนใหญ่เห็นด้วย	เพื่อนทุกคนเห็นด้วย
1. การใช้ถุงยางอนามัยทุกครั้งเมื่อมีเพศสัมพันธ์				
.....				
5. การดื่มสุราทำให้ควบคุมตนเองไม่ได้ และเพิ่มโอกาสเสี่ยงที่จะมีเพศสัมพันธ์โดยไม่มีการป้องกัน				

บรรทัดฐานของคู่เพศสัมพันธ์

คำชี้แจง คำถามในส่วนนี้ ให้ท่านนึกถึงคู่นอนที่มีความสำคัญกับท่านมากที่สุด โปรดระบุชื่อสมมติลงในช่องว่างที่กำหนด..... **ท่านคิดว่าผู้ที่ท่านระบุคิดอย่างไร** กับพฤติกรรมต่อไปนี้ โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด ถ้าท่านไม่แน่ใจ โปรดระบุสิ่งที่ใกล้เคียงกับความคิดของผู้ที่ท่านระบุมากที่สุด

	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1. การใช้ถุงยางอนามัยทุกครั้งที่มีเพศสัมพันธ์				
.....				
5. การดื่มสุราทำให้ควบคุมตนเองไม่ได้ และเพิ่มโอกาสเสี่ยงที่จะมีเพศสัมพันธ์โดยไม่มีการป้องกัน				

6.2 แรงสนับสนุนทางสังคมจากเพื่อนและคู่เพศสัมพันธ์

คำชี้แจง คำถามในส่วนนี้เป็นการถามเกี่ยวกับแรงสนับสนุนทางสังคมจากเพื่อนและคู่เพศสัมพันธ์ โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด

แรงสนับสนุนทางสังคมจากเพื่อน

	ไม่เคย	บางครั้ง	บ่อยครั้ง	ทุกครั้ง
1. เพื่อนของท่านให้ถุงยางอนามัยแก่ท่าน				
.....				
11. เพื่อนของท่านให้ความเชื่อมั่นว่าการหลีกเลี่ยงการมีเพศสัมพันธ์ในวันแรกของการออกเดทช่วยลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์ และการตั้งครรภ์ไม่พึงประสงค์				

แรงสนับสนุนทางสังคมจากคู่เพศสัมพันธ์

	ไม่เคย	บางครั้ง	บ่อยครั้ง	ทุกครั้ง
1. คู่นอนของท่านให้ถุงยางอนามัยแก่ท่าน				
.....				
11. คู่นอนของท่านให้ความเชื่อมั่นว่าการหลีกเลี่ยงการมีเพศสัมพันธ์ในวันแรกของการออกเดทช่วยลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์ และการตั้งครรภ์ไม่พึงประสงค์				

ส่วนที่ 7

คำชี้แจง คำถามในส่วนนี้เป็นการถามเกี่ยวกับพฤติกรรมทางเพศ โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด

	ไม่เคย	บางครั้ง	บ่อยครั้ง	ทุกครั้ง
1. ฉันยืนยันที่จะใช้ถุงยางอนามัยเมื่อมีเพศสัมพันธ์				
.....				
19. ฉันดื่มเครื่องดื่มที่มีแอลกอฮอล์ก่อนหรือขณะมีเพศสัมพันธ์				

APPENDIX C

Item analysis

ตารางที่ 15 จำนวนและร้อยละการรับรู้ประโยชน์ของการมีเพศสัมพันธ์ที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)	ไม่เห็นด้วย จำนวน (ร้อยละ)	ไม่แน่ใจ จำนวน (ร้อยละ)	เห็นด้วย จำนวน (ร้อยละ)	เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)
1. การใช้ถุงยางอนามัยช่วยป้องกันการตั้งครรภ์ไม่พึงประสงค์	4 (1.9)	5 (2.3)	20 (9.3)	85 (39.7)	100 (46.7)
2. การใช้ถุงยางอนามัยสามารถลดความเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	1 (0.5)	0 (0)	16 (7.5)	83 (38.8)	114 (53.3)
3. การใช้ถุงยางอนามัยทุกครั้งที่มีเพศสัมพันธ์ช่วยลดความกลัว/กังวลว่าจะติดโรคฯ และการตั้งครรภ์ไม่พึงประสงค์	1 (0.5)	4 (1.9)	18 (8.4)	102 (47.7)	89 (41.6)
4. การหลีกเลี่ยงการมีเพศสัมพันธ์กับผู้ที่มีพฤติกรรมรักเพศเดียวกัน ช่วยป้องกันการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	8 (3.7)	15 (7.0)	48 (22.4)	77 (36.0)	66 (30.8)
5. การมีเพศสัมพันธ์เฉพาะกับคู่รักเพียงคนเดียวช่วยลดความเสี่ยงจากการการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	21 (9.8)	16 (7.5)	70 (32.7)	60 (28.0)	47 (22.0)
6. การหลีกเลี่ยงการร่วมเพศทางทวารหนักช่วยลดความกลัว/กังวลว่าจะติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	9 (4.2)	18 (8.4)	65 (30.4)	72 (33.6)	50 (23.4)
7. การหลีกเลี่ยงการสัมผัสสารคัดหลั่งของคู่นอนขณะที่ท่านมีแผลช่วยป้องกันการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	8 (3.7)	15 (7.0)	47 (22.0)	88 (41.1)	56 (26.2)
8. การหลีกเลี่ยงการมีเพศสัมพันธ์ขณะที่ท่านหรือคู่นอนมีแผลบริเวณอวัยวะเพศ ช่วยลดโอกาสเสี่ยงที่จะติดโรคฯ	6 (2.8)	9 (4.2)	65 (30.4)	97 (45.3)	37 (17.3)
9. การหลีกเลี่ยงการสัมผัสกับเลือดของคู่นอนช่วยลดความกลัว/กังวลว่าจะติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	3 (1.4)	10 (4.7)	25 (11.7)	80 (37.4)	96 (44.9)
10. การยืนยันที่จะใช้ถุงยางอนามัยทุกครั้งกับคู่นอนสามารถป้องกันการติดโรคฯ และการตั้งครรภ์ไม่พึงประสงค์	6 (2.8)	6 (2.8)	40 (18.7)	85 (39.7)	77 (36.0)

ตารางที่ 15 จำนวนและร้อยละการรับรู้ประโยชน์ของการมีเพศสัมพันธ์ที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ (ต่อ)

ข้อความ	ไม่เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)	ไม่เห็นด้วย จำนวน (ร้อยละ)	ไม่แน่ใจ จำนวน (ร้อยละ)	เห็นด้วย จำนวน (ร้อยละ)	เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)
11. การปฏิเสธการมีเพศสัมพันธ์กับผู้ที่มีคู่นอนหลายคนและ/หรือผู้ติดสารเสพติด ช่วยลดความเสี่ยงที่จะติดโรคฯ	5 (2.3)	9 (4.2)	36 (16.8)	89 (41.6)	75 (35.0)
12. การพูดเกี่ยวกับเรื่องการป้องกันโรคฯ และการตั้งครรภ์ไม่พึงประสงค์กับคู่นอนก่อนการมีเพศสัมพันธ์ช่วยลดความกลัว/กังวลว่าจะติดโรคฯ และการตั้งครรภ์ไม่พึงประสงค์	1 (0.5)	9 (4.2)	60 (28.0)	107 (50.0)	37 (17.3)
13. การหลีกเลี่ยงการมีเพศสัมพันธ์ในวันที่ออกเดทครั้งแรกช่วยป้องกันการติดโรคฯ และการตั้งครรภ์ไม่พึงประสงค์	9 (4.2)	32 (15.0)	82 (38.3)	71 (33.2)	20 (9.3)
14. การหลีกเลี่ยงการดื่มสุราหรือของมึนเมาก่อนมีเพศสัมพันธ์ทำให้สามารถควบคุมตนเองได้ และมีการป้องกันที่ช่วยลดความเสี่ยงต่อการติดโรคฯ และการตั้งครรภ์ไม่พึงประสงค์	7 (3.3)	21 (9.8)	45 (21.0)	91 (42.5)	50 (23.4)
15. การหลีกเลี่ยงการมีเพศสัมพันธ์กับผู้ที่ใช้สารเสพติดชนิดฉีดช่วยลดความกลัว/กังวลว่าจะติดโรคฯ	9 (4.2)	12 (5.6)	32 (15.0)	77 (36.0)	84 (39.3)

ตารางที่ 16 จำนวนและร้อยละการรับรู้สมรรถนะของตนเองในการมีเพศสัมพันธ์ที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ทำไม่ได้ จำนวน (ร้อยละ)	ทำได้แต่ไม่มั่นใจเลย จำนวน (ร้อยละ)	ทำได้มั่นใจพอสมควร จำนวน (ร้อยละ)	ทำได้มั่นใจมาก จำนวน (ร้อยละ)	ทำได้มั่นใจมากที่สุด จำนวน (ร้อยละ)
1. ปฏิเสธการมีเพศสัมพันธ์กับแฟน	101 (47.2)	62 (29.0)	32 (15.0)	10 (4.7)	9 (4.2)
2. มีความต้องการทางเพศโดยไม่รู้สึกว่าถูกบังคับให้มีเพศสัมพันธ์	14 (6.5)	42 (19.6)	69 (32.2)	43 (20.1)	46 (21.5)
3. สวมใส่ถุงยางอนามัยในขณะที่อวัยวะเพศแข็งตัว	6 (2.8)	11 (5.1)	46 (21.5)	67 (31.3)	84 (39.3)
4. เป็นผู้เริ่มกิจกรรมทางเพศ	5 (2.3)	22 (10.3)	52 (24.3)	68 (31.8)	67 (31.3)
5. พูดคุยกับแฟนเกี่ยวกับการใช้ถุงยางอนามัยหรือการคุมกำเนิดวิธีอื่นๆ	15 (7.0)	33 (15.4)	68 (31.8)	58 (27.1)	40 (18.7)
6. ขอร้องให้แฟนชะลอการมีเพศสัมพันธ์ ถ้าในขณะนั้นไม่มีถุงยางอนามัยหรือ การคุมกำเนิดวิธีอื่นๆ	45 (21.0)	63 (29.4)	63 (29.4)	33 (15.4)	10 (4.7)
7. พกถุงยางอนามัยติดตัวตลอดเวลา	54 (25.2)	46 (21.5)	55 (25.7)	20 (9.3)	39 (18.2)
8. ควบคุมความต้องการทางเพศได้เมื่อท่านรู้สึกมึนเมา	53 (24.8)	54 (25.5)	56 (26.2)	29 (13.6)	22 (10.3)
9. สนองตอบความต้องการทางเพศโดยสำเร็จความใคร่ด้วยตนเอง	26 (12.1)	40 (18.7)	76 (35.5)	32 (15.0)	40 (18.7)
10. พูดคุยกับแฟนถึงการใช้ถุงยางอนามัยเพื่อป้องกันโรคเอดส์ถึงแม้จะใช้การคุมกำเนิดวิธีอื่นๆอยู่แล้ว	17 (7.9)	32 (15.0)	79 (36.9)	56 (26.2)	30 (14.0)
11. เลือกที่จะมีเพศสัมพันธ์กับใครและเมื่อไร	23 (10.7)	43 (20.1)	71 (33.2)	37 (17.3)	40 (18.7)

ตารางที่ 16 จำนวนและร้อยละการรับรู้สมรรถนะของตนเองในการมีเพศสัมพันธ์ที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ (ต่อ)

ข้อความ	ทำไม่ได้ จำนวน (ร้อยละ)	ทำได้แต่ไม่มั่นใจเลย จำนวน (ร้อยละ)	ทำได้มั่นใจพอสมควร จำนวน (ร้อยละ)	ทำได้มั่นใจมาก จำนวน (ร้อยละ)	ทำได้มั่นใจมากที่สุด จำนวน (ร้อยละ)
12. บอกแฟนถึงวิธีปฏิบัติในเรื่องทางเพศ	23 (10.7)	42 (19.6)	66 (30.8)	56 (26.2)	27 (12.6)
13. ปฏิเสธที่จะมีกิจกรรมทางเพศเมื่อท่านไม่พร้อม	30 (14.0)	64 (29.9)	56 (26.2)	31 (14.5)	33 (15.4)
14. ซื้อถุงยางอนามัย หรือใช้การคุมกำเนิดวิธีอื่นๆ	10 (4.7)	32 (15.0)	65 (30.4)	55 (25.7)	52 (24.3)
15. พูดคุยเกี่ยวกับวิธีการป้องกันตนเองจากโรคติดต่อทางเพศสัมพันธ์ กับแพทย์หรือบุคลากรทางสุขภาพ	27 (12.6)	62 (29.0)	67 (31.3)	36 (16.8)	22 (10.3)
16. ยอมรับว่าไม่มีประสบการณ์ทางเพศกับเพื่อนที่มีประสบการณ์	32 (15.0)	39 (18.2)	68 (31.8)	52 (24.3)	23 (10.7)
17. ปฏิเสธการมีกิจกรรมทางเพศกับคนอื่นที่ไม่ใช่แฟน	57 (26.6)	49 (22.9)	56 (26.2)	29 (13.6)	23 (10.7)
18. ดูภาพยนตร์โป๊ โดยไม่รู้สึกเขอะเขิน	26 (12.1)	29 (13.6)	62 (29.0)	43 (20.1)	54 (25.2)
19. ขอออกเดทกับคนอื่นนอกเหนือจากแฟน	37 (17.4)	56 (26.3)	53 (24.9)	37 (17.4)	30 (14.1)
20. ขอให้แฟนกระตุ้นเร้าทางเพศตามที่ท่านต้องการ	36 (16.8)	43 (20.1)	69 (32.2)	34 (15.9)	32 (15.0)

ตารางที่ 17 จำนวนและร้อยละการรับรู้อุปสรรคของการมีเพศสัมพันธ์ที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)	ไม่เห็นด้วย จำนวน (ร้อยละ)	ไม่แน่ใจ จำนวน (ร้อยละ)	เห็นด้วย จำนวน (ร้อยละ)	เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)
1. การใช้ถุงยางอนามัยทำให้ลดความรู้สึกสัมผัส	15 (7.0)	18 (8.4)	58 (27.1)	78 (36.4)	45 (21.0)
2. การใช้ถุงยางอนามัย ยุ่งยากทั้งในการใส่และถอด	14 (6.5)	51 (23.8)	61 (28.5)	62 (29.0)	26 (12.1)
3. การใช้ถุงยางอนามัยทำให้ขัดจังหวะและเสียเวลา	7 (3.3)	52 (24.3)	64 (29.9)	65 (30.4)	26 (12.1)
4. การใช้ถุงยางอนามัยขณะร่วมเพศ อาจทำให้คู่นอนไม่ไว้วางใจ	19 (8.9)	43 (20.1)	79 (36.9)	51 (23.8)	22 (10.3)
5. การเริ่มต้นพูดเกี่ยวกับการใช้ถุงยางอนามัยกับคู่นอนทำให้ท่านรู้สึกอึดอัดใจ	13 (6.1)	52 (24.3)	75 (35.0)	55 (25.7)	19 (8.9)
6. เป็นเรื่องยากที่จะถามประวัติ การมีพฤติกรรมรักเพศเดียวกัน การใช้สารเสพติดชนิดฉีด และการเป็นโรคติดต่อฯของคู่นอน	24 (11.2)	32 (15.0)	68 (31.8)	57 (26.6)	33 (15.4)
7. การถามประวัติการมีเพศสัมพันธ์ของคู่นอน เป็นการก้าวก่ายเรื่องส่วนตัว	13 (6.1)	42 (19.6)	52 (24.3)	85 (39.7)	22 (10.3)
8. การปฏิเสธที่จะไม่ใช้ถุงยางอนามัยอาจทำลายความสัมพันธ์ของท่านกับคู่นอน	19 (8.9)	44 (20.6)	101 (47.2)	37 (17.3)	13 (6.1)
9. การหลีกเลี่ยงการสัมผัสเลือดของคู่นอนขณะมีเพศสัมพันธ์ทำให้ท่านรู้สึกอึดอัดใจ	18 (8.4)	40 (18.7)	88 (41.1)	50 (23.4)	18 (8.4)
10. การหลีกเลี่ยงการสัมผัสสารคัดหลั่งของคู่นอนเป็นเรื่องยาก	12 (5.6)	43 (20.1)	82 (38.3)	59 (27.6)	18 (8.4)
11. การหลีกเลี่ยงการมีเพศสัมพันธ์ขณะที่ท่านหรือคู่นอนมีแผลบริเวณอวัยวะเพศ อาจทำให้คู่นอนของท่านเข้าใจผิด	12 (5.6)	44 (20.6)	59 (27.6)	68 (31.8)	31 (14.5)

ตารางที่ 17 จำนวนและร้อยละการรับรู้อุปสรรคของการมีเพศสัมพันธ์ที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ (ต่อ)

ข้อความ	ไม่เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)	ไม่เห็นด้วย จำนวน (ร้อยละ)	ไม่แน่ใจ จำนวน (ร้อยละ)	เห็นด้วย จำนวน (ร้อยละ)	เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)
12. ไม่มีข้อมูลใดมาสนับสนุนว่าการหลีกเลี่ยงการสัมผัสสารคัดหลั่งของคู่นอนจะลดความเสี่ยงจากการติดเชื้อเอดส์	11 (5.1)	22 (10.3)	105 (49.1)	57 (26.6)	19 (8.9)
13. การปฏิเสธการร่วมเพศทางทวารหนักเมื่อคู่นอนต้องการทำให้ท่านรู้สึกอึดอัดใจ	17 (7.9)	43 (20.1)	71 (33.2)	54 (25.2)	29 (13.6)
14. การหลีกเลี่ยงการร่วมเพศทางทวารหนักเป็นเรื่องที่กระทำได้ยาก	40 (18.7)	51 (23.8)	49 (22.9)	47 (22.0)	27 (12.6)
15. การปฏิเสธการมีเพศสัมพันธ์กับคู่นอนที่มีพฤติกรรมรักเพศเดียวกัน อาจทำลายความสัมพันธ์ของท่านกับคู่นอน	25 (11.7)	32 (15.0)	72 (33.6)	53 (24.8)	32 (15.0)
16. ไม่มีข้อมูลชัดเจนที่จะอธิบายว่าการหลีกเลี่ยงการร่วมเพศทางทวารหนักจะลดความเสี่ยงจากการติดเชื้อเอดส์	31 (14.5)	33 15.4	89 (41.6)	46 (21.5)	15 (7.0)
17. การหลีกเลี่ยงการดื่มสุราหรือของมึนเมาก่อนมีเพศสัมพันธ์ทำให้ท่านรู้สึกไม่มั่นใจ	22 (10.3)	60 (28.0)	65 (30.4)	50 (23.4)	17 (7.9)
18. เป็นเรื่องยากที่จะปฏิเสธการมีเพศสัมพันธ์กับคู่รักที่ท่านทราบว่ามีประวัติใช้สารเสพติดชนิดฉีด	18 (8.4)	51 (23.8)	87 (40.7)	41 (19.2)	17 (7.9)
19. การปฏิเสธการมีเพศสัมพันธ์ในวันแรกของการออกเดทอาจทำลายความสัมพันธ์ของท่านกับคู่นอน	17 (7.9)	52 (24.3)	77 (36.0)	52 (24.3)	16 (7.5)
20. การมีเพศสัมพันธ์เฉพาะกับคู่รักเพียงคนเดียวทำให้เสียเชิงชาย	35 (16.4)	63 (29.4)	48 (22.4)	40 (18.7)	28 (13.1)

ตารางที่ 18 จำนวนและร้อยละบรรทัดฐานของเพื่อนของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่มีเพื่อนคนใดเห็นด้วย จำนวน (ร้อยละ)	เพื่อนบางคนเห็นด้วย จำนวน (ร้อยละ)	เพื่อนส่วนใหญ่เห็นด้วย จำนวน (ร้อยละ)	เพื่อนทุกคนเห็นด้วย จำนวน (ร้อยละ)
1. การใช้ถุงยางอนามัยทุกครั้งเมื่อมีเพศสัมพันธ์	19 (8.9)	71 (33.2)	83 (38.8)	41 (19.2)
2. การหลีกเลี่ยงการมีเพศสัมพันธ์เมื่ออวัยวะเพศเป็นแผล	17 (7.9)	48 (22.4)	86 (40.2)	63 (29.4)
3. การหลีกเลี่ยงการร่วมเพศทางทวารหนักโดยไม่ใช้ถุงยางอนามัย	50 (23.4)	45 (21.0)	50 (23.4)	69 (32.2)
4. การพูดเกี่ยวกับเรื่องการป้องกันโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์และการตั้งครรภ์ไม่พึงประสงค์เป็นเรื่องที่เหมาะสม	24 (11.2)	54 (25.2)	84 (39.3)	52 (24.3)
5. การดื่มสุราทำให้ควบคุมตนเองไม่ได้และเพิ่มโอกาสเสี่ยงที่จะมีเพศสัมพันธ์โดยไม่มีการป้องกัน	22 (10.3)	54 (25.2)	80 (37.4)	58 (27.1)

ตารางที่ 19 จำนวนและร้อยละบรรทัดฐานของคู่เพศสัมพันธ์ของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)	ไม่เห็นด้วย จำนวน (ร้อยละ)	เห็นด้วย จำนวน (ร้อยละ)	เห็นด้วยอย่างยิ่ง จำนวน (ร้อยละ)
1. การใช้ถุงยางอนามัยทุกครั้งเมื่อมีเพศสัมพันธ์	19 (8.9)	30 (14.0)	111 (51.9)	54 (25.2)
2. การหลีกเลี่ยงการมีเพศสัมพันธ์เมื่ออวัยวะเพศเป็นแผล	13 (6.1)	19 (8.9)	115 (53.7)	67 (31.3)
3. การหลีกเลี่ยงการร่วมเพศทางทวารหนักโดยไม่ใช้ถุงยางอนามัย	33 (15.4)	20 (9.3)	74 (34.6)	87 (40.7)
4. การพูดเกี่ยวกับเรื่องการป้องกันโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์และการตั้งครรภ์ไม่พึงประสงค์เป็นเรื่องที่เหมาะสม	7 (3.3)	29 (13.6)	126 (58.9)	52 (24.3)
5. การดื่มสุราทำให้ควบคุมตนเองไม่ได้และเพิ่มโอกาสเสี่ยงที่จะมีเพศสัมพันธ์โดยไม่มีการป้องกัน	15 (7.0)	34 (15.9)	98 (45.8)	67 (31.3)

ตารางที่ 20 จำนวนและร้อยละแรงสนับสนุนทางสังคมจากเพื่อนของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่เคย จำนวน (ร้อยละ)	บางครั้ง จำนวน (ร้อยละ)	บ่อยครั้ง จำนวน (ร้อยละ)	ทุกครั้ง จำนวน (ร้อยละ)
1. เพื่อนให้ถุงยางอนามัยแก่ท่าน	75 (35.0)	106 (49.5)	24 (11.2)	9 (4.2)
2. เพื่อนให้ความเชื่อมั่นว่าการใช้ถุงยางอนามัยสามารถป้องกันโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์ และการตั้งครรภ์ไม่พึงประสงค์	16 (7.5)	86 (40.2)	66 (30.8)	46 (21.5)
3. เพื่อนสนับสนุนให้ท่านพกถุงยางอนามัยติดตัว	44 (20.6)	86 (40.2)	61 (28.5)	23 (10.7)
4. เพื่อนบอกให้ทราบว่าการมีเพศสัมพันธ์กับผู้ที่มีพฤติกรรมรักเพศเดียวกันเสี่ยงต่อการติดโรคต่อทางเพศสัมพันธ์/โรคเอดส์	54 (25.2)	81 (37.9)	61 (28.5)	18 (8.4)
5. เพื่อนให้ความเชื่อมั่นว่าการหลีกเลี่ยงการร่วมเพศทางทวารหนักสามารถลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	54 (25.2)	69 (32.2)	64 (29.9)	27 (12.6)
6. เพื่อนบอกให้ทราบว่าการสัมผัสกับสารคัดหลั่งขณะที่ท่านหรือคู่นอนมีแผลบริเวณอวัยวะเพศเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	53 (24.8)	77 (36.0)	65 (30.4)	19 (8.9)
7. เพื่อนให้ความเชื่อมั่นว่าการหลีกเลี่ยงการสัมผัสกับเลือดสามารถลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	55 (25.7)	65 (30.4)	72 (33.6)	22 (10.3)
8. เพื่อนสนับสนุนให้ท่านเริ่มต้นพูดเกี่ยวกับเรื่องการใช้ถุงยางอนามัยกับคู่นอน	46 (21.5)	83 (38.8)	66 (30.8)	19 (8.9)
9. เพื่อนให้ความเชื่อมั่นว่าการปฏิเสธการมีเพศสัมพันธ์ที่ไม่ใช้ถุงยางอนามัยสามารถลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	53 (24.8)	82 (38.3)	58 (27.1)	21 (9.8)
10. เพื่อนบอกให้ทราบว่าการดื่มสุราหรือของมึนเมาก่อนการมีเพศสัมพันธ์ทำให้ควบคุมตนเองไม่ได้และมีเพศสัมพันธ์โดยไม่มีการป้องกัน	48 (22.4)	84 (39.3)	63 (29.4)	19 (8.9)
11. เพื่อนให้ความเชื่อมั่นว่าการหลีกเลี่ยงการมีเพศสัมพันธ์ในวันแรกของการออกเดทช่วยลดโอกาสเสี่ยงต่อการติดโรคฯและการตั้งครรภ์ไม่พึงประสงค์	48 (22.4)	98 (45.8)	53 (24.8)	15 (7.0)

ตารางที่ 21 จำนวนและร้อยละแรงสนับสนุนทางสังคมจากคู่เพศสัมพันธ์ของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่เคย จำนวน (ร้อยละ)	บางครั้ง จำนวน (ร้อยละ)	บ่อยครั้ง จำนวน (ร้อยละ)	ทุกครั้ง จำนวน (ร้อยละ)
1. คู่นอนให้ถุงยางอนามัยแก่ท่าน	115 (53.7)	59 (27.6)	26 (12.1)	14 (6.5)
2. คู่นอนให้ความเชื่อมั่นว่าการใช้ถุงยางอนามัยสามารถป้องกันโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์ และการตั้งครรภ์ไม่พึงประสงค์	25 (11.7)	75 (35)	70 (32.7)	44 (20.6)
3. คู่นอนสนับสนุนให้ท่านพกถุงยางอนามัยติดตัว	60 (28.0)	61 (28.5)	56 (26.2)	37 (17.3)
4. คู่นอนบอกให้ทราบว่าการมีเพศสัมพันธ์กับผู้ที่มีพฤติกรรมรักเพศเดียวกันเสี่ยงต่อการติดโรคต่อทางเพศสัมพันธ์/โรคเอดส์	77 (36.0)	49 (22.9)	63 (29.4)	25 (11.7)
5. คู่นอนให้ความเชื่อมั่นว่าการหลีกเลี่ยงการร่วมเพศทางทวารหนักสามารถลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	66 (30.8)	58 (27.1)	64 (29.9)	26 (12.1)
6. คู่นอนบอกให้ทราบว่าการสัมผัสกับสารคัดหลั่งขณะที่ท่านหรือคู่นอนมีแผลบริเวณอวัยวะเพศเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	63 (29.4)	68 (31.8)	58 (27.1)	25 (11.7)
7. คู่นอนให้ความเชื่อมั่นว่าการหลีกเลี่ยงการสัมผัสกับเลือดสามารถลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	47 (22.0)	70 (32.7)	73 (34.1)	24 (11.2)
8. คู่นอนสนับสนุนให้ท่านเริ่มต้นพูดเกี่ยวกับเรื่องการใช้ถุงยางอนามัยกับคู่นอน	56 (26.2)	75 (35.0)	53 (24.8)	30 (14.0)
9. คู่นอนให้ความเชื่อมั่นว่าการปฏิเสธการมีเพศสัมพันธ์ที่ไม่ใช้ถุงยางอนามัยสามารถลดโอกาสเสี่ยงต่อการติดโรคติดต่อทางเพศสัมพันธ์/โรคเอดส์	57 (26.6)	71 (33.2)	61 (28.5)	25 (11.7)
10. คู่นอนบอกให้ทราบว่าการดื่มสุราหรือของมึนเมาก่อนการมีเพศสัมพันธ์ทำให้ควบคุมตนเองไม่ได้และมีเพศสัมพันธ์โดยไม่มีการป้องกัน	45 (21.0)	79 (36.9)	52 (24.3)	38 (17.8)
11. คู่นอนให้ความเชื่อมั่นว่าการหลีกเลี่ยงการมีเพศสัมพันธ์ในวันแรกของการออกเดทช่วยลดโอกาสเสี่ยงต่อการติดโรคฯและการตั้งครรภ์ไม่พึงประสงค์	61 (28.5)	73 (34.1)	54 (25.2)	26 (12.1)

ตารางที่ 22 จำนวนและร้อยละพฤติกรรมทางเพศที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ

ข้อความ	ไม่เคย จำนวน (ร้อยละ)	บางครั้ง จำนวน (ร้อยละ)	บ่อยครั้ง จำนวน (ร้อยละ)	ทุกครั้ง จำนวน (ร้อยละ)
1. ฉันยืนยันที่จะใช้ถุงยางอนามัยเมื่อมีเพศสัมพันธ์	33 (15.4)	88 (41.1)	40 (18.7)	53 (24.8)
2. ฉันใช้ยาเสพติดหรือยากระตุ้นอื่นๆ ก่อนหรือขณะมีเพศสัมพันธ์	154 (72.0)	36 (16.8)	18 (8.4)	6 (2.8)
3. ฉันหยุดการเล้าโลมทางเพศนานพอที่จะใส่ถุงยางอนามัย (หรือให้คู่นอนใส่ถุงยางอนามัยให้)	68 (31.8)	91 (42.5)	44 (20.6)	11 (5.1)
4. ฉันถามประวัติการมีเพศสัมพันธ์ของคนที่ฉันจะมีเพศสัมพันธ์ด้วย	55 (25.7)	85 (39.7)	51 (23.8)	23 (10.7)
5. ฉันและคู่นอนใช้น้ำยาฆ่าเชื้ออสุจิร่วมกับการใช้ถุงยางอนามัยในการมีเพศสัมพันธ์แต่ละครั้ง	109 (50.9)	61 (28.5)	28 (13.1)	16 (7.5)
6. ฉันเคยมีเพศสัมพันธ์กับผู้ที่เคยใช้ยาเสพติดชนิดฉีดเข้าเส้น	150 (70.1)	27 (12.6)	31 (14.5)	6 (2.8)
7. ฉันถามประวัติการมีพฤติกรรมรักเพศเดียวกันของคู่นอน	104 (48.6)	63 (29.4)	36 (16.8)	11 (5.1)
8. ฉันมีเพศสัมพันธ์ในวันที่ออกเดทครั้งแรก	81 (37.9)	67 (31.3)	49 (22.9)	17 (7.9)
9. ฉันมีเพศสัมพันธ์กับคู่นอนแม้ว่าฉันจะไม่ทราบประวัติส่วนตัวของคู่นอน	62 (29.0)	92 (43.0)	46 (21.5)	14 (6.5)
10. ฉันงดมีเพศสัมพันธ์เมื่อพบว่าฉันมีแผลบริเวณอวัยวะเพศ	34 (15.9)	67 (31.3)	55 (25.7)	58 (27.1)
11. ถ้าฉันรู้ว่าจะมีการพบปะสังสรรค์ที่จะนำไปสู่การมีเพศสัมพันธ์ ฉันจะพกถุงยางอนามัยติดตัว	38 (17.8)	77 (36.0)	62 (29.0)	37 (17.3)

ตารางที่ 22 จำนวนและร้อยละพฤติกรรมทางเพศที่ปลอดภัยของนักเรียนอาชีวศึกษาชายรายข้อ (ต่อ)

ข้อความ	ไม่เคย จำนวน (ร้อยละ)	บางครั้ง จำนวน (ร้อยละ)	บ่อยครั้ง จำนวน (ร้อยละ)	ทุกครั้ง จำนวน (ร้อยละ)
12. ถ้าฉันไม่เห็นด้วยกับข้อมูลเกี่ยวกับการมีเพศสัมพันธ์ที่ปลอดภัยของคู่นอน ฉันจะแสดงความคิดเห็นของฉัน	37 (17.3)	95 (44.4)	63 (29.4)	19 (8.9)
13. ฉันมีเพศสัมพันธ์ทางปากโดยปราศจากการป้องกัน เช่น ใช้ถุงยางอนามัย	80 (37.4)	70 (32.7)	50 (23.4)	14 (6.5)
14. ถ้าฉันรู้ว่าจะมีการพบปะสังสรรค์ที่จะนำไปสู่การมีเพศสัมพันธ์ ฉันวางแผนที่จะมีเพศสัมพันธ์ที่ปลอดภัย	38 (17.8)	77 (36.0)	66 (30.8)	33 (15.4)
15. ถ้าคู่นอนของฉันยืนยันที่จะมีเพศสัมพันธ์โดยไม่ใช้ถุงยางอนามัย ฉันจะปฏิเสธการมีเพศสัมพันธ์นั้น	69 (32.2)	88 (41.1)	36 (16.8)	21 (9.8)
16. ฉันเป็นคนเริ่มต้นพูดถึงการมีเพศสัมพันธ์ที่ปลอดภัยกับคู่นอน	41 (19.2)	92 (43.0)	59 (27.6)	22 (10.3)
17. ฉันมีเพศสัมพันธ์กับผู้ที่ฉันรู้ว่ามีพฤติกรรมรักเพศเดียวกัน	119 (55.6)	56 (26.2)	24 (11.2)	15 (7.0)
18. ฉันมีเพศสัมพันธ์ทางทวารหนักโดยไม่ใช้ถุงยางอนามัย	125 (58.4)	43 (20.1)	35 (16.4)	11 (5.1)
19. ฉันดื่มเครื่องดื่มที่มีแอลกอฮอล์ก่อนหรือขณะมีเพศสัมพันธ์	73 (34.1)	81 (37.9)	39 (18.2)	21 (9.8)

Table 23: Correlation matrix between independent variable and dependent variable

Variable	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
1. Perceived benefits											
1.1 decrease risk factors	1.000										
1.2 protection	0.499**	1.000									
1.3 reduce anxiety	0.645**	0.621**	1.000								
2. Perceived barriers											
2.1 turnoffs	0.154*	0.060	0.106	1.000							
2.2 hassles	0.181**	0.189**	0.163*	0.540**	1.000						
2.3 execution	0.104	0.162*	0.186**	0.499**	0.577**	1.000					
2.4 relationship concern	0.121	0.117	0.103	0.535**	0.529**	0.542**	1.000				
3. Perceived self-efficacy											
3.1 say no	0.119	0.106	0.073	-0.116	-0.013	-0.065	-0.069	1.000			
3.2 assertive	0.167*	0.135*	0.154*	0.237**	0.263**	0.293**	0.142*	0.122	1.000		
3.3 precaution	0.109	0.220**	0.108	-0.076	-0.061	0.153*	0.127	0.456**	0.381**	1.000	
3.4 others	0.151*	0.063	0.137*	0.127	0.177**	0.153*	0.020	0.133	0.493**	0.314**	1.000
4. Peer norm	0.227**	0.216**	0.228**	0.034	0.179**	0.073	0.022	0.182**	0.222**	0.285**	0.214**
5. Patner norm	0.320**	0.187**	0.227**	0.112	0.148*	0.061	0.064	0.167**	0.086	0.249**	0.129
6. Social support of peer											
6.1 instrument	0.077	0.060	0.014	0.141*	0.143*	0.180**	0.064	0.186**	0.214**	0.138*	0.059
6.2 confidence	0.133	0.192**	0.158*	0.082	0.142*	0.197**	0.121	0.276**	0.225**	0.382**	0.123
6.3 information	0.102	0.180**	0.109	0.005	0.050	0.116	-0.018	0.187**	0.037	0.178**	0.037
7. Social support of patner											
7.1 instrument	0.006	0.046	0.007	0.051	0.09	0.138*	0.066	0.235**	0.225**	0.341**	0.149*
7.2 confidence	0.172*	0.229**	0.208**	0.051	0.142*	0.165*	0.044	0.272**	0.163*	0.355**	0.070
7.3 information	0.151*	0.166*	0.189**	0.062	0.135*	0.127	0.061	0.307**	0.082	0.218**	0.009

Table 23: Correlation matrix between independent variable and dependent variable (Cont.)

Variable	1.1	1.2	1.3	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
8. Alcohol consumption											
8.1 never	-0.096	0.053	-0.042	-0.088	0.063	-0.009	0.001	0.126	-0.027	-0.018	-0.092
8.2 rarely	0.070	-0.001	0.035	0.054	-0.034	-0.116	0.036	0.121	-0.113	0.113	-0.120
8.3 sometimes	0.016	-0.032	0.032	-0.088	-0.130	-0.060	-0.080	-0.100	-0.001	0.004	0.113
8.4 usually	-0.027	0.028	-0.061	0.115	0.160*	0.166*	0.037	-0.067	0.127	0.147*	0.045
8.5 always	0.007	-0.050	0.001	0.091	0.071	0.163*	0.069	0.141*	0.122	-0.023	0.075
9. Safer sex practices	0.107	0.074	0.079	-0.115	-0.088	0.243**	0.146*	0.326**	0.022	0.405**	0.011

* p< 0.05, ** p< 0.01

Table 23: Correlation matrix between independent variable and dependent variable (Cont.)

Variable	4	5	6.1	6.2	6.3	7.1	7.2	7.3	8.1	8.2	8.3
1. Perceived benefits											
1.1 decrease risk factors											
1.2 protection											
1.3 reduce anxiety											
2. Perceived barriers											
2.1 turnoffs											
2.2 hassles											
2.3 execution											
2.4 relationship concern											
3. Perceived self-efficacy											
3.1 say no											
3.2 assertive											
3.3 precaution											
3.4 others											
4. Peer norm	1.000										
5. Patner norm	0.580**	1.000									
6. Social support of peer											
6.1 instrument	0.152*	0.105	1.000								
6.2 confidence	0.293**	0.175*	0.433**	1.000							
6.3 information	0.310**	0.146*	0.307**	0.654**	1.000						
7. Social support of patner											
7.1 instrument	0.046	0.085	0.433**	0.337**	0.194**	1.000					
7.2 confidence	0.232**	0.179**	0.400**	0.601**	0.476**	0.475**	1.000				
7.3 information	0.146*	0.104	0.341**	0.543**	0.475**	0.427**	0.736**	1.000			

Table 23: Correlation matrix between independent variable and dependent variable (Cont.)

Variable	4	5	6.1	6.2	6.3	7.1	7.2	7.3	8.1	8.2	8.3
8. Alcohol consumption											
8.1 never	0.027	0.146*	-0.101	-0.083	-0.043	-0.106	0.034	0.026	1.000		
8.2 rarely	0.031	0.026	-0.087	0.024	-0.007	0.023	0.026	0.044	-0.231**	1.000	
8.3 sometimes	-0.001	0.065	0.023	0.026	0.037	0.004	-0.058	-0.042	-0.374**	-0.573**	1.000
8.4 usually	-0.103	-0.072	0.146*	0.026	0.009	0.007	-0.027	-0.092	-0.121	-0.186**	-0.301**
8.5 always	-0.099	0.153*	0.102	-0.016	-0.018	0.115	0.072	0.100	-0.076	-0.117	-0.190**
9. Safer sex practices	0.304**	0.287**	0.099	0.211**	0.074	0.178**	0.311**	0.215**	0.057	0.128	-0.028

* p< 0.05, ** p< 0.01

Table 23: Correlation matrix between independent variable and dependent variable (Cont.)

Variable	8.4	8.5	9
1. Perceived benefits			
1.1 decrease risk factors			
1.2 protection			
1.3 reduce anxiety			
2. Perceived barriers			
2.1 turnoffs			
2.2 hassles			
2.3 execution			
2.4 relationship concern			
3. Perceived self-efficacy			
3.1 say no			
3.2 assertive			
3.3 precaution			
3.4 others			
4. Peer norm			
5. Patner norm			
6. Social support of peer			
6.1 instrument			
6.2 confidence			
6.3 information			
7. Social support of patner			
7.1 instrument			
7.2 confidence			
7.3 information			

Table 23: Correlation matrix between independent variable and dependent variable (Cont.)

Variable	8.4	8.5	9
8. Alcohol consumption			
8.1 never			
8.2 rarely			
8.3 sometimes			
8.4 usually	1.000		
8.5 always	-0.062	1.000	
9. Safer sex practices	-0.125	-0.138*	1.000

* p< 0.05, ** p< 0.01

APPENDIX D

Documentary Proof of Ethical Clearance

No. 98/2004

Documentary Proof of Ethical Clearance
The Committee on Human Rights Related to Human Experimentation
Mahidol University, Bangkok

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Title of Project: Safer Sex Practices of Vocational Education Male Students in Nakhon Pathom Province

Principal Investigator: Mrs. Napatsawan Watronachai

Name of Institution: Faculty of Public health

Approved by the Committee on Human Rights Related to Human Experimentation

Signature of Chairman: _____
(Professor Dr. Srisin Khusmith)

Signature of Head of Institute: _____
(Professor Dr. Pornchai Matangkasombut)

Date of Approval: - 1 SEP 2004

BIOGRAPHY

NAME	Mrs. Napatsawan Watronachai
DATE OF BIRTH	5 January 1970
PLACE OF BIRTH	Pichit, Thailand
INSTITUTIONS ATTENDED	Mahidol University, 1996: Bachelor of Nursing Mahidol University, 2005: Master of Science (Public Health) Major in Public Health Nursing
RESEARCH GRANT	Supported in part by Thesis Grant, Faculty of Graduate Studies, Mahidol University, 2004 Supported in part by Commission on Higher Education and Faculty of Graduate Studies, Mahidol University, 2004
POSITION & OFFICE	April 1989 – 2000 Taphanhin Crown Prince Hospital, Pichit, Thailand Position: Nurse June 2000 – Present Boromrajonani College of Nursing, Chang Wat Nonthaburi Praboromrajchanok Institute of Health Workforce Department Ministry of Public Health, Thailand Position: Nurse Instructor Level 5
TELEPHONE	0-2525-3135-6