PERCEPTIONS OF SEXUAL PRACTICES AMONG UNDERGRADUATE STUDENTS IN A RAJABHAT UNIVERSITY

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

DEPARTMENT OF FAMILY SCIENCES

COLLEGE OF PROFESSIONAL EDUCATION

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DENTON, TEXAS

DECEMBER 2016

DEDICATION

To my father, the late Assistant Professor, Wisith Thongsaeng,
my mother, Jiraporn Thongsaeng,
and my brother, the late Nattapol Thongsaeng,
thank you for your never-ending love, support, and understanding.

ACKNOWLEDGEMENTS

Education is a lifelong process. Throughout my challenging years in a doctoral program, I have observed and learned new cultures and gained new knowledge from professors, textbooks, assignments, classmates, other people, and from the environment surround me. Learning is never ending. The completion of this degree is a precious reward earned in exchange for patience, fatigue, tears, and perseverance. Without the gracious support of many people, I would not have been able to accomplish my goal and this doctoral degree.

I am greatly indebted to Nakhon Sawan Rajabhat University (NSRU) for the scholarship and opportunities to pursue my degree and obtain memorable life experiences in the United States. Many thanks to all of my colleagues and students at Nakhon Sawan Rajabhat University, friends, and family in Thailand for cheering me on and always encouraging me over the years.

I would like to express my appreciation to my committee members, Drs. Joyce Armstrong, my major advisor; Lin Moore; and Shann Hwa (Abraham) Hwang. Dr. Joyce Armstrong, I am truly grateful for your encouragement, passion, guidance, and patience in walking with me step by step to achieve this goal. You always welcomed and embraced me when I felt tired, confused, and frustrated. Dr. Moore, I express my sincere gratitude to you for your total support, understanding, and for always believing in me. Dr. Armstrong and Dr. Moore, you are my greatest inspirational role model. You are always

demonstrating your dedication to the academic development of all of your students. Dr. Hwang, I feel honored to work with you. You have challenged me to work to my full potential. Thank you for always being available and for providing valuable life-long guidance.

My appreciation is also expressed to Kinnaree Gilbert and your family for your unconditional love, assistance, and support. To Lekky King, Raht Johnson, and both of your families, thank you for being so helpful and providing unending support. These three families have dried my tears while bringing joy and cheer to my heart. Your actions taught me about God without saying anything about religion. This created an interest in learning more about Him while creating a renewed faith.

I would also like to thank Uncle Prasit and Wilaiwan Glimchit, the owners of Thai Ocha and all employees for their nourishment, support, and life experiences. Furthermore, thanks to Anocha Intharasuwan, my beloved friend, the Thai-Denton Student Association members, UNT and TWU faculty and students, including people that I met in the US for their love, friendship, and comfort.

I am more than thankful to everyone and every experience that enlightens me to be strong and ready to work for my community and to serve my country, Thailand.

ABSTRACT

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PERCEPTIONS OF SEXUAL PRACTICES AMONG UNDERGRADUATE STUDENTS IN A RAJABHAT UNIVERSITY

DECEMBER 2016

This research examined the perceptions of sexual practices among 670 adolescent males (194) and females (476) who enrolled in 21 first-year-classrooms in Spring 2015 at a Rajabhat University in the northern region of Thailand. This study also investigated how demographic information affected the scores of the Sexual Health Inventory through the socio-ecological framework.

The instrument was adapted from the Sexual Health Inventory, developed by Edwards (2004). It consisted of ten components. Participants were asked to respond on a Likert Scale with answers ranging from "Strongly Agree," "Agree," "Neither Agree or Disagree," "Disagree," to "Strongly Disagree."

The independent variables in this study were participants' gender, family income, and educational levels of parents and the dependent variables were scores on the Sexual Health Inventory. Descriptive statistics, MANOVAs, and Pearson *r* correlations were utilized in this study.

Findings indicated that participants had high scores on Component 1: Talking about Sex and 8: Positive Sexuality but low scores on component 5: Challenges-Overcoming the Barrier and 10: Spirituality and Values. There were correlations among

the 10 components in this inventory. There were no significant differences based on gender for Component 2: Culture and Sexuality, 9: Intimacy and Relationships, and 10: Spirituality and Values. There were no significant differences based on family income except Component 7: Masturbation and Fantasy and 8: Positive Sexuality. There were significant differences on Component 2: Culture and Sexuality and 5: Challenges-Overcoming the Barrier based on parents' educational levels. This study presented a discussion on the results and made the recommendations for future studies.

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CHAPTER I

INTRODUCTION

Adolescence can be a transitional period of sexual exploration. During this period, adolescents may be involved in experimenting with various sexual activities due to biological, emotional, and sociological changes. This period is marked by dramatic changes that affect adolescents' emotional behaviors (Muuss, 1996). New adjustments arise due to these parallel changes (Hurlock, 1975). Some adolescents are well adjusted and achieve autonomy, whereas others experience conflict and encounter several problems, especially sexual health (Muuss, 1996; Steinberg, 2016). Some adolescents become explorers who are always curious about everything surrounding them. They are more likely to seek what they want to know and learn from their environment. In Selman's theory of interpersonal understanding, adolescents learn and develop their perspectives from other people. Furthermore, they can understand the mutual relationships (Muuss, 1996). In Bronfenbrenner's human ecological theory, adolescents observe, think, and learn from ecological structuring, which are parents, school teachers, peers, and other people in their society (Bronfenbrenner, 1979).

According to Craig and Dunn (2010), between the ages of 10 and 14 development shifts from childhood to adolescence in a very short period with biological changes corresponding to reproductive maturity. Adolescents receive implicit and explicit sexual

information from their environment and peers. They are forced to adopt attitudes and behaviors of adolescents. During this period, they can best be described as (a) struggling for a sense of identity and sometimes experiencing moodiness, (b) realizing that parents are not as important as friends, (c) expressing their actions rather than using words, (d) returning to childish behaviors, (e) demonstrating about the future, (f) searching for new love and relationships, and (g) having ability to work and think more abstractly (Craig & Dunn, 2010; Muuss, 1996; Steinberg, 2016).

Moreover, during later adolescence (age 14-18), some adolescents graduate from school and are considered to be on the threshold of young adulthood. However, few adolescents at the age of 18 are confident in the role of an adult (Craig & Dunn, 2010). Many exhibit the same behavior tendencies as they did during early and mid-adolescence. They can be extremely concerned about their body appearance, sexual attractiveness, and self-image. They may withdraw emotionally from their parents. They typically examine inner experiences, gain intellectual interests, frequently change relationships, develop ideas, form a sense of moral reasoning, and select role model (Craig & Dunn, 2010; Muuss, 1996; Steinberg, 2016). A research study conducted in 2009 found that adolescents have a peak level of body dissatisfaction at the age of 12-18. When they experience physical changes, they tend to compare themselves with their peers. Negative images with their own body lead to a feeling of exclusion and inferiority, and yet impact the development of identity (Kim & Kim, 2009).

Sexuality is one of several subjects that adolescents are interested in due to external and internal changes (Steinberg, 2016). Steinberg indicated that the primary source of sexuality information comes from parents, peers, and the internet. Zamboni and Silver (2009) stated that parents are the primary teachers for their adolescents to learn sexuality. However, parental sex-related communications, especially in Asian countries, are rare because of moral and traditional norms. For example, in Thailand, parents seldom have sex talks with their children because they think that their children are too young to learn about sex information and knowledge. A number of Thai and American parents also believe that teaching sexuality may lead to early onset of sexual activity. These parents further think that topics related to sexuality should be learned when adolescents grow up and become adults. Hence, some parents teach their adolescents not to engage in premarital sex without providing reasons for abstinence and how to prevent sexual behavior. During the period of adolescence, it is important for adolescents to acquire accurate information so that they can make sound decisions about their sexual health.

Peers are also considered a major source of information for many adolescents on sexuality (Epstein & Ward, 2008; Kim & Free, 2008; Powell, 2008). Epstein and Ward posited that adolescents (especially boys) discussed sex with their peers rather than their parents. However, with peers of the same age and from similar backgrounds and environments, it becomes questionable to the accuracy of peer-to-peer sexual knowledge

and practices. There is insufficient evidence to depict the effectiveness of peers as sex educators (Kim & Free, 2008).

Statistical data from the World Health Organization (WHO) (2011) showed that adolescent boys and girls in the developing countries experienced sexual health problems. In 2011, WHO reported that adolescents in 63 countries, 5 regions of the world had initial sexual intercourse between the ages of 14-15. During these formative teen years, unprotected sexual intercourse can lead to health problems, such as early pregnancies, sexually transmitted infections, and sexual abuse incidents (World Health Organization, 2011).

Young and Vazsonyi cited similar findings (2011) in their work on African American teens. They found that almost 40% of African American adolescents from the Southeastern United States had sexual intercourse before they reached 14 years old. Moreover, some of them were pregnant, whilst some were treated for sexually transmitted infections, and consequently were at risk of sexually transmitted diseases. Because adolescents explored and experimented in risky behaviors, it is important to provide accurate and relevant sexual information for their needs. During puberty, adolescents are not fully mature and tend to make poor decisions about sexual behavior. Therefore, they need guidance in order to avoid those vulnerable situations (Marhefka, Mellins, Brackis-Cott, Dolezal, & Ehrhardt, 2009).

In Asian cultures, such as Thailand, sexuality is seen as a taboo topic. In the Thai culture, sex is considered dirty talk so much so that some people are avoiding discussing

its details (Sridawruang, Crozier, & Pfeil, 2010). Zamboni and Silver (2009) asserted that family sex communication is the first place for adolescents to seek answers for their curiosities. Male adolescents who have had sex talks with their fathers are more likely to have appropriate attitudes toward sexual behaviors than adolescents who rarely communicate about sex with their parents. It is not surprising that Thai families rarely talk about sex among family members because sex communication is considered dirty talk, especially in rural areas. In addition, premarital sex is seemed to be an unacceptable behavior for children, including adolescents and single teen mothers (Sridawruang et al., 2010). When Thai parents are asked about sex, they may assume that their children are sexually active. Although it is suggested that parents should be the primary source to discuss or to teach sexuality, there are some difficulties for Thai families to discuss sexual matters due to Thai traditional norms. Furthermore, children may be blamed or punished by parents when asking about sexual matters (Sridawruang et al.).

Thai adolescents may receive little healthy sex education information from parents; however, they do receive some information through the country's sex education curriculum. The Ministry of Education develops the sex education curriculum from primary to high school in Thailand. Every school uses the same curriculum, which is integrated sex education curriculum in health and physical education. The sex education curriculum includes five strands of knowledge: (a) human growth and development; (b) life and family; (c) movement, doing physical exercises, playing games, and Thai and

international sports; (d) strengthening of health, capacity, and disease prevention; and (e) safety in life (Ministry of Education, 2008).

The goals of the sex education curriculum are to educate students for acquisition of health knowledge, accurate understanding, and appropriate attitudes and values. Furthermore, the curriculum also helps adolescents to develop life skills in order to achieve the quality of life (Ministry of Education, 2008). While schools have access to the curriculum, some teachers have opted to pick and choose parts of the curriculum to teach. Therefore, some students may not receive the full benefits of the curriculum. Many school teachers are reluctant to teach sexuality to their students because of traditional Thai norms and values. Some of them avoid teaching contraceptive use, relationship intimacy, and life skills, such as negotiations, whereas some teach only sexual abstinence programs. Hence, many Thai adolescents may have inadequate skills to prevent health risk behaviors and unexpected situations, such as initial sexual intercourse, pregnancy, illegal abortion, sexual transmitted infections, drug use, and school dropout (Sridawruang et al., 2010). Thai adolescents should be provided comprehensive sexuality information in order to acquire crucial knowledge on sexuality, which can help them make their own decisions to prevent various health risk behaviors and other unexpected situations, and to live their lives in a healthy way (Vuttanont, Greenhalgh, Griggin, & Boynton, 2006).

Statement of the Problem

Adolescents in Thailand are exposed to various forms of sex information. Families, peers, schools, and the media seem to provide insufficient sex education (Kim

& Free, 2008; Sridawruang et al., 2010; Vuttanont et al., 2006). Few adolescents receive adequate sexual knowledge and healthy attitudes. Cultural values, traditions, norms, beliefs, and family disciplines influence adolescents' perceptions and practices in positive and negative ways (Sridawruang et al., 2010). The lack of knowledge about sex and attitudes of sexual activities can lead to an unhealthy lifestyle, risky behaviors, and other social problems (Parkes, Henderson, Wight, & Nixon, 2011). This study examined how adolescents viewed their sexual health from their own experiences in order to find out what knowledge adolescents lacked about their sexual health and practices.

Purpose Statement

The purpose of this study was to examine Thai adolescents' perceptions of sexual practices during their first year at Rajabhat University in Thailand. This study also looked at how demographic information affected the scores of the Sexual Health Inventory.

Conceptual Framework

This study used socio-ecological framework as a lens to view the perceptions of sexual practices among undergraduate students. It examined the interrelated factors in the environment that affect individual's behaviors and perspectives. The Ecological theory was utilized in this study. Bronfenbrenner (1979) believed that the environment plays a significant role in a child's development. He divided the environment into five layers: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Bronfenbrenner examined the relationships between each layer in the environment and one's developmental process. He explained that each layer influences the individual's life.

Family, school, teachers, peers, and neighborhood are considered a microsystem that affects one's belief and behaviors. A connection between one's experiences and his parents' experiences with teachers, school, or religious groups is considered as a mesosystem. In the layer of an exosystem, there is a link between one's experiences and a social network that he or she may or may not interact with directly, such as parents' workplaces. In the macrosystem, there are relationships among cultural values, customs, and laws that affect the way a child is growing. The last layer is the chronosystem. It is a relationship between sociohistorical circumstances and a transition across time. This perspective was used as guideline for the researcher to investigate and interpret how adolescents perceive their sexual behaviors and practices.

Research Questions

The following research questions guided this study.

1. What are the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory (Edwards, 2004)?
2. Do the components of the Sexual Health Inventory correlate with each other?
3. Do the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory, differ when groups are compared by students' gender, family income, or parents' levels of education?

Definitions

Terms relevant to variables were defined by the interpretation of the researcher. The following definitions were used:

Adolescence**:** refers to a period of development from age 10-21 years old regarding youth who have undergone puberty and not yet reached full maturity (Steinberg, 2016).

Adolescents: will be used interchangeable with teens, teenagers, first-year college students, and emerging adults.

Undergraduate students: refers to Thai students, 18-24 years old, during their freshmen year at Rajabhat University in Thailand.

Perceptions of sexual practices: refers to how individuals view their sexual health from past experiences and individual perspectives.

Sexual knowledge: refers to an essential knowledge about sexuality, consisting of the knowledge on human development, relationships, personal and interpersonal skills, sexual behaviors, sexual health, risky behaviors, and societal norms and expectations.

Sexuality: refers to an individual's perceptions of his/her sexual identity, role, orientation, experience, behavior, attitude, belief, norm, value, and activity that shape one's life.

Sexual health: refers to adolescents' sexual information as measured by the Sexual Health Inventory (Edwards, 2004).

Sexual Health Inventory: refers to the 10 competencies as listed below:

Component one: Talking about Sex: refers to students' perceptions of comfort or discomfort in talking about sexual feelings, values, and behaviors.

Component 2: Culture and Sexual Identity: refers to the cultural influence on an individual's perceptions of sexual behaviors, community's values, and sexual identities.

Component 3: Sexual Anatomy and Functioning: refers to the perceptions of sexual functioning and sexual dysfunction.

Component 4: Sexual Health Care and Safer Sex: refers to personal thoughts of HIV/AIDS or sexually transmitted infections and HIV/AIDS information.

Component 5: Challenges: Overcoming Barrier to Sexual Health: refers to perceptions on sexual behavior relating to relationship and financial difficulties, physical and mental health, and controlling sexual feelings and behaviors.

Component 6: Body Image: refers to the satisfaction with body image, size, and looks.

Component 7: Masturbation and Fantasy: refers to self-expression of masturbation, sexual fantasy, and sexual desires.

Component 8: Positive Sexuality: refers to personal satisfaction with one's sex life, and attitudes toward sexual exploration and experiment.

Component 9: Intimacy and Relationships: refers to emotional disclosures and sexual expression with sexual partners.

Component 10: Spirituality and Values: refers to individual spirituality, religious beliefs, and activities.

Assumptions

This study identified four assumptions.

1. Participants in this study responded honestly and accurately.
2. Participants in this study could recall sexual behaviors and attitudes from their experiences.
3. Adolescents' perceptions of sexual practices could be measured by using descriptive statistics.
4. The scores of the Sexual Health Inventory represented participants' sexual practices.

Delimitations

This study identified two delimitations.

1. Only freshmen who were at least 18 years old and enrolled in Spring 2015 were studied.
2. Thai students in their first year of study at Rajabhat University in Thailand were studied.

Summary

This chapter introduced perspectives of adolescents' sexual health and sex related problems found during puberty. It also presented a statement of the problem, purpose statement, conceptual framework, research questions, definitions, assumptions, and delimitations in the study. The next chapter will present the literature review and describe

adolescents' perceptions and practices through the lens of the Sexual Health Inventory created by Edwards (2004).

CHAPTER II

REVIEW OF LITERATURE

This chapter presents a review of the literature pertaining to adolescents' perceptions of sexual health. This chapter also discusses how adolescents perceive sexual health and practices and encounter sexual health problems through the lens of the Sexual Health Inventory, created by Edwards (2004), including theories that help describe adolescents' perceptions and practices. Finally, it points to the advantages of accurate sexual knowledge for adolescents from different worldviews that promote positive sexual health and well being.

The Sexual Health Inventory

According to the Sexual Health Inventory created and developed by Edwards (2004), sexual health relates to sexual attitudes and behaviors that can be used as a framework to study adolescents' perceptions of sexual practices. It consists of 10 sexual health components: (a) talking about sex, (b) culture and sexuality, (c) sexual anatomy and functioning, (d) sexual health care and safer sex, (e) challenges: overcoming barriers to sexual health, (f) body image, (g) masturbation and fantasy, (h) positive sexuality, (i) intimacy and relationships, and (j) spirituality and values.

Talking about Sex

This component examines students' perceptions of comfort or discomfort in talking about sexual feelings, values, and behaviors. It addresses three research studies about parent-adolescent communication in Thailand and in the United States. Two studies utilized qualitative methodology consisting of focus group interview techniques to examine attitudes toward sex talks between adolescents and their parents. The last one used a quantitative research methodology to investigate their perceptions on mother-adolescent dyads' sexuality communication. The results exhibited similar findings that parents' beliefs, attitudes, communication skills, period of times, and knowledge were the barriers for dyadic sex discussion.

Sridawruang et al. (2010) conducted focus groups to examine attitudes toward sexuality of 36 Thai teens 15-18 years and their parents. Findings presented that some parents in Thailand did not have sex talks with their children directly. Parents rarely taught sexual knowledge because they felt ashamed and embarrassed. Some parents realized that it is valuable to teach their children sexuality, but they did not know how and when to start talking about sexuality. Some parents had insufficient knowledge about sexuality, so they avoided talking about sexuality and restricted their children from undesirable sexual activities. Furthermore, many parents thought that teaching sexuality was not their responsibility, so they expected schools to provide sex information and knowledge. Many parents did not have sex talks with their children because they thought

that their children were too young to learn, whereas some thought that talking about sex might encourage adolescents to experiment and experience sex activities.

Wilson, Dalberth, Koo, and Gard (2010) conducted 16 focus groups with 131 American families, mothers and fathers with pre-teens, to examine parents' perspectives on parent-child communication about sexuality. This study was funded by the U.S. Department of Health and Human Services, Office of Population Affairs. Wilson and her colleagues found several factors influencing adolescent child-parent communication. This research concluded that media and peers were the sources that led adolescents to be involved in high-risk sexual activities. Some thought that the use of technology and social networks could bring about sexual risk. Many parents realized that communication about sexuality is essential because adolescents could learn and make healthy decisions regarding sexual practices after discussing with their parents. Some parents believed that discussing with children openly about sexuality from an early age could develop closeness in relationship within the family. However, approximately one-third of parents revealed that they felt uncomfortable talking about sex with their children and thought that conversations about sex might lead to children's sexual exploration and practices. Some parents explained that there were some barriers to talking about sex with their children, such as the perception that their children are too young to talk about sex, the uncertainty of how and when to talk about sex, and the lack of time to talk to children.

Marhefka et al. (2009) looked at the perceptions of adolescents' sexual behavior among mother-adolescent communication about sexual related topics. This quantitative

research looked at how mothers living with/without HIV perceived their pre-teens' and teens' sexual behavior. The pre-teens' baseline ages were 10-14 years old and the followed up at ages of 13-19 years old. They investigated 129 urban, ethnic minority, HIV negative youths and their mothers about perceptions on sexuality communication. About half of the mothers (47%) interviewed were HIV positive, about half were not (53%). Findings showed that many HIV positive mothers thought that their children were too young to talk about sexuality and postponed conversation related to sexuality activity and practices until their child reached the age of 18. Some mothers thought that mother-daughter communication about sexuality at the age of 18 is considered too late for adolescents to obtain that sexuality information. Therefore, they discussed about sexual activities, condoms, birth control, and HIV prevention. As a result, they could predict their daughters' age of sexual debut.

Culture and Sexual Identity

This component examines the cultural influence on an individual's perceptions of sexual behaviors, community's values, and sexual identities. Cultural values, norms, society expectations, social roles, and family disciplines are factors that influence adolescents' sexual attitudes and behaviors (Sridawruang et al., 2010). This section presents an overview of six research studies on culture and sexual identity.

Vuttanont et al. (2006) used a mixed-method approach to examine sexuality knowledge, behaviors, and attitudes of 2301 teens and 351 parents. Results showed that many sexually active adolescents were interpreted as being "bad people" because Thai

society perceives adolescents who keep their virginity as "good people." Because of these cultural perceptions, some adolescents were not comfortable discussing sexuality with their parents because they did not want their parents to view them as bad people. As a result, they searched for sexuality information from other sources outside of the family, such as peers and the media. However, these sources might provide inaccurate sexuality information and bring about unhealthy sexual practices.

Thato, Jenkins, and Dusitsin (2008) conducted a quasi-experimental study to evaluate a culturally sensitive sexuality education program. Participants were 552 Thai students from grades 9-11. Researchers found that this program could delay sexual intercourse among adolescents who participated, increase refusal skills to deny unwanted sexual intercourse, motivate condom usage, and encourage adolescents to rethink sexual activities.

Wamoyi, Fenwick, Urassa, Zaba, and Stones (2010) used a qualitative ethnographic research design with focus groups consisting of 14-24 year olds and their parents or caregivers in rural Tanzania. Parents perceived initial sexual intercourse and sexually active behavior negatively. Wamoyi et al. identified the youth participants as young people rather as adolescents. Wamoyi and team found that the parent participants thought that open and early communication about sexual behavior would lead to premature interest and participation in sexual activities; thus, young people may (a) become pregnant, (b) have abortions, (c) contract sexually transmitted diseases, and/or (d) drop out of school. Young people expressed a fear of contracting sexual health

problems and a low level of satisfaction in their communication with parents on sexual related issues.

Sridawruang et al. (2010) found that many parents felt embarrassed when talking about sex-related topics with other people due to traditional Thai culture. Some parents thought that sex is a taboo issue, so it was not supposed to be talked about with adolescents.

Kingston, Malamuth, Fedoroff, and Marshall (2009) reviewed the U.S. literature regarding pornography and adolescents' sexually aggressive behaviors. The report presented that pornography in the media, such as television shows and dramas, aroused individuals to develop negative attitudes and false beliefs on sexual activities, including antisocial and sexually aggressive behaviors.

Zamboni and Silver (2009) used a questionnaire package to study sexuality communication in the family, including sexual desire, attitudes, and behaviors of 522 American college students. Results showed that family sexuality communication rarely influenced adolescents' sexual desire, attitudes, and behaviors, but social expectations did.

Sexual Anatomy and Functioning

This component examines the perceptions of sexual functioning and sexual dysfunction. The researcher looked at three major research studies conducted in Thailand, Netherlands, and the United States, explaining individuals' knowledge and their sexual anatomy and functioning that affected adolescents' interpersonal skills.

Vuttanont et al. (2006) conducted a mixed-method research to explore perceptions, attitudes, and knowledge about sexuality of 2301adolescents, 351 parents, and 6 stakeholders in Chiang Mai, Thailand by using questionnaires and group interviews. Findings indicated that some adolescent girls did not have negotiating skills to communicate and maintain relationships with their boyfriends when they were not ready to have sexual activities, whereas certain adolescent boys did not know how to deal with sexual arousal, sexual fulfillment, and healthy intimate relationships.

Smerecnik, Schaalma, Gerjo, Meijer, and Poelman (2010) conducted exploratory qualitative research to examine perspectives toward sex education among 44 Muslims and 33 non-Muslim teens (14-24 years old) who participated in online forum discussions in Netherlands. This research added to the body of knowledge on sexual anatomy and functioning. Smerecnik and colleagues found that some Muslim adolescents were obedient. Their parents were more powerful and could control their intimate relationships. Muslim adolescents were taught to believe that sexual intercourse before marriage was a sin, unacceptable in Muslim culture and masturbation created more sin. Some argued that masturbation was a healthy way to satisfy one's self (Smerecnik et al.).

Lesko (2010) reviewed two types of sexuality curricula: abstinence-only education (AOE) and comprehensive sexuality education (CSE). Lesko found that culture, societal norms, and public policy have directed sexuality education curriculum since 1960. The AOE seemed to deny sex outside marriage but promoted sexual self-control, sexual values, and negative feeling or outcomes of premarital sex. On the other

hand, CSE advocated accurate scientifically sexuality information, positive sex aspects, and responsive sexual decision making. However, both approaches empower teens in decisions making.

Sexual Health Care and Safer Sex

This component examines how adolescents behave and practice protected sexual intercourse. The Bureau of AIDS, TB and STIs (2012) indicated that Thai youth were at risk of HIV and sexually transmitted infections (STIs). Their health risk behaviors, unprotected sexual intercourse, premarital sexual intercourse, and alcohol and drug use, led to AIDS, gonorrhea, syphilis, chancre, bubo, teen pregnancy, illegal abortion, and suicidal attempts. Three research studies conducted in Thailand and Singapore revealed that sexually transmitted infections were the results of unsafe sex. In 2011, 376,690 Thai citizens reported that they had a HIV infection (256,571 males and 120,119 females). Approximately 94% were 15-59 years old, and according to the Bureau of AIDS, TB and STIs (2011), the main cause of HIV infection was unprotected sexual intercourse.

Balthip and Purnell (2014) conducted a qualitative study using grounded theory that defined life goals of 18-20 year old adolescents with HIV living in the southern region of Thailand. Balthip and Purnell found that participants perceived that self-value, a sense of being connected to prolong life, a personal feeling of calm and peace, an unconditional love, and support systems were the conditions to pursue meaning and purpose in life when living with HIV. A lack of sexual knowledge caused adolescents, family members, and their communities to feel frightened of people with HIV, especially

in the southern rural area of Thailand. Balthip and Purnell further found that many adolescents in Thailand with HIV infection were living in fear and felt threatened with a loss of family, community, and life. They did not want others to know that they had HIV and expressed a strong sense of isolation and abandonment.

Wong et al. (2013) conducted a cross-sectional survey to study condom usage of 964 adolescents 14-19 years old who attended the Department of STIs Control Clinic in Singapore. Findings showed that the number of males using condoms while having sexual intercourse with prostitutes was higher (74.4%) than when having intercourse with their girlfriends (23.7%). Furthermore, when comparing males using condoms while having sexual intercourse with casual non-paying partners, the rate of condom used was 26.2%. Wong and colleagues found "a knowledge behavior disconnect" (p. 578) between the level of confidence in condom use and application among adolescents.

Thongpriwan and McElmurry (2006) used a content analysis methodology to examine high school teens' health concerns through their discussions on a Thai web board and articles related to teens' health from databases during 1996-2004. The results showed that teens used a web board to seek sexual health information, such as dating relationships, friendship, physical and mental health, undesirable social behaviors, and risky behaviors rather than talking to their parents.

Challenges: Overcoming Barriers to Sexual Health

This component examines perceptions on sexual behavior relating to relationships and financial difficulties, physical and mental health, and controlling sexual feelings and

behaviors. Research indicated these barriers affect teenagers through "…depression, sexual compulsivity, abuse, and chemical dependency" (Edwards, 2004, p. 81). Several adolescents in the United States and Asian countries, such as Thailand, China, Vietnam, and Korea, had difficulties during puberty. Some had suicidal attempts and engaged in substance use due to depression and anxiety (Kay et al., 2012). In exploring this component, three major research studies conducted in Thailand and neighbor countries will provide additional insight on sexual health challenges and barriers that examined adolescent adjustment.

Kay et al. (2012) used a three-part questionnaire to explore suicide attempts from 1,247 high school senior students in China, Korea, Thailand, and Vietnam. Findings showed that suicidal behavior resulted from sad feelings, tragic life events, and the failure of academic performances. Kay and colleagues recommended that schools may consider providing counseling services that are student-centered that (a) encourage students to seek counseling; (b) expand services to include adequate education and outreach with media component that specifically addresses mental health for teens; (c) develop culturally responsive programs that meet the student population, and (d) develop a tracking system for students across academic grade levels. These services could support students as they continue their academic goals and career pathways, consequently reducing suicidal ideations.

Xing et al. (2010) conducted a survey to explore factors associated with suicide ideations among 13,512 Chinese junior and senior high school teens. Xing and team

found that more females than males had attempted to commit suicide within an academic year. Family factors, such as parents' scolding, punishment, control, and divorce, including harmful family environment and improper childrearing, were associated with the large number of suicides among Chinese teens. Xing and team concluded that family environment is a key of suicidal attainment.

Pirruccello (2010) conducted a pilot study on suicide prevention strategies. They examined two high school groups with 22 in group one and 18 in group two, totally 40 participants (ages ranging from 13 to 18 years old). Research finding indicated that suicide was the most common cause of death among American adolescents. The risk factors were suicidal attempt history, depression, sexual abuse, and bullying. The study revealed that program outcomes were that suicide prevention programs, nurses in communities, family members, peers, and communities could reduce the number of suicide attempt by implementing community-based teens' suicide programs.

Body Image

This component examines the satisfaction with body image, size, and looks. Body image and physical appearances seemed to be issues of concern among adolescents (Latner, Knight, & Illingworth, 2011). Holsen, Jones, and Birkeland (2012) described in their study that it affected how adolescents viewed themselves positively or negatively.

Holsen et al. (2012) conducted a study to examine 1,132 Norwegian adolescents' body image satisfaction using the Norwegian Longitudinal Health Behavior Study. Researchers concluded that at puberty, adolescents in the study were interested in

physical appearance. Findings revealed that relationships among adolescents, families, and friends could either decrease or strengthen levels of body image satisfaction. In addition, closeness in relationship within family could increase self-esteem and self-actualization; whereas, negative peer relationships could lower self-confidence and body satisfaction.

Siegling and Delaney (2013) administered a self-report survey to investigate correlations between body image importance (BII) and body satisfaction of 141 undergraduate students in Canada. Siegling and Delaney found that gender-schematic and perfectionism played an important role, as did self-evaluation, for both males and females students.

Masturbation and Fantasy

This component examines self-expression of masturbation, sexual fantasy, and sexual desires. According to Kott (2011), masturbation could be a healthy way to experience sexual pleasure. Two research studies (Robbins et al., 2011; Vuttanont et al., 2006) showed how Thai and American adolescents viewed masturbation and sexual fantasy.

Robbins et al. (2011) conducted a cross-sectional study to examine sexual behaviors including masturbation among 820 American teens, 14-17 years old. Researchers found that adolescent males masturbated more often than adolescent females and that the number of masturbation acts among males increased with age. Male adolescents who masturbated were more likely to be involved in partnered sexual

activities, including penile-vaginal intercourse and oral sex. Because masturbation is a common sexual expression and viewed as a normative developmental process during childhood to adolescence, Robbins et al. recommended that healthcare workers should provide young people current and accurate information on masturbation.

Vuttanont et al. (2006) conducted a mixed-method study among 2,301 Thai teens 12-18 years old and 351 parents using questionnaires and focus groups to examine sexuality education needs for adolescents and to redesign school policy. Findings indicated that many adolescents were curious whether masturbation is healthy or harmful to their sexual health. These teens expressed some confusion and misunderstanding about masturbation due to "mixed-messages" (p. 2074) from family, school, and society. Vuttanont and collegues found that these conflicting messages were due to several factors: (a) traditional and cultural values, (b) parental knowledge and comfort level in discussing sexual matters, and (c) schools and teachers comfort level and personal value system in developing and delivering relevant and accurate sexual health education. Teens expressed that what they were taught at home and school about masturbation is sinful and unhealthy.

Positive Sexuality

This component examines personal satisfaction with one's sex life, and attitudes toward sexual exploration and experiment. Gavin, Catalano, David-Ferdon, Gloppen, and Markham (2010) emphasized that sexual and reproductive health information is a necessity for adolescents to "develop and nurture who they are" (Robinson, Bockting,

Rosser, Miner, & Coleman, 2002, p. 50). Three major studies are presented in this section to address positive sexuality. These studies were conducted in the United States and Scotland with each presenting a positive perspective on sexuality and its role throughout the lifespan.

Vrangalova and Savin-Williams (2011) conducted a cross-sectional study using a survey of 475 American high school seniors from a rural community in New York to explore about their sexual activity and psychological development. Findings demonstrated that there were links between sexual experiences, ages, numbers of sexual partners, and psychological well-being. When Vrangalova and Savin-Williams compared three groups: (a) sexually active adolescents, (b) less sexually active adolescents, and (c) no sex-partner adolescents to group norms, findings indicated that all three groups had lower psychological well-being than normative students. Overall, the numerous sexual partners were not related to psychological well-being among male and female teens.

Parkes et al. (2011) conducted a cross-sectional survey using self-reporting questionnaires to study 1,854 students in grade 10 from 13 schools in Scotland to explore the correlations among parenting processes and adolescents' sexual risky behaviors and attitudes. Parkes et al. found that parental communication relating to sexuality and reproductive health frequently encouraged self-esteem and autonomy in adolescents, postponed premarital sex, promoted contraceptive use, and reduced chances of risky sexual behaviors. Parkes et al. offered some recommendations supporting parental involvement and sex education programming. They stated that parents play an important

role in helping teens to develop values, nurturing, and managing relationships. They challenged sex educators and health professionals to move beyond abstinence sexual education programs.

Gavin et al. (2010) conducted a systematic review of published data to evaluate 30 the Positive Youth Development Programs (PYD) using eight databases to investigate program effectiveness. PYD programs are youth programs that target teens that build skills through component based curriculum, direct instruction, and community services (p. S76) to improve adolescents' sexual and reproductive health among American teenagers. Finding indicated that sex education programs integrated with PYD had more positive program outcomes because PYD programs increased teen motivation. Gavin et al. presented several implications for sex educators based on findings that (a) PYD could help schools and those who work with adolescents to develop self-efficacy by promoting positive sexual attitudes and behaviors, (b) more research is needed to assist local communities in implementing PYD, and (c) PYD programs should enhance and strengthen local communities.

Intimacy and Relationships

This component examines emotional disclosures and sexual expression with sexual partners. Tolman and McClelland (2006) described intimate relationships as normative and positive, generally associated with sexual development during the adolescence period. During this period, teens value peers and relationship closeness. Tolman and McClelland explained that there was a gender difference among teens in how

they viewed intimacy with girls valuing intimacy higher than boys, with boys valuing sexual pleasure higher than girls.

Wilson et al. (2010) indicated that parents play an important role in creating an environment that nurtures healthy intimate relationships. Consequently, closed and negative family interactions and negative parent-child relationships sometimes foster psychosocial and sexual health problems between adolescents and adults (Jonsson et al., 2011). Two research studies conducted in Sweden and Ghana showed the negative outcomes of unhealthy relationships.

Jonsson et al. (2011) conducted a 15-year longitudinal study examining Swedish adolescents with depression. Findings indicated that adolescents who had no interpersonal family interaction or who were abused during childrearing were more likely to have difficulties in forming intimate relationships. In looking at males and females, Jonsson et al. found patterns of disruptive disorders. Some male adolescents from families with a history of domestic violence or from insecure families were reported to have explicit abusive behaviors toward their sexual partners and irresponsibility in their own intimate relationships. Some female adolescents were pregnant at an early age, victims of dating violence, depressed from what their sexual partners had done, and became single parents.

Asampong, Osafo, Bingenheimer, and Ahiadeke (2013) conducted a longitudinal cohort study (LCS) using focus group discussions (FGDs) to study perception of timing for sex talks between Ghana adolescents and their parents. Results found a difference in

perceived sexual practices as viewed by parents and teens. Finding further indicated that parents were concerned about risky sexual behaviors and sexually transmitted diseases, such as AIDS among adolescents, so they tried to control and convince their children not to have sex outside of marriage and instilled negative attitudes about premarital sexual intercourse rather than informing them comprehensive sexuality information that could help them make their own sexual decisions. Asampong et al. concluded that many families had conflicts, confusion, and tension in their households because parents had strict family rules and less sexuality discussion.

Spirituality and Values

This component examines individual spirituality, religious beliefs, and activities. Vuttanont et al. (2006) indicated that Thai morality, traditional norms, religious beliefs, family values, and past experiences are passed from older generations to younger generations, such as from teachers to students and from parents to their children. Sometimes these beliefs and traditions created confusion and curiosity for adolescents due to the dual value system between traditional and Western norms influenced by the media and technology. Social values (Rouvier, Campero, Walker, & Caballero, 2011), family's culture and religion (Heller & Johnson, 2010), family is values and school curriculum may affect adolescents' sexual attitudes and practices (Vuttanont et al., 2006). Two research studies conducted in the United States demonstrated the relationships between spirituality, values, and adolescents' sexual behaviors.

Barry, Willoughby, and Clayton (2015) looked at emerging adults and relationships within the family. These researchers conducted a longitudinal study using data from Project READY. The first wave of data was collected from 779 non-married undergraduate students from 2009 to 2010, and the second data collection was from 2010 to 2011 with 286 undergraduate students. Barry et al. found that family religious practices and personal religious practices were key determinates in how emerging adults viewed engaging sexual intercourse in committed relationships versus casual relationships. Strong religious family values and personal religious practices influenced the perceptions of sexual practices in their relationships. Barry et al. concluded that restrictions in the families contributed personal decision-making on sexual beliefs and practices.

Haglund and Fehring (2010) conducted a cross-sectional study using a periodic survey and interview from the National Survey of Family Growth (NSFG) in 2002 to study the associations of religiosity, parental sex education, and family's risky behaviors of 3,168 adolescents' boys and girls. Haglund and Fehring found that adolescents who were raised by parents who regularly attended religious activities were more likely to (a) postpone initial sexual intercourse, (b) have fewer numbers of sex-partners, and (c) decrease unsafe sexual behaviors. Furthermore, adolescents who were taught the use of contraception and refusal skills were less likely to engage in sexual intercourse and had less number of sexual partners. Therefore, parenting with religious doctrine may reduce unsafe sexual involvement among adolescents.

Conceptual Framework

The socio-ecological framework was the guideline in this study. Parent-adolescent communication, culture, beliefs, parental discipline, and spirituality on sexuality were considered as interrelated factors in the environment that affected individual's sexual health, behaviors, and perspectives.

Bronfenbrenner's Ecological Theory

The ecological theory was utilized in this study to examine how sexual knowledge affects adolescents' health and behaviors. Bronfenbrenner (1979) posits that ecological structuring plays an important role in children's development. According to the ecological theory, one's ecological structuring is comprised of microsystem, mesosystem, exosystem, macrosystem, and chronosystem. It can be stated that each system influences an individual's life.

A microsystem is the smallest component that makes up the physical and social environment of the individual. It is the closest ecological structuring to one's life, consists of factors that directly affect one's belief and behaviors. Family, school, teachers, peers, and community are elements in the microsystem. The relationships between these elements shape adolescents' thoughts and lifestyles. The more supporting and nurturing the relationships in the microsystem, the better an individual develops.

A connection between one's experiences and his/her parents' experiences with teachers, school, or religious group is considered the mesosystem. The mesosystem connects the people in the microsystem through interaction. It describes how the different

parts of an adolescent's microsystem work together. There are two microsystems interacting that lead to a new level of developmental influence, such as the connection between an adolescent's home and school. If a parent takes special interest in the child's school and extra curriculum-activities, it will help the overall growth of that adolescent. If there is conflict between family and school it can adversely affect the adolescent's development. Parents' experiences can influence their children the same ways as they have experiences. If parental figures give the adolescent conflicting messages, the adolescent's growth will be influenced in different ways. It can be stated that the mesosystem can be counted as a connection of two microsytems interacting with each other.

An exosystem relates to the broader community in which adolescent lives. It is an external environment, which indirectly involved and affected adolescents' social development. When looking at the exosystem, there is a link between one's experiences and social networks with which he or she may or may not interact directly. However, it has a huge impact on an adolescent, such as parents' workplaces, extended family members, neighborhood, networks, mass media, neighbors, community health systems, and social welfare. For example, if an adolescent's parent is laid off from work, it will have negative effects on him or her when the family's income is decreased. On the other hand, if his or her parent receives a promotion or a raise at work, the parent could support be better able to support the family financially. This will have a positive effect on an

adolescent. The exosystem is an environmental level that has an impact on an individual's life even though they may not interact directly.

A macrosystem is the largest and the outermost layer in an adolescent's environment that has a great influence. It contains the attitudes and ideologies, values, laws and customs of a particular culture or subculture, including the national government, cultural values, customs, economy, and wars. These things can either have a positive effect or a negative one on an adolescent. For example, if the culture is less likely to provide resources to help parents, it will affect the parents' ability or inability to carry out that responsibility toward their child. In a macrosystem, relationships among cultural values, customs, and laws affect the way an adolescent is growing and developing. Adolescents can learn and develop their behaviors within the cultural contexts.

The last system is the chronosystem. This includes environmental events and transitions over the course of the lifetime. The events within this system can be either external or internal aspect. For instance, the internal can be the timing of a parent's death, whereas as the physiological changes with the aging of an adolescent can be an external one. As adolescents get older, they may react differently to environmental changes and may be able to determine more on how those changes will influence them. In a chronosystem, relationships between sociohistorical circumstances and a transition during the lifespan also affect adolescents' behaviors. Growing up in their societies, adolescents can develop their selves over time.

The ecological theory emphasizes on the relationships between individuals and their environment. The ecological structuring influences adolescents. Every unit in its environment can shape their thoughts, belief, values, custom, and behaviors (Bronfenbrenner, 1979).

This ecological theory was used to explain adolescents and their changes in terms of the interaction among layers. What adolescents have learned in their families, schools, and through society could develop their attitudes and behaviors directly and indirectly. Furthermore, this framework served as a framework to investigate and explore perceptions of sexual practices among undergraduate students in Thailand.

Summary

This chapter reviews literature on the areas of sexual practices which are communication about sex, culture and sexuality, sexual anatomy and functioning, sexual health care and safer sex, challenges-overcoming barriers to sexual health, body image, masturbation and fantasy, positive sexuality, intimacy and relationship, and spirituality and values. In addition, Bronfenbrenner's ecological theory was used to explain adolescents' sexual practices.

Communication about sexuality is essential because adolescents with sexuality knowledge and negotiation skills can prevent themselves from participating in risky health behaviors. Comfortable discussions about sexuality among adolescents and their parents, teachers, peers, and sex-partners could create positive relationship among them and strengthen their ability to make appropriate decisions on sexuality. It is necessary for

adolescents to have sexuality communication skills in order to express what they want to do and know, and behave appropriately. The next chapter will describe research methodology, a group of participants, research design, procedures, data collection, and data analysis.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the perceptions of sexual practices of first-year students at a Rajabhat University in Thailand. This study also looked at how demographic information might affect the scores on the Sexual Health Inventory. This chapter will present the methodology, including research setting, sample, protection of human subjects, instrument, validity and reliability, methodology, procedures, and summary.

Research Setting

Thailand is divided into five geographical regions: Central, North, Northeast, East, and South. Each region has both public and private universities. One of the public universities is the Rajabhat University System. It is a non-profit higher education institution comprised of 40 decentralized institutions in Thailand's five regions: 14 in Central, 8 in Northern, 12 in Northeastern, 1 in East, and 5 in Southern. All Rajabhat Universities are accredited by the Ministry of Education, supported by the government, and use the same criteria and organizational structure. The main purpose of the university is to provide citizens access to higher education and to educate undergraduate and graduate students who will serve the local communities.

Data were collected at one of the Rajabhat universities, which is located in the northern region of Thailand. The community is in a large city surrounded by smaller cities and rural areas. The majority of students are from agricultural families with lower incomes and parents with limited education.

Sample

The target population consisted of 194 male and 476 female college students, who were enrolled in a bachelor degree program in a selected Rajabhat University in the northern region of Thailand. According to statistical enrollment data from the university website, 2,728 freshmen were enrolled in Spring semester of 2015. Using the table for determining sample size from a given population (Krejcie, 1970), sample size for this study was determined to be at least 338. An actual sample of 670 students was used to represent the target population in this study.

Protection of Human Subjects

This research study was carefully conducted in accordance of the procedures and guidelines of the Institutional Review Board (IRB) at Texas Woman's University to ensure that the privacy, safety, health, and welfare of the participants were adequately protected. The Confidentiality Agreement and the application for expedited and full review for approval were submitted to the Institutional Review Board (IRB) and approved. Before collecting data, participants were informed of the study, the research procedures, potential risks, and benefits of participating in the research. Each participant

agreed to participate by signing the consent form (see Appendix A). The researcher also gained written approval from Rajabhat University (see Appendix B).

Instrument

This quantitative study aimed to examine Thai adolescents and their perceptions of sexual practices. The instrument was adapted from the Sexual Health Inventory developed by Edwards (2004) with approval to use granted by Edwards (see Appendix C).

The data collection instrument inventory was presented in two sections. The first section included personal background information. The second section consisted of 102 items using a Likert scale with 5 responses (Strongly Disagree, Disagree, Neither Agree or Disagree, Agree, and Strongly Agree). The instrument consisting of 10 parts is as follows.

(1) Talking about Sex – 11 questions

(2) Culture and Sexual Identity – 5 questions

(3) Sexual Anatomy and Functioning – 8 questions

(4) Sexual Health Care and Safer Sex – 7 questions

(5) Challenges: Overcoming Barriers to Sexual Health – 15 questions

(6) Body Image – 7 questions

(7) Masturbation and Fantasy – 20 questions

(8) Positive Sexuality – 8 questions

(9) Intimacy and Relationships – 10 questions

(10) Spirituality and Values - 11 questions

Professional sex educators reviewed each item to ensure the content appropriateness and accuracy for adolescents. Participants were asked to select the most appropriate response on a five-point scale ranging from "Strongly Disagree" to "Strongly Agree." Scoring was reverse coded for items that were negatively worded, based on the recommendations of the author. Each of the10 instrument components will be discussed individually to describe the students' perceptions. The means and standard deviations will be presented to provide an overview of the inventory results in this chapter.

Validity and Reliability

The Sexual Health Model provided the basis for the development of the Sexual Health Inventory by Edwards (2004). From the model, sexual health information was gathered and stipulated from several sources, such as the World Health Organization (WHO), the Sexuality Information and Education Council of the United States (SIECUS), the National Strategy for Sexual Health and HIV, and a sexual health model described by Robinson et al. published in the journal of Health Education Research. Edwards created questions based on the summary of those sources and categorized these into 10 components. Some questions were negatively worded to reduce response sets.

The original inventory of 187 questions was validated using confirmatory factor analysis. Eighty-three questions were eliminated because of low item discrimination. As a result, there were 104 questions with item discrimination > 0.4 (Edwards, 2004).The sample of the inventory was predominately male (57%) and the mean age was 36.6 years

old (age range from 18-74). The majority of participants were White (93%) and 52% identified as homosexual and 14% identified as bisexual. The primary occupation of the participants was student (27%), Human Services Profession (23%), and Business Profession (19%). Students were recruited from a sexuality class in a small size private college in the Midwestern region of the United States, others were recruited from the author's friends, colleagues, and patients from a psychotherapy clinic. Reliability values calculated by Edwards for a sample of 930 participants ranged from a low of 0.78 to a high of 0.93, as displayed in table 1.

Table 1

Reliability of the Sexual Health Inventory

	Components	Numbers of Items	Alpha Values
(1)	Talking about Sex	12	0.91
(2)	Culture and Sexual Identity	5	0.78
(3)	Sexual Anatomy and Functioning	8	0.83
(4)	Sexual Health Care and Safer Sex	7	0.81
(5)	Challenges: Overcoming Barriers to Sexual Health	15	0.84
(6)	Body Image	7	0.80
(7)	Masturbation and Fantasy	21	0.93
(8)	Positive Sexuality	8	0.81
(9)	Intimacy and Relationships	10	0.80
(10)	Spirituality and values	11	0.92

An additional item (#103) measured overall sexual health. Participants were asked to rate their own sexual health on a five-point scale from "Poor" to "Excellent."

Methodology

The current research study was conducted by using a quantitative method design which focused on quantitative statistics. A questionnaire was used to examine adolescents' perceptions of sexual practices in Thailand.

There were two sets of variables in this study:

(1) Independent Variables: students' gender, family income, and educational levels of parents or relatives; and

(2) Dependent Variables: scores on the Sexual Health Inventory.

Research Questions

The following research questions guided this study.

RQ 1. What are the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory (Edwards, 2004)?

RQ 2. Do the components of the Sexual Health Inventory correlate with each other?

RQ 3. Do the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory, differ when groups are compared by students' gender, family income, or parents' levels of education?

Procedures

This research utilized the research procedures.

Sexual Health Inventory Validation Process

To enhance the readability and culturally responsiveness, the Sexual Health Inventory adopted by Edwards (2004) was translated to a Thai version. The researcher translated the Sexual Health Inventory from English to Thai language. A panel of experts who were native Thai speakers with advanced degrees in the United States examined the translated version. These experts compared the English and Thai versions to confirm accuracy of the translation. Two items were eliminated because the meanings were duplicated. Furthermore, three sex educators examined the translated inventory for cultural appropriateness.

Permission and Consent Form

The researcher contacted Rajabhat University administrators to obtain permission to conduct this research study through the five department areas in specific program courses. The researcher contacted the dean of each department to plan visits to classrooms according to the University course schedule in the spring semester. The researcher met with instructors/professors to explain the study and to schedule dates and times for class visits and data collection. The researcher visited each classroom to explain the purpose of the study and procedures. The consent forms were distributed in classes and returned in sealed envelopes to the researcher.

Sampling Methods

The researcher used Microsoft Excel to randomize the orders in which departmental majors were recruited. Researcher visited classrooms for data collection.

Participants were recruited from the freshman class who enrolled in classes with those targeted instructors/professors recruited to participate in Spring 2015.

Data Collection

Students who agreed to participate in this study signed a consent form and place it in a labeled envelope and sealed. Students received a Sexual Health Inventory. Upon completion of the inventory, it was placed in a labeled envelope and sealed upon completion of the data collection. Quantitative data were collected during Spring 2015.

Data Analyses

Descriptive statistics: frequencies and percentages were used to examine demographic variables and background information. Pearson *r* correlations were used to explain relationships between the components in the Sexual Health Inventory. MANOVAs were used to determine the differences in the mean scores of the ten components in the Sexual Health Inventory by gender, family income, and educational levels of parents. Graphs were created for comparisons.

Final Report

After quantitative data were collected and analyzed, the researcher summarized the data, interpreted the results, and made conclusions.

Summary

This chapter presented the methodology that was utilized in this research study. This quantitative method research study was collected and analyzed data from the Sexual Health Inventory, which was developed from Edwards (2004). The purpose of this study

was to examine Thai adolescents and their perceptions of sexual practices. This study also looked at how demographic information affected the scores of the Sexual Health Inventory. Furthermore, a descriptive statistics were used as evidence to support and answered questions in this research study. The next chapter will present data analysis.

CHAPTER IV

RESULTS

This chapter presents findings and data analysis. The purpose of this study was to examine Thai adolescents' perceptions of sexual practices. This study also looked at how demographic information affected the scores of the Sexual Health Inventory. This chapter describes demographic data and provides a summary of the results.

Description of Sample

The following section provides a description of the sample. Descriptive analysis was used to summarize the participants' demographic and background information. A total of 670 freshmen students from one the Rajabhat University in the northern region of Thailand participated in the study. Surveys were distributed in 21 classrooms in Spring 2015. Data were collected from students using the Perceptions of Sexual Practices among Undergraduate Students in Rajabhat University Sexual Health Inventory. The survey inventory was adopted from Edwards' (2004) Sexual Health Inventory.

Age and Gender of Participants

As displayed in Table 2, the majority of the 670 participants in the sample were 19 years old. Less than a third of the participants were 18 years old. Those listed as "Other" identified their ages as 20 to 24 years. Female participants far outnumbered male participants, comprising 71% of the sample.

Table 2

Age and Gender of Participants

Descriptors	*f*	%
Age		
18 years old	184	27.50
19 years old	412	61.50
Other	74	11.00
Total	**670**	**100**
Gender		
Female	476	71.00
Male	194	29.00
Total	**670**	**100**

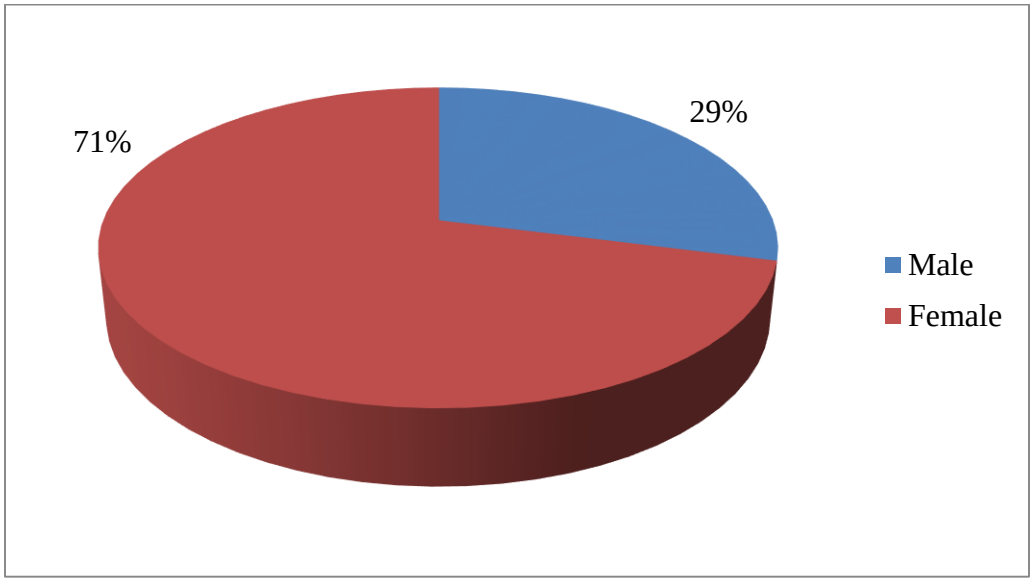

Figure 1: Gender of participants

Height, Weight, and Body Mass Index by Gender

Height and weight were provided by the participants as part of their demographic information. The Body Mass Index for each participant was calculated based on these values. In this study, BMI were categorized into five groups: (1) BMI less than 18.49: Underweight, (2) BMI between 18.5-22.99: Standard, (3) BMI between 23.0-24.99: Overweight, (4) BMI between 25.0-29.99: Overweight At Risk, and (5) BMI more than 30: Obese (Bureau of Nutrition, 2012). The results are displayed in the following table.

Table 3

Height, Weight, and Body Mass Index by Gender

Personal Background	**Male**		**Female**	
	Mean	**SD**	**Mean**	**SD**
Height (cm)	171.03	7.17	159.70	11.93
Weight (kg)	64.22	13.63	52.97	10.85
BMI	21.91	4.23	20.66	3.70

Body Mass Index	**Male**		**Female**	
	f	**%**	***f***	**%**
Group 1: BMI < 18.49	40	20.6	158	33.2
Group 2: BMI = 18.5-22.99	89	45.9	217	45.6
Group 3: BMI = 23-24.99	32	16.5	43	9.0
Group 4: BMI = 25-29.99	23	11.9	37	7.8
Group 5: BMI > 30	10	5.2	15	3.2

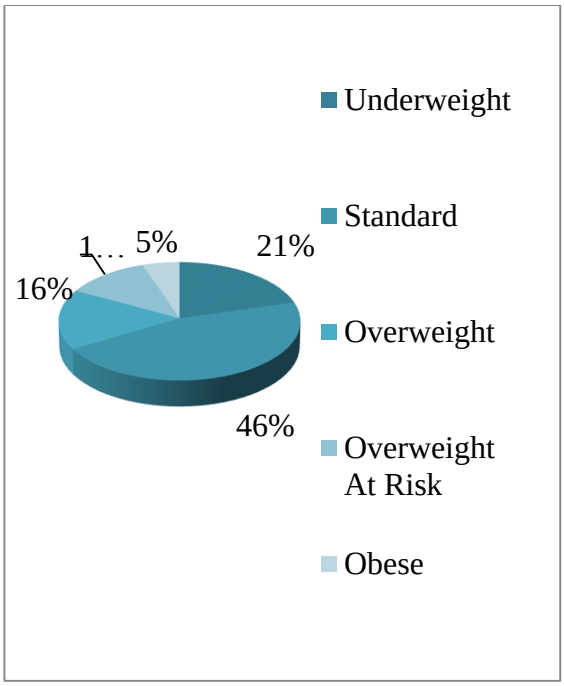

Figure 2. BMI groups for males

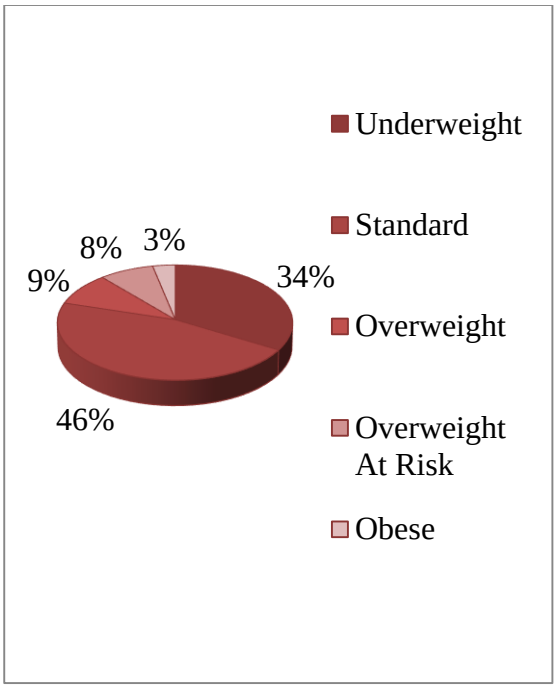

Figure 3. BMI groups for females

University Department

Participants provided additional information about themselves as college students (Table 4). Students from five departments were included: the Department of Science and Technology, Humanities and Social Sciences, Agricultural Technology and Industrial Technology, Management Science, and Education. Most students who participated were enrolled in the Department of Science and Technology (31.3%); the least number of students were enrolled in the Department of Agricultural Technology and Industrial Technology (3.9%).

Table 4

University Department

Descriptors	*f*	%
Department:		
Science and Technology	210	31.30
Humanities and Social Sciences	106	15.80
Agricultural Technology and Industrial Technology	26	3.90
Management Science	144	21.50
Education	184	27.50

Religious/Spiritual Affiliation

Almost 98% of the participants reported their religious/spiritual affiliation as Buddhism. Only 1.5% and 0.6% were Christian and Muslim respectively.

Table 5

Religious/Spiritual Affiliation

Descriptors	*f*	%
Religious/Spiritual affiliation:		
Buddhism	654	97.60
Muslim	4	0.60
Christian	10	1.50
Other	2	0.30

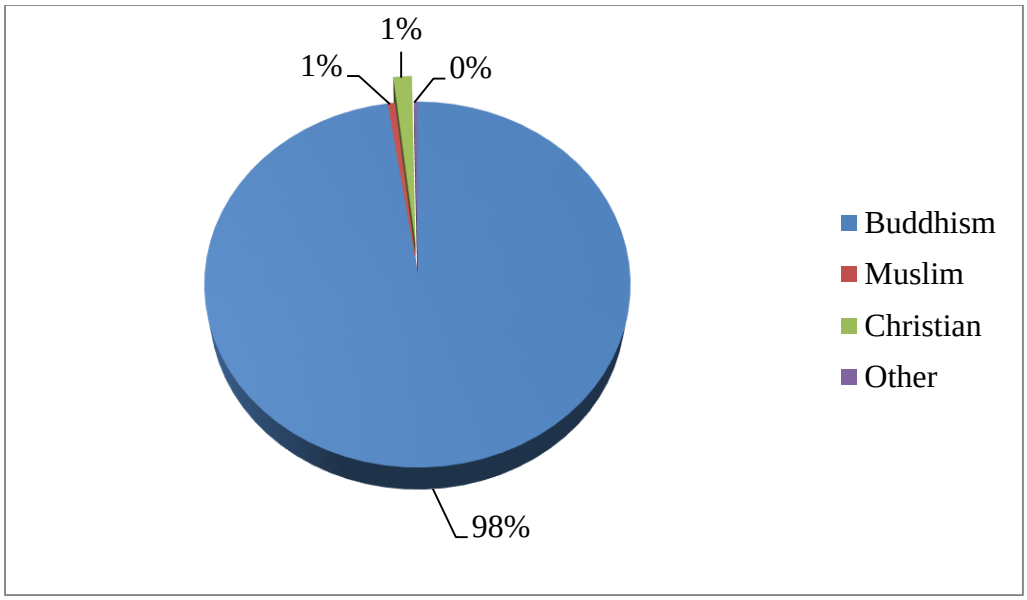

Figure 4. Participants' religious/spiritual affiliation

Marital Status of Parents

Participants reported that most of their parents were married (72%). Less than one-third revealed that their parents were divorced, separated, and widowed.

Table 6

Marital Status of Parents

Descriptors	*f*	%
Marital status of parents:		
Married	483	72.10
Divorced	74	11.00
Separated	62	9.30
Widowed	47	7.00
Other	4	0.60

Family Income per Month

Their family income ranged from less than 5,000 to more than 100,000 Baht. More than half of participants revealed that their family income was less than 10,000 Baht per month. The majority of participants' families in this study would be considered low income. Table 7 displays participants' family income per month.

Table 7

Family Income per Month

Descriptors	*f*	%
Family income per month:		
Less than 5,000 Baht	49	7.30
5,001-10,000 Baht	314	46.90
10,001-50,000 Baht	233	34.80
50,001-100,000 Baht	55	8.20
Over 100,000 Baht	19	2.80

*$1.00 US dollar = 35 Baht.

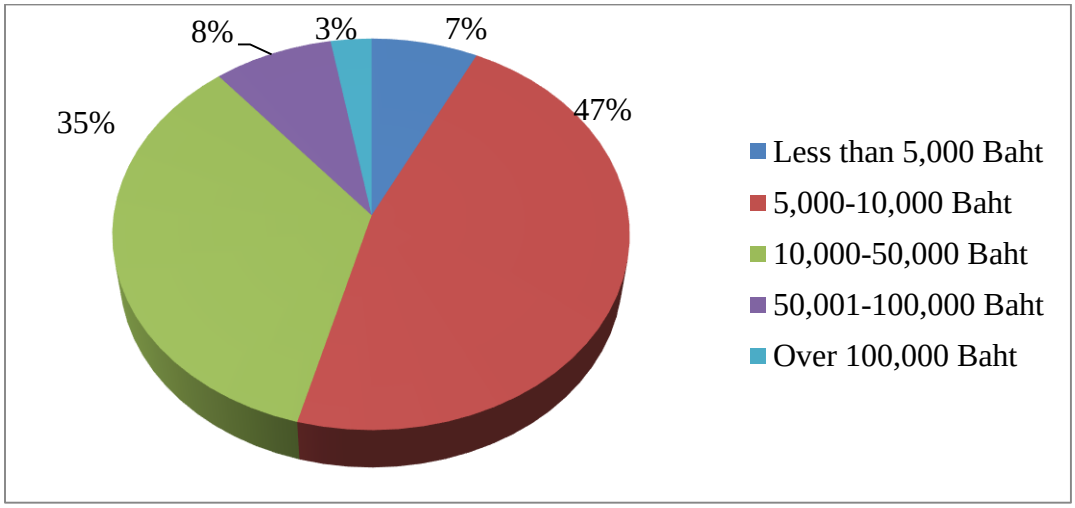

Figure 5. Family income per month

Educational Levels of Fathers and Mothers

Participants reported that the education of both fathers and mothers was very low, with "elementary school" as the most often selected level. Less than 17% of both fathers and mothers had graduated from vocational school, high school, or any level of secondary education.

Table 8

Educational Levels of Fathers and Mothers

Descriptors	*f*	%
Educational levels of fathers:		
No schooling completed	21	3.10
Elementary school	315	47.00
Middle school	93	13.90
Vocational school	24	3.60
High school, diploma or the equivalent	92	13.70
Some college	18	2.70
Bachelor's degree	80	11.90
Master's degree	13	1.90
Doctoral degree	3	0.40
Other	11	1.60

(Continued)

Educational levels of mothers:		
No schooling completed	29	4.30
Elementary school	370	55.20
Middle school	89	13.30
Vocational school	19	2.80
High school, diploma or the equivalent	67	10.00
Some college	11	1.60
Bachelor’s degree	68	10.10
Master’s degree	11	1.60
Doctoral degree	4	0.60
Other	2	0.30

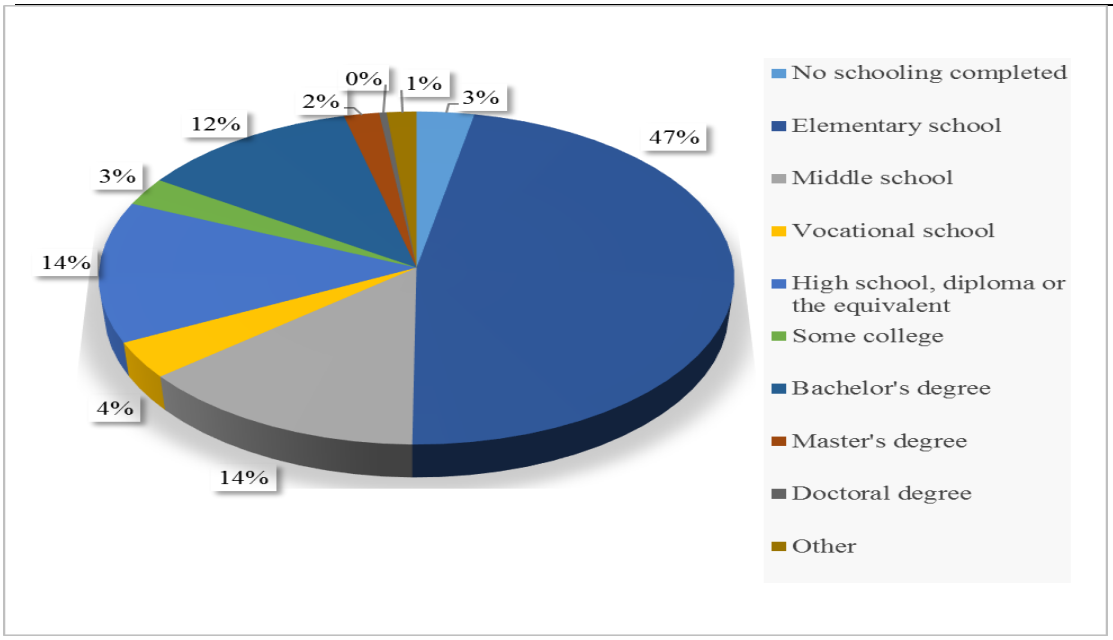

Figure 6. Education levels of fathers

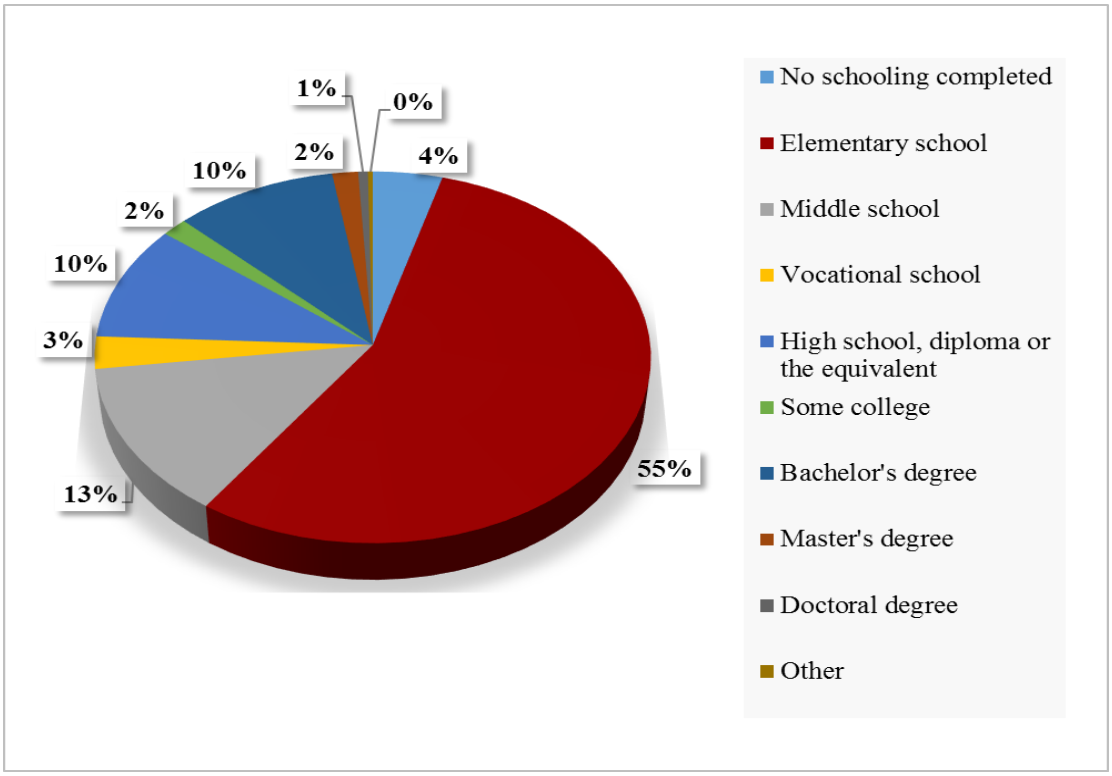

Figure 7. Education levels of mothers

Sexuality and Sources of Information

Participants responded to items concerning who they lived with and who they considered as sources of information concerning sexuality (Table 9). Many participants lived with their parents or relatives; 35% lived with roommates in university dormitories. More than half of the participants discussed sexuality most with their peers (65.8%) rather than family members or teachers. Sources of sexual information were most often from the internet websites or peers.

Table 9

Sexuality and Sources of Information

Sexuality and Sources of Information	*f*	%
Who do you live with?		
Both parents	224	33.40
Father	23	3.40
Mother	75	11.20
Relatives	62	9.30
Roommate(s)	237	35.40
Other	49	7.30
Who do you discuss sexuality with the most? (Select one)		
Father	25	3.70
Mother	76	11.30
Siblings	26	3.90
Relatives	3	0.40
Roommates	74	11.00
Teachers	7	1.00
Peers	441	65.80
Other	18	2.70

Which source do you use the most to acquire sexual information? (Select three)		
Father	26	3.90
Mother	67	10.00
Siblings	33	4.90
Relatives	11	1.60
Roommates	92	13.70
Peers	445	66.40
Teacher	77	11.50
School curriculum	217	32.40
Internet websites	467	69.70
TV and Movies	185	27.60
Magazines/Newspapers	152	22.70

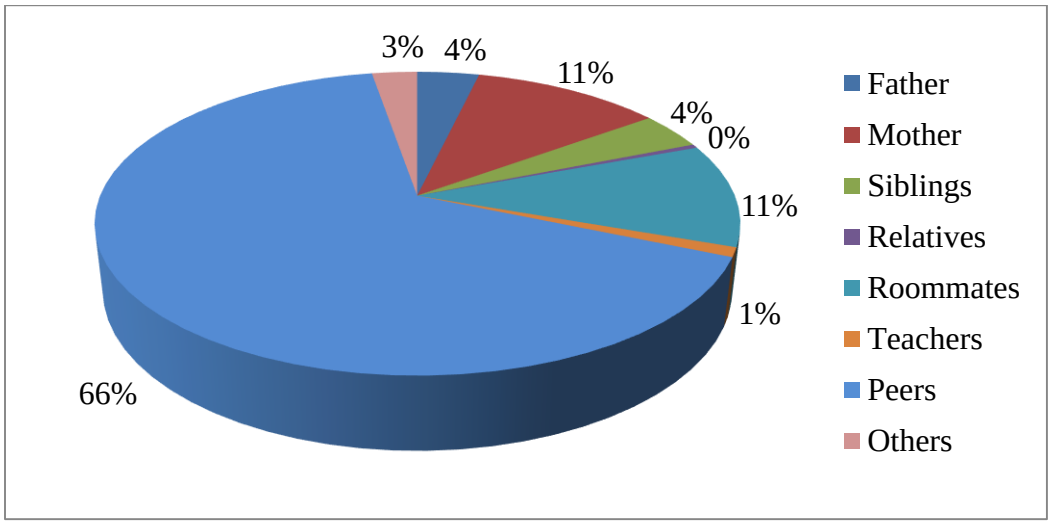

Figure 8. Person to discuss sexuality

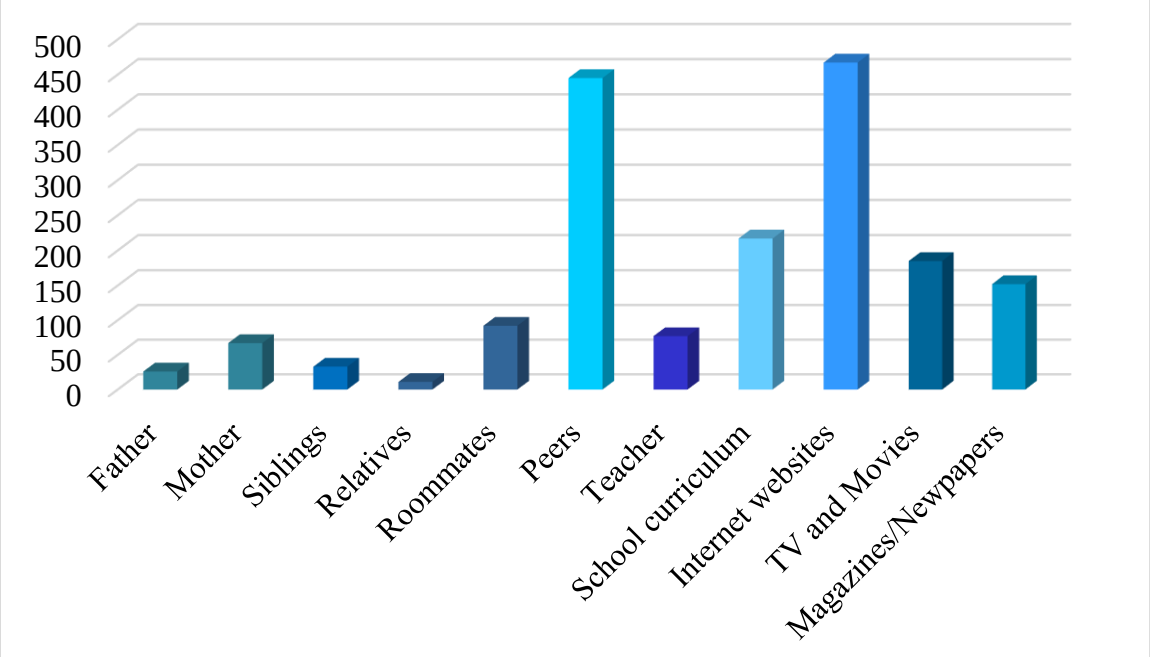

Figure 9. Sources to acquire sexual information

Sexual Partners and Sexual Orientation

When asked about sexual partners and sexual orientation, almost half of the participants (48.7%) reported having no sexual partners during the past five years. Those who were sexually active tended to have only one partner. Approximately 84.2% defined themselves as heterosexual.

Table 10

Sexual Partners and Sexual Orientation

Sexual Partners and Sexual Orientation	***f***	**%**
How many sexual partner(s) have you had? (during the past 5 years)		
None	326	48.70
1	184	27.50
2	62	9.30
3	42	6.30
4	19	2.80
5	11	1.60
6	10	1.50
Other (Over 6 people)	16	2.40
Who have you had sex with? (during the past 5 years)		
Men only	235	35.10
Women only	102	15.20
Both men and women	17	2.50
I have not had sex	316	47.20
Sexual Orientation:		
Heterosexual	564	84.20
Gay	29	4.30
Lesbian	22	3.30
Transgender	10	1.50
Bisexual	44	6.60
Other	1	0.10

Sexual Health Inventory

The Sexual Health Inventory developed by Edwards (2004) was translated to Thai language by the researcher. Two items in Thai version were eliminated because the meanings were duplicated with two items in Edwards's version. The version utilized in this study was comprised of 102 items that represented 10 components related to sexual attitudes and practices. Tests of reliability were tested (Edwards, 2004) for each of the components to measure internal consistency. Standardized Cronbach's alpha values were calculated for the current sample. The results were much lower than those reported by the author. Results are provides in Table 11.

Table 11

Reliability of the Sexual Health Inventory for Rajabhat University Students

Components	Numbers of Items	Alpha Value
(1) Talking about Sex	11	0.66
(2) Culture and Sexual Identity	5	-0.02
(3) Sexual Anatomy and Functioning	8	0.60
(4) Sexual Health Care and Safer Sex	7	0.57
(5) Challenges: Overcoming Barriers to Sexual Health	15	0.90
(6) Body Image	7	0.52
(7) Masturbation and Fantasy	20	0.87
(8) Positive Sexuality	8	0.65
(9) Intimacy and Relationships	10	0.63
(10) Spirituality and Values	11	0.71

Research Questions

Results from the Sexual Health Inventory were used to answer the research questions. Participants selected the most appropriate response on a five-point scale ranging from "Strongly Disagree" to "Strongly Agree." Scoring was reverse coded for items that were negatively worded based on the recommendations of the author. Six missing items were replaced with a rating of three, representing "Neither Agree or Disagree." Five of the six items were in the Component 9: Intimacy and Relationships, and one item was in Component 4: Sexual Health Care and Safer Sex. For reporting purposes, the ratings for the individual items were combined to form three categories: "Strongly Disagree and Disagree," "Neither Agree or Disagree," and "Agree and Strongly Agree." Each of the 10 components will be discussed individually to describe the participants' perceptions. A single item requested participants to estimate their current sexual health on a five-point scale. The means and standard deviations will be presented to provide an overview of the inventory results.

Research Question One

What are the Perceptions of Sexual Practices among Undergraduate Students, as Measured by the Sexual Health Inventory (Edwards, 2004)?

Component one: Talking about sex. This component consisted of 11 items indicating participants' perceptions of comfort or discomfort in talking about sexual feelings, values, and behaviors. Table 9 displays the frequencies and percentages of the ratings.

Table 12

Frequencies and Percentages for Component One: Talking about Sex

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
(R) I avoid talking about sex.	91	13.6	236	35.1	344	51.3
I talk about my sexuality with my friend(s).	342	51.0	217	32.4	111	16.6
(R) It bothers me to talk about sex.	89	13.3	301	44.9	280	41.8
(R) There will be negative consequences if I talk about sex.	76	11.3	336	54.6	228	34.0
I talk about my sexuality with my sexual partner(s).	225	33.6	321	47.9	124	18.5
Talking about sex is usually a positive experience.	228	34.0	292	43.6	150	22.4
I talk about my sexual feelings.	170	25.4	346	51.6	154	23.0
I usually feel comfortable discussing my sexual values.	160	23.9	351	52.4	159	23.7
In general, I usually feel comfortable discussing my sexuality.	180	26.9	303	45.2	187	27.9
I usually feel comfortable discussing my sexual behavior.	130	19.4	364	54.3	176	26.3
(R) I find many sexual matters too upsetting to talk about.	259	38.7	245	36.6	166	24.8

A majority of participants reported that they did not avoid talking about sex. When talking about sexuality, the majority talked with friends. When considering "I

usually feel comfortable discussing my sexual values," there was an equal split between participants who agreed and those who disagreed.

Component two: Culture and sexual identity. This component consisted of five items examining the cultural influence on an individual's perceptions of sexual behaviors and sexual identities as well as a community's values. The table displays the results, ordered from highest to lowest ratings.

Table 13

Frequencies and Percentages for Component Two: Culture and Sexual Identity

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
My culture has a negative view of homosexuality.	130	19.4	309	46.1	231	34.5
People in my community approve of my sexuality.	195	29.1	368	54.9	107	16.0
(R) My culture has a negative view of sexuality.	133	19.9	338	50.4	199	29.7
I feel my sexual behavior(s) are consistent with my community's values.	120	17.9	396	59.1	154	23.0
My sexual orientation (bisexual, homosexual, heterosexual) is positively valued in my community.	130	19.4	309	46.1	231	34.5

More than half of participants reported that they did not know whether their sexual behaviors were consistent with their community's values. More than one-third reported that they did not think their culture had a negative view of homosexuality.

However, they thought their sexuality orientation (bisexual, homosexual, heterosexual) was negatively valued in their community.

Component three: Sexual anatomy and functioning. This component consisted of eight items including the perceptions of sexual functioning and sexual dysfunction. The results are displayed in the following table.

Table 14

Frequencies and Percentages for Component Three: Sexual Anatomy and Functioning

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
(R) I usually am able to orgasm/"come" when I am with my partner(s).	151	22.5	342	51.0	177	26.4
I have concerns about my sexual functioning.	93	13.9	345	51.5	232	34.6
I often have a delay or absence of orgasm when I am with a sexual partner.	85	12.7	355	53.0	230	34.3
I feel anxious about my ability to perform sexually.	82	12.2	340	50.7	248	37.0
I often have a delay or absence of orgasm when I masturbate.	62	9.3	370	55.2	238	35.5
FOR MEN: I have trouble getting or keeping an erection	31	16.0	73	37.6	90	46.4
FOR WOMAN: I have trouble getting et/lubricating	34	7.1	283	59.5	159	33.4
I avoid sex because of problem with sexual functioning.	100	14.9	262	39.1	308	46.0
I think I might have a sexual functioning problem caused by a medical condition or prescribed medications.	61	9.1	311	46.4	298	44.5

A majority of participants reported that they disagreed that their sexual functioning problem would make them avoid having sex. Furthermore, they did not think that they might have a sexual functioning problem caused by a medical condition or prescribed medications.

Component four: Sexual health care and safer sex. Table 15 displays the results for Component 4. This component consisted of seven items measuring personal thoughts of HIV/AIDS or sexually transmitted diseases and HIV/AIDS information.

Table 15

Frequencies and Percentages for Component Four: Sexual Health Care and Safer Sex

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
(R) I feel I am at high risk for getting HIV/AIDS or a sexually transmitted disease.	67	10.0	207	30.9	396	59.1
(R) I worry that I might be infected with a sexually transmitted disease.	83	12.4	200	29.9	387	57.8
(R) I worry that I might be infected with HIV	80	11.9	243	36.3	347	51.8
(R) I want information on HIV/AIDS.	275	41.0	275	41.0	120	17.9
(R) I want information on sexually transmitted diseases.	321	47.9	224	33.4	125	18.7
(R) I want information on how to practice safer sex.	314	46.9	247	36.9	109	16.3
(R)I fear getting HIV/AIDS or a sexually transmitted disease.	471	70.3	118	17.6	81	12.1

Approximately 70% of participants felt fearful of getting HIV/AIDS or a sexually transmitted disease. Almost 60% did not feel that they were at high risk for getting HIV/AIDS or a sexually transmitted disease. A low percentage of participants (12.4%) were worried that they might have been infected with a sexually transmitted disease.

Component five: Challenges-overcoming barrier to sexual health. This component consisted of 15 items representing perceptions on sexual behavior relating to relationship and financial difficulties, physical and mental health, and controlling sexual feelings and behaviors. Table 16 displays the results ordered from highest to lowest ratings.

Table 16

Frequencies and Percentages for Component Five: Challenges: Overcoming Barrier to Sexual Health

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
My sexual behavior has caused me relationship difficulties.	84	12.5	362	54.0	224	33.4
My sexual behaviors have caused me financial difficulties.	60	9.0	341	50.9	269	40.1
I've used sex to avoid problems in my life.	72	10.7	315	47.0	283	42.2
I feel unable to control my sexual feelings.	88	13.1	276	41.2	306	45.7
I feel unable to control my sexual behavior.	79	11.8	275	41.0	316	47.2
I engage in sexual behaviors that bother me.	68	10.1	257	38.4	345	51.5
I feel sad much of the time.	68	10.1	225	33.6	377	56.3

I have been physically abused as an adult.	58	8.7	236	35.2	376	56.1
I was sexually abused as a child.	49	7.3	249	37.2	372	55.5
I have considered suicide recently.	56	8.4	219	32.7	395	59.0
I feel depressed most of the time.	58	8.7	209	31.2	403	60.1
I attempted suicide recently.	50	7.5	222	33.1	398	59.4
I have been sexually abused as an adult.	48	7.2	221	33.0	401	59.9
I wish I was dead.	40	6.0	236	35.2	394	58.8
I was physically abused as a child.	49	7.3	193	28.8	428	63.9

More than half of participants reported that they did not engage in sexual behaviors that bothered them and have not been physically or sexually abused. In addition, they disagreed that they felt sad or depressed, had attempted or considered suicide, or wished they were dead.

Component six: Body image. This component consisted of seven items identifying satisfaction with body image, size, and looks. Frequencies and percentages for the items are displayed in the following table.

Table 17

Frequencies and Percentages for Component Six: Body Image

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
In general, I like how my body looks.	336	50.1	193	28.8	141	21.0
I like the look of my genitals.	201	30.0	376	56.1	93	13.9
Overall, I feel my body is attractive.	173	25.8	370	55.2	127	19.0
I like how my breast/chest looks.	216	32.2	276	41.2	176	26.6
(R) I feel I am overweight.	210	31.3	224	33.4	210	31.3
FOR MEN: I like the size of my penis.	64	33.0	96	49.5	34	17.6
FOR WOMAN: I like the size of my breasts.	107	22.4	224	47.1	145	30.5
(R) I am uncomfortable with several parts of my body.	337	50.3	179	26.7	154	23.0

Although half of participants reported that they liked how their bodies look in general; another half reported feeling uncomfortable with several parts of their body. Almost one third of female participants reported that they disliked their breast size. The proportion of male participants who reported that they liked/disliked penis size was almost equal. Almost a third of the participants felt that they were overweight.

Component seven: Masturbation and fantasy. This component consisted of 20 items focusing on self-expression of masturbation, sexual fantasy, and sexual desires. Table 18 displays the results.

Table 18

Frequencies and Percentages for Component Seven: Masturbation and Fantasy

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
(R) I believe masturbation is sinful.	73	10.9	297	44.3	300	44.8
(R) I feel guilty when I masturbate.	75	11.2	376	56.1	219	32.7
Masturbation is very safe sex.	266	39.7	283	42.2	121	18.1
Sharing a sexual fantasy is a good way to get to know what a sexual partner likes.	209	31.2	330	49.3	131	19.6
Sharing a sexual fantasy with a sexual partner(s) enriches my sex life	175	26.1	363	54.2	132	19.7
Masturbation is a healthy way to learn about my sexual desires.	182	27.2	340	50.7	148	22.1
Masturbation is a form of healthy sexual expression.	187	27.9	320	47.8	163	24.3
I enjoy masturbating.	211	31.5	273	40.7	186	27.6
Masturbation is a positive source of comfort and pleasure.	173	25.8	340	50.7	157	23.4
Sexual fantasy helps me learn about what I like and don’t like sexuality.	182	27.2	319	47.6	169	25.2

Masturbation with my sexual partner(s) is a healthy expression of being close to one another.	181	27.0	315	47.0	174	26.0
Masturbation is a good way to help me feel better about myself.	165	24.6	343	51.2	162	24.2
Masturbation is a good way to reduce stress.	170	25.4	334	49.9	166	24.8
Masturbation can be helpful in overcoming sexual dysfunction.	147	21.9	373	55.7	150	22.4
I enjoy fantasizing about sex.	149	22.2	355	53.0	166	24.8
Masturbation is a good way to affirm my sexuality.	161	24.0	328	49.0	181	27.0
Sexual fantasy helps me express my sexual desires.	134	20.0	369	55.1	167	24.9
Masturbation is a healthy way to have sex when I'm horny.	143	21.3	341	50.9	186	27.8
I enjoy hearing about my sexual partner's sexual fantasies.	136	20.3	354	52.8	180	26.9
I masturbate to explore my body.	97	14.5	337	50.3	236	35.2

A majority of participants reported that masturbation was a very safe sex and not sinful. Approximately one-third of the participants reported that they enjoyed masturbating, but some participants did not believe that masturbation was a healthy way to have sex when they were horny or that it was a good way to affirm their sexuality.

Component eight: Positive sexuality. This component consisted of eight items reflecting personal satisfaction with one's sex life, and attitudes toward sexual exploration and experimentation. The results are displayed in Table 19.

Table 19

Frequencies and Percentages for Component Eight: Positive Sexuality

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
I can explore my sexuality in a positive way.	350	52.2	230	34.3	90	13.4
(R) My sex life is boring.	79	11.8	344	51.3	247	36.9
My sex life is exciting.	238	35.5	331	49.4	101	15.1
I know what kinds of sexual behaviors I like.	230	34.3	320	47.8	120	17.9
My sexuality is a positive force of my life.	180	26.9	370	55.2	120	17.9
My sexuality makes me feel good about my life	188	28.1	355	53.0	127	19.0
Having a good sex life is an important part of my life.	167	24.9	335	50.0	168	25.1
I enjoy experimenting with sex to learn about what I like.	141	21.0	344	51.3	185	27.6

More than 50% of participants reported that they explored their sexuality in a positive way. Some reported that their sex life was exciting and not boring. Some indicated that they knew what kinds of sexual behaviors they liked, and indicated that their sexuality was a positive force of their life with a positive force being defined as a factor of positive sexuality.

Component nine: Intimacy and relationships. This component consisted of 10 items reflecting emotional disclosures and sexual expression with sexual partners. Four

of the items were recorded as “Neither Agree or Disagree” if the participants checked “no current sexual relationship(s)” or “no current sexual partner(s).” The results are displayed in the following table.

Table 20

Frequencies and Percentages for Component Nine: Intimacy and Relationships

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
(R) I have difficulty finding a sexual partner.	59	8.8	325	48.5	286	42.7
(R) I have difficulty keeping a sexual partner.	81	12.1	350	52.2	239	35.7
Overall, I feel satisfied about my current sexual relationship(s).	173	53.2	122	37.5	30	9.3
[ ] Check here if no current sexual relationship(s). (*f* = 345)						
Talking about sex with my sexual partner(s) is a satisfying experience.	163	49.7	132	40.2	33	10.0
[ ] Check here if no current sexual partner(s). (*f* = 342)						
I feel I can express what I like and don’t like sexuality.	241	36.0	301	44.9	128	19.1
(R) I feel my sexual partner(s) avoids talking about sexuality with me.	39	12.0	151	46.6	134	41.4
[ ] Check here if no current sexual partner(s). (*f* = 346)						

Overall, I feel close with my sexual partner(s).	148	46.2	113	35.3	59	18.4
[ ] Check here if no current sexual partner(s). (*f* = 350)						
(R) Some sexual matters are too upsetting to discuss with my partner(s).	109	16.3	375	56.0	186	27.8
When I have sex with my sexual partner, I feel emotionally close to him or her.	205	30.6	303	45.2	162	24.2
I feel my sexual partner(s) is sensitive to my needs and desires.	101	31.0	149	45.7	76	23.4
[ ] Check here if no current sexual partner(s). (*f* = 344)						

Approximately 50% of participants agreed that they were satisfied talking about sex with their sexual partners. Responses reported in the table reflected those who indicated that they had current sexual partners. Almost one-third of participants reported that their sexual partners were sensitive to their needs and desires. Participants indicated that they did not have difficulty in finding sexual partners (42.7%) and their sexual partners did not avoid talking about sexuality with them (41.4%).

Component ten: Spirituality and values. This component consisted of 11 items focusing on individual spirituality, religious beliefs, and activities. Table 21 displays the results.

Table 21

Frequencies and Percentages for Component Ten: Spirituality and Values

Items	Strongly Agree and Agree		Neither Agree or Disagree		Strongly Disagree and Disagree	
	f	%	*f*	%	*f*	%
I often attend religious services.	488	72.8	111	16.6	71	10.6
I have strong religious beliefs.	436	65.1	174	26.0	60	9.0
My spiritual beliefs affirm my sexuality.	155	23.1	373	55.7	142	21.2
I have strong spiritual beliefs.	168	25.1	301	44.9	201	30.0
I am a very spiritual person.	138	20.6	317	47.3	215	32.1
My spirituality is very important for me in how I view my sexuality.	105	15.7	371	55.4	194	29.0
I am a very religious person.	136	20.3	291	43.4	243	36.3
I am affirmed in my sexuality by my higher power.	71	10.6	333	49.7	266	39.7
Sex is a sacred/holy act.	63	9.4	347	51.8	260	38.8
Sexual behavior is an expression of God's love in my life.	61	9.1	348	51.9	261	39.0
Sexuality helps me feel connected to God.	56	8.4	283	42.2	331	49.4

A majority of participants reported that they had strong religious beliefs and often attended religious services. Approximately 10% or less of the participants reported being affirmed in their sexuality by a higher power. Moreover, few participants agreed that sex was a sacred/holy act, an expression of God's love, or that sexuality helped them feel connected to God.

Estimate of sexual health. Participants were requested to estimate their current sexual health on a five-point scale ranging from "Poor Sexual Health" to "Excellent Sexual Health." Sexual health was defined in the inventory as "a state of physical, emotional, mental and social well-being related to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence" (Edwards, 2004, p.153).

None of the participants selected "Poor" as an estimate of their current sexual health. The majority of participants (63.4%) reported their sexual health as "Average." Only 5.7% rated their sexual health as "Excellent." The results are displayed as follows.

Table 22

Estimations of Current Sexual Health

Ratings	***f***	**%**
Poor	0	0
Fair	11	1.6
Average	425	63.4
Good	196	29.3
Excellent	38	5.7

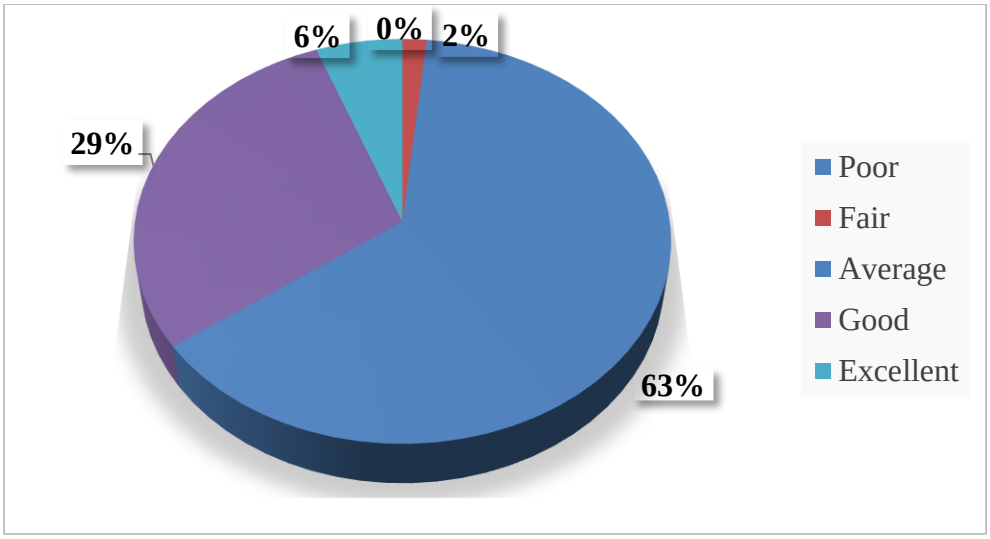

Figure 10. Estimations of current sexual health vary the colors

To further explore the participants' perceptions of their sexual practices, the means and standard deviations for each component of the Sexual Health Inventory were calculated. The following table displays the results for the 670 undergraduate students.

Table 23

Means and Standard Deviations of 10 Components

Components	Means	Standard Deviations
(1) Talking about Sex	3.13	0.02
(2) Culture and Sexual Identity	3.05	0.02
(3) Sexual Anatomy and Functioning	2.66	0.02
(4) Sexual Health Care and Safer Sex	3.06	0.02
(5) Challenges-Overcoming Barriers to Sexual Health	2.27	0.02
(6) Body Image	3.03	0.02
(7) Masturbation and Fantasy	3.01	0.02
(8) Positive Sexuality	3.15	0.02
(9) Intimacy and Relationships	3.38	0.03
(10) Spirituality and values	2.87	0.02

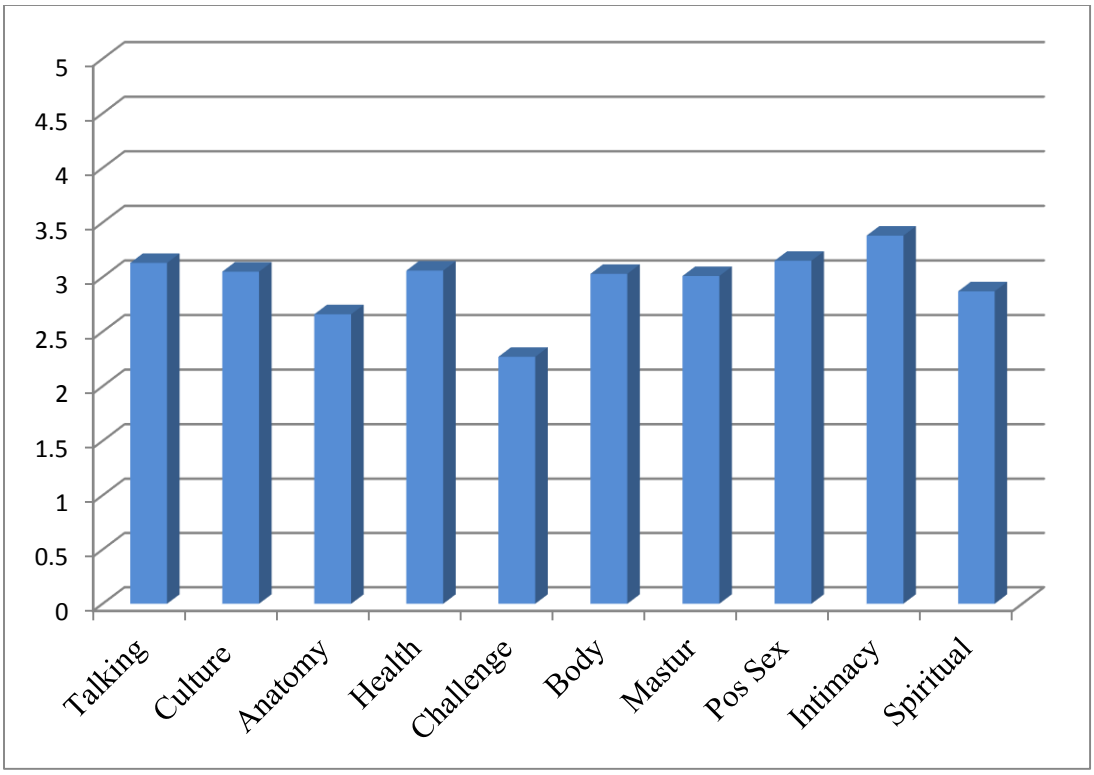

Figure 11. Means for components

The component with the highest mean score was Component 9: Intimacy and Relationships. The scores indicated high level of communications with a sexual partner that included feelings of intimacy and satisfaction. However, this needed be interpreted cautiously because 360 of the inventories were missing responses in this component due to reports of "no current sexual partner." The replacement values thus greatly influenced the calculated mean score.

The next highest mean scores were Component 8: Positive Sexuality and Component 1: Talking about Sex. The scores are an indication that participants valued

sexual expression and were willing to explore and experiment, as well as feeling comfortable in communications about sexuality.

The lowest mean scores were in Component 5: Challenges-Overcoming Barriers to Sexual Health. The scores indicated that the risk factors of sexual abuse, sexual compulsions, and mental health issues were relatively low for this sample of participants.

The low mean scores in Component 10: Spirituality and Values reflect participants' attitudes about spirituality and religiosity. Interpretation should be cautiously made because the items may have reflected a more Western view of religion that was not as familiar to the participants who reported Buddhism as their religious/spiritual affiliation.

Research Question Two

Do the Components of the Sexual Health Inventory Correlate with Each Other?

Bivariate Pearson correlations were calculated for the 10 Components of the Sexual Health Inventory. The correlations were low to moderate, with both positive and negative *r* values. Table 24 displays the correlations with symbols indicating the levels of significance.

Table 24

Correlations between Components of the Sexual Health Inventory

Components	Talking	Culture	Anatomy	Health	Challenge	Body	Mastur	Pos Sex	Intimacy	Spiritual
Talking About Sex	1									
Culture and Sexual Identity	0.22***	1								
Sexual Anatomy and Functioning	-0.30***	-0.07	1							
Sexual Health Care and Safer Sex	-0.25***	-0.08*	-0.23***	1						
Challenges: Overcoming Barriers to Sexual Health	-0.11**	-0.07	0.50***	-0.22***	1					
Body Image	0.27***	0.07	-0.06***	-0.88*	0.01	1				
Masturbation and Fantasy	0.58***	0.19***	-0.06	-0.48***	0.10*	0.26***	1			
Positive Sexuality	0.59***	0.22***	-0.14***	-0.41***	0.02	0.29***	0.71***	1		
Intimacy and Relationships	0.49***	0.21***	-0.36***	-0.80*	-0.31***	0.20***	0.40***	0.45***	1	
Spirituality and Values	0.04	0.02	0.36***	-0.35***	0.45***	0.19***	0.24***	0.23***	-0.09*	1

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

Component One: Talking about Sex was significantly correlated with all of the components except Component 10: Spirituality and Values. The strongest positive correlations were with Component 8: Positive Sexuality and Component 7: Masturbation and Fantasy. Component 1: Talking about Sex was negatively correlated with Component 3: Sexual Anatomy and Functioning, Component 4: Sexual Health Care and Safer Sex, and Component 5: Challenges-Overcoming Barrier to Sexual Health.

Component Two: Culture and Sexual Identity was positively and significantly correlated with five other components but the correlation values were low. Nonsignificant correlations included two positive and two negative values that were also low.

Component Three: Sexual Anatomy and Functioning was positively and significantly correlated with Component 5: Challenges-Overcoming Barrier to Sexual Health and Component 10: Spirituality and Values. The strongest positive correlations were with Component 5: Challenges-Overcoming Barrier to Sexual Health. It was negatively and significantly correlated with four other components.

Component Four: Sexual Health Care and Safer Sex was negatively and significantly correlated with six components. There were no positively correlations with other components.

Component Five: Challenges-Overcoming Barrier to Sexual Health was positively and significantly correlated with Component 10: Spirituality and Values and Component 7: Masturbation and Fantasy. It was negatively and significantly correlated with Component 9: Intimacy and Relationships.

Component Six: Body Image was positively and significantly correlated with four components; Component 8: Positive Sexuality, Component 7: Masturbation and Fantasy, Component 9: Intimacy and Relationships, and Component 10: Spirituality and Values. However, the correlation values were quite low.

Component Seven: Masturbation and Fantasy was strongly positively correlated with Component 8: Positive Sexuality. Furthermore, Component 7: Masturbation and Fantasy was positively and significantly correlated with Component 9: Intimacy and Relationships and Component 10: Spirituality and Values.

Component Nine: Intimacy and Relationships was negatively and significantly correlated with Component 10: Spirituality and Values, but the correlation values were low.

Research Question Three

Do the Perceptions of Sexual Practices among Undergraduate Students, as Measured by the Sexual Health Inventory, Differ When Groups are Compared by Students' Gender, Family Income, or Parents' Levels of Education?

The correlations among components of the Sexual Health Inventory required the use of multivariate approaches in comparing group means. The 10 components served as dependent variables in MANOVAs to test group differences.

Gender. A two group multivariate analysis of variance was conducted on the combination of 10 component mean scores. The independent variable was gender. The Pillai's Trace value was 0.14 with an associated *F* value of 10.45, which was significant at the 0.001 level. The partial Eta Squared value was equal to 0.14, which is considered a

large effect. The results of the univariate tests are displayed in the following table. Males scored significantly higher than females in Component 1: Talking about Sex, Component 5: Challenges-Overcoming Barriers to Sexual Health, Component 6: Body Image, Component 7: Masturbation and Fantasy, and Component 8: Positive Sexuality. Females scored significantly higher in Component 3: Anatomy and Functioning and Component 4: Sexual Health Care and Safer Sex. There were no significant differences based on gender for Component 2: Culture and Sexual Identity, Component 9: Intimacy and Relationships, and Component 10: Spirituality and Values.

Table 25

Means, Standard Deviations, and ANOVAs for Sexual Health Inventory Components by Gender

Components	**Male (*n* = 194)**		**Female (*n* = 476)**			
	Mean	**SD**	**Mean**	**SD**	***F***	***p***
(1) Talking about Sex	3.24	0.50	3.09	0.41	16.91	0.000***
(2) Culture and Sexual Identity	3.02	0.44	3.07	0.42	1.33	NS
(3) Sexual Anatomy and Functioning	2.56	0.57	2.70	0.42	9.21	0.01**
(4) Sexual Health Care and Safer Sex	2.95	0.65	3.1	0.52	10.65	0.01**
(5) Challenges: Overcoming Barriers to Sexual Health	2.40	0.64	2.22	0.64	11.53	0.01**

(6) Body Image	3.12	0.54	3.00	0.47	7.69	0.01**
(7) Masturbation and Fantasy	3.22	0.59	2.94	0.43	46.88	0.000***
(8) Positive Sexuality	3.30	0.55	3.08	0.43	28.56	0.000***
(9) Intimacy and Relationships	3.25	0.41	3.20	0.37	1.97	NS
(10) Spirituality and values	2.86	0.52	2.87	0.46	0.12	NS

Family Income. Comparisons by family income required recoding the income levels into two income groups. The lower income group included families with "Less than 5,000 Baht" and "5,001-10,000 Baht." The higher income group included families with income from "10,001-50,000 Baht," "50,001-100,000 Baht," and "Over 100,000 Baht." A MANOVA was calculated to compare the two income groups on the combination of 10 components. The resulting Pillai's Trace value was 0.32 with F = 2.20 and p = 0.16 which was significant at the 0.05 level. The value for Partial Eta Squared was 0.03 which was considered a small effect. Table 26 displays the results of the univariate tests. Participants whose parents had higher income rated items in Component 7 and 8. There were no significant differences by family income groups for the other dependent variable components.

Table 26

Means, Standard Deviations, and ANOVAs for Sexual Health Inventory Components by Income Groups

Components	**Lower Income (*n* =363)**		**Higher Income (*n* = 307)**			
	Mean	SD	Mean	SD	*F*	*p*
(1) Talking about Sex	3.12	0.43	3.15	0.46	0.76	NS
(2) Culture and Sexual Identity	3.03	0.43	3.08	0.41	2.67	NS
(3) Sexual Anatomy and Functioning	2.67	0.46	2.64	0.48	0.70	NS
(4) Sexual Health Care and Safer Sex	3.09	0.59	3.02	0.53	2.37	NS
(5) Challenges: Overcoming Barriers to Sexual Health	2.24	0.66	2.31	0.63	1.87	NS
(6) Body Image	3.01	0.49	3.06	0.50	1.60	NS
(7) Masturbation and Fantasy	2.96	0.51	3.10	0.48	13.49	0.000***
(8) Positive Sexuality	3.10	0.47	3.20	0.47	8.61	0.01**
(9) Intimacy and Relationships	3.20	0.36	3.23	0.41	1.51	NS
(10) Spirituality and values	2.85	0.47	2.89	0.48	1.20	NS

Parents' education levels. Participants reported the education levels for their fathers and mothers. The levels for education were first combined to create three categories. "No schooling completed" and "Elementary school" were coded as "1."

"Middle school," "Vocational school," "High school, Diploma or the equivalent," and "Some college" were coded as "2." "Bachelor's degree," "Master's degree," and "Doctoral degree" were coded as "3." Since "Other" was not specified, these responses were not included. The separate categories for education were then combined to create a new variable describing parents' education.

If father's education and mother's education were coded as "1," then parents' education was recoded as "1" (Lower). If either father's or mother's education was coded as "2", then parents' education was recoded as "2" (Middle). The code of "3" was applied if either or both parents' education was recoded as "3" (Higher).

A multivariate analysis of variance was calculated to compare the combination of mean scores for the 10 components with parents' education as the independent variable. The analysis produced a Pillai's Trace value of 0.60 with $F = 2.02$ and $p = 0.005$. The parents' education groups differed significantly at the 0.01 level with a Partial Eta Squared value of 0.03 which was considered a small effect. LSD post hoc tests were conducted to compare parents' education for the three groups—Lower, Middle, and Higher education. The mean scores in Component 2: Culture and Sexual Identity differed significantly when compared by parents' education levels. The mean scores for the Lower education group were significantly lower than the Middle ($p = 0.04$) and Higher ($p = 0.04$) education groups. However, the Middle and Higher education groups produced no significant results. The findings indicate a less congruent attitude within the culture toward participants' sexual identities and practices among parents with lower education levels.

The results for Component 5: Challenges-Overcoming Barriers to Sexual Health revealed that mean scores for the parent's Higher education group were significantly higher than the Middle ($p = 0.006$) and Lower ($p = 0.003$) education groups. Higher scores in Component 5 indicated more serious challenges among participants, such as abuse and poor physical and mental health. The Middle and Lower education groups did not differ significantly. The following table displays the results for the follow-up tests for the group comparisons by parents' education levels.

Table 27

Means, Standard Deviations, and ANOVAs for Sexual Health Inventory Components By Parents' Education Levels

Components	**Lower Educ (*n* = 296)**		**Middle Educ (*n* = 244)**		**Higher Educ (*n* = 125)**		
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	***Sig***
(1) Talking about Sex	3.10	0.40	3.17	0.47	3.18	0.78	NS
(2) Culture and Sexual Identity	3.01	0.44	3.09	0.43	3.10	0.39	0.05*
(3) Sexual Anatomy and Functioning	2.67	0.43	2.66	0.49	2.63	0.51	NS
(4) Sexual Health Care and Safer Sex	3.06	0.50	3.10	0.59	2.98	0.64	NS
(5) Challenges: Overcoming Barriers to Sexual Health	2.23	0.62	2.24	0.69	2.44	0.61	0.01**

(6) Body Image	3.03	0.45	3.07	0.51	2.96	0.54	NS
(7) Masturbation and Fantasy	2.99	0.47	3.04	0.52	3.07	0.54	NS
(8) Positive Sexuality	3.11	0.45	3.16	0.49	3.21	0.50	NS
(9) Intimacy and Relationships	3.21	0.36	3.23	0.39	3.21	0.39	NS
(10) Spirituality and values	2.87	0.44	2.86	0.50	2.90	0.51	NS

Additional Analyses

An exploration of participants' responses in Component 6: Body Image was considered separately for males and females. The Body Image mean score for 194 males was 3.12 (SD = 0.54). For 476 females, the Body Image mean score was 3.00 (SD = 0.47). BMI calculations were based on reported height and weight. Three female participants did not report height and weight so the BMI was missing. The BMI mean score for males was 21.91 (SD = 4.23) while the BMI mean score for 473 females was 20.66 (SD = 3.70). Pearson correlations were calculated separately for males and females to determine relationships between Body Image mean scores and BMI mean scores. For males, the *r* value of -0.12 was negative but not significant ($p = 0.097$). Therefore, more positive scores in Body Image were correlated with lower BMI scores. For females, the *r* value of -0.17 was highly significant ($p = 0.000$). Higher Body Image scores were correlated with lower BMI scores.

Participants were separated by gender and then grouped into five categories based on recommendations published by the Bureau of Nutrition, Department of Health, the Ministry of Public Health in Thailand. The frequencies and percentages are displayed in the following table.

Table 28

Body Mass Index Groups for Sexual Health Inventory Components by Gender

Body Mass Index	**Male**		**Female**	
	f	**%**	***f***	**%**
Group 1: BMI < 18.49	40	20.6	158	33.2
Group 2: BMI = 18.5-22.99	89	45.9	217	45.6
Group 3: BMI = 23-24.99	32	16.5	43	9.0
Group 4: BMI = 25-29.99	23	11.9	37	7.8
Group 5: BMI > 30	10	5.2	15	3.2

Analysis of variance tests were calculated with Body Image mean scores as the dependent variable and Body Mass Index groups as the independent variable. ANOVAs were conducted separately for males and females. For male participants, there were no significant differences among the five BMI groups ($F = 1.12$, $p = 0.35$). On the other hand, for female participants, the F value of 3.42 produced a probability of 0.01, indicating a significant difference among the BMI groups. Follow-up tests revealed that Body Image means for Group 1 (lowest BMI) were significantly higher than Groups 2, 4, and 5. Body Image means for Group 2 (moderate BMI) were significantly higher than

Group 4. Group 3 scores for Body Image were significantly higher than Group 4. Females in the lowest BMI group reported the highest Body Image mean scores.

Summary

This chapter displayed the results that were analyzed from the research methodology. In addition, the demographic data and information of participants including findings from ten components from the Sexual Health Inventory were displayed in tables and figures. Height and weight were calculated for Body Mass Index. To answer three research questions, researchers utilized SPSS program to analyze and reported findings. Some components from the Sexual Health Inventory were found that they correlated with each other in some ways. Moreover, adolescents' sexual health was measured and revealed that it was different when compared by students' gender, family income, and parents' levels of education. The next chapter will summarize the findings and present the implications of this study.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

This current study examined the perceptions of sexual practices of first-year students at a Rajabhat University in Thailand. It also looked at how demographic information affected the scores on the Sexual Health Inventory. This chapter provides a summary of the study, illustrates methodology of procedures, discusses the findings from the analyzed data, and interprets findings by answering the three questions through the lens of the ecological theory. Furthermore, the researcher provides limitations and implications for practice. Finally, researcher addresses recommendations for future research from an ecological perspective and summary.

Summary of the Study

Adolescence is a period of changes. The parallel changes, such as physical and psychological changes, require adolescents to make adjustments accordingly. Sexuality development is one of the issues that adolescents typically deal with during this period. Some adolescents seek sexuality information from their parents, schools, friends, books, and through experimentation to satisfy their curiosity (Hurlock, 1975).

The purpose of this study was to examine the perceptions of sexual practices in first-year students of a Rajabhat University in Thailand. Bronfenbrenner's ecological theory (1979) was utilized as a framework to investigate and interpret how adolescents perceive their sexual behaviors, attitudes, and practices.

The following research questions were used:

1. What are the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory (Edwards, 2004)?

2. Do the components of the Sexual Health Inventory correlate with each other?

3. Do the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory, differ when groups are compared by students' gender, family income, or parents' levels of education?

The methodology of procedures used in this research was:

1. An instrument validation process was used to confirm accuracy of the translation from English to Thai version, to enhance the readability, and to ensure translation for culturally responsiveness.

2. University administrators of a Rajabhat University were contacted to obtain permission and consent form.

3. Sampling methods included using Microsoft Excel to randomize the class orders. Subsequently, professors were contacted to schedule dates and times to visit their classrooms. Participants were recruited from freshmen who enrolled classes with those professors in Spring 2015.

4. Questionnaires were collected and kept in sealed envelopes.

5. Data were analyzed using descriptive statistics, MANOVAs, and Pearson *r* correlations.

6. Results were interpreted, data displayed with tables and graphs, and conclusions drawn.

The target population consisted of adolescent males and females who were freshmen studying in Spring 2015 at a Rajabhat University in the northern region of Thailand. The Sexual Health Inventory, which was developed by Edwards (2004), was used to gather data in this study. The independent variables in this study were participants' gender, family income, and educational levels of parents and the dependent variables were scores on the Sexual Health Inventory. Data were analyzed by using descriptive statistics. MANOVAs were used to determine the differences in the mean scores of the ten components. Pearson *r* correlations were used to explain relationships among components.

Discussion of Findings

The findings from this research study are discussed as follows.

Description of the Sample

In this study, 670 undergraduate students enrolled in five departments of a Rajabhat University participated in this research. There were 476 females (71%) and 194 males (29%). The demographic variables examined were age, Body Mass Index (BMI), religious affiliation, family income per month, and sources of sexual information.

Age. The majority of participants were 19 years old (61.5%) ranging from 18-24 years old. The average age of participants in this study was comparable to the age of traditional undergraduate students in Thailand.

Body Mass Index (BMI). Similar to age, findings indicated that the Body Mass Index (BMI) was in a normal range (21.91 for males, 20.66 for females) for Thai adolescents in this age group. The findings further showed that the majority of participants' BMI were in the standard level; however, many of the students felt dissatisfied with their current body images. This sense of dissatisfaction with body images can be viewed as normative during adolescence. However, when students engage in unhealthy eating habits, excessive exercising practices, and the intake dietary supplements, they are more open to forming psychological health problem, such as eating disorders and emotional depression (Latner et al., 2011; Thongpriwan & McElmurry, 2006).

Religious affiliation. In response to the items regarding religious and spiritual affiliation, the majority of participants self-identified as Buddhist with less than 3% as Christian and Muslim. Because the Sexual Health Inventory is an American's instrument and some of the items may not have been congruent with Thai religious values and attitudes, participants may have not related to these items.

Family income per month. Findings from this study indicated that family income per month ranged from less than 5000 Baht ($143 in U.S. currency) to over 100,000 Baht ($2,857 in U.S. currency) with the majority of monthly family income was 54.2% (0-10,000 Baht). For participants whose parents were highly educated, monthly income was higher. These findings further indicated that parents with low income and limited education may spend less family time with their adolescents due to excessive work schedule to compensate monthly family income. Consequently, limited education

may impact Thai parents' comfort level in communicating about sexuality or the ability to acquire appropriate sexual information (Sridawruang et al., 2010).

Sources of sexual information. Participants were asked to select the most frequently accessed sources of information regarding sexuality. Choices included familiar persons, school curriculum, and media sources.

Parents. Although findings indicated that one third of participants lived with their parents, this does not mean that their parents are the first ones that they talk to about sexuality. Many adolescents choose peers as the first person to gain sexual information versus parents. Due to the sensitive nature of discussing sexuality, many Thai parents may find it difficult to talk about sexual health and well-being because they may have inadequate sexuality knowledge. This is supported by research on parents communicating about sexuality with their children (Wilson et al., 2010). This is applicable to the participants in this study due to the large number of parents from low income rural families. These findings are further supported by Sridawruang et al. (2010) that addressed Thai parents living in rural areas experiencing difficulties in communicating with their adolescents about sexuality. Furthermore, Thai parents may be reluctant to teach sexuality due to their restrictive traditional norms and beliefs, self-efficiency (Wilson et al., 2010), limited knowledge (Heller & Johnson, 2010; Rouvier et al., 2011; Sridawruang et al., 2010; Thato et al., 2003), and non-responsive attitudes because they think that it is the school's responsibility (Sridawruang et al., 2010).

Peers. Findings indicated that the majority of participants discussed sexuality with their peers (65.8%). These findings are supported in the literature on adolescents

seeking sexual health information (Kim & Free, 2008; Powell, 2008; Vrangalova & Savin-Williams, 2011). Powell's (2008) work looking at informal sources of sex and relationship information from friends supports these findings. However, peers may not be the best source for getting accurate and reliable sexuality information because in many instances, peers are generally the same age and share similar experiences as indicated by Epstein and Ward (2008). Adolescents may lack the sexual knowledge and competency to give healthy sexual advice.

Findings indicated that the most frequent sources that Thai adolescents used to acquire sexual information were internet websites (69.7%), peers (66.4%), and school curriculum (32.4%). These adolescents need to know how to accurately assess resources especially internet resources for accuracy. Many adolescents fail to evaluate sources of sexual information for accuracy. Many adolescents use the internet as their primary source of information. They need to develop skills in critiquing current and relevant factual sexual information.

This section addressed findings by discussing the target population: (a) ages, (b) body mass index, (c) religious affiliation, (d) monthly family income, and (e) sources of sexual information. These variables will serve as a lens for discussing the three research questions.

Research Question One

What are the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory (Edwards, 2004)?

Findings from the Sexual Health Inventory showed that the majority of undergraduate students in a Rajabhat University rated their sexual practices as "Neither Agree or Disagree" in almost every component. Since this represents a neutral response, there is a possibility that this might indicate Thai adolescents are reluctant to disclose their private sex information. The instrument used a Likert Scale composed of five response categories including Strongly Agree, Agree, Neither Agree or Disagree, Disagree, Strongly Disagree. The five response categories were collapsed to form three categories that represented all Agree responses, the neutral responses, and all Disagree responses. These ratings were used to better reflect the participants' perspectives. The following section discusses findings related to the 10 components.

Component one: Talking about sex. Fifty one percent of the participants reported that they did not avoid talking about sex. However, some felt uncomfortable discussing their sexuality (27.9%) and sexual behavior (26.3%). An interesting finding is that they talked to their friends about sexuality (51.0%) rather than their sexual partners (33.6%). This finding is similar to Epstein and Ward's (2008) research in which they found that adolescents received sex information from peers and the media more than parents. This finding is further supported by Hurlock's (1975) seminal work which posits that adolescents value friendship and seek friends who have same values and interests. In summary, the current study found that adolescents were open for sexuality discussion with friends and sexual partners.

Component two: Culture and sexuality. Findings indicated that participants in this study perceived society had a positive view of sexuality (34.5%) and

homosexuality/same sex orientation (29.7%). However, almost half of the participants perceived that their sexual orientation other than heterosexuality was negatively valued in their communities (34.5%). These findings are supported by research (Smerecnik et al., 2010; Zamboni & Silver, 2009). Zamboni and Silver indicated that social expectations and desirability influenced adolescents' sexual attitudes and desires in their study. Smerecnik et al. found that in Muslim culture, same sex orientation individuals were more likely to be blamed and unacceptable. Perhaps participants may have thought that it was a sin to "choose" to practice same sex orientation lifestyle rather than thinking that it is a genetically determined. Although there are lesbian, gay, bisexual, and transgender individuals emerging in Thai society, it seems that Thai culture still hold a negative view of the same sex lifestyle due to personal and cultural beliefs. From a mircosystem perspective, this paradigm of thinking is enforced and portrayed through daily media stereotyping.

Component three: Sexual anatomy and functioning. According to the findings, more than half of participants took a neutral position on items that described sexual anatomy and functioning as related to orgasm, erection, masturbation, and sexual performance. However, when expressing their thoughts on sexual functioning, many participants disagreed that they had sexual functioning problems caused by medical conditions (44.5%). They further disagreed that their sexual functioning would cause them to avoid sexual intercourse (46%).

The findings concerning sexual anatomy and functioning are supported by prior research (Epstein & Ward, 2008; Sridawruang et al., 2010; Vuttanont et al., 2006).

Epstein and Ward stated that adolescent boys discussed sexual desires, masturbation, and sexual intercourse with peers. Adolescents feel that sex is an acceptable topic to discuss with others. Talking about sexual performance with peers may be the issue that helps adolescent boys learn and understand sexual anatomy and functioning.

However, Sridawruang et al. (2010) stated that Thai culture view topics related to sexuality as a taboo, and that Thai people are reluctant to discuss sexuality. This may be related to the neutral responses of the participants in the current study. This perspective is even seen in schools across Thailand. While these schools have sexuality curricula, many teachers are uncomfortable in teaching sex education due to their personal values and beliefs (Vuttanont et al., 2006). This lack of curriculum alignment with personal values and beliefs may cause gaps in delivering sexuality instructional delivery that is comprehensive, coherent, and sequential.

Component four: Sexual health care and safer sex. Findings indicated that more than two thirds of the participants (70.3%) revealed that they were fearful of getting HIV/AIDS or STDs; yet, almost 60% reported that they did not worry that they may be at "high risk" or infected with HIV or STDs. While participants may have been fearful of HIV/AIDS or STDs, they did not consider themselves as "high risk" of getting HIV/AIDS or STDs. This kind of thinking might lead one to risky unwanted health issues; conversely, Thai adolescents may find the internet websites as primary sources of acquiring sexual information over the parents or teachers.

This finding is supported by Thongpriwan and McElmurry's (2006) work on Thai adolescents and sexual health. Thongpriwan and McElmurry revealed that Thai

adolescents used web boards rather than their parents or other adults to seek sexual information, such as pregnancy, AIDS/STDs, alcohol and substance use, suicide ideation, health promotion, relationships, and sexual intercourse. One of the health risk behaviors that they posted on the web boards was "How can we know that we have AIDS" (p. 48). Posting sex-related questions can imply that adolescents are concerned and need sexual information in order to deal with unwanted sexual health problems.

Component five: Challenges-overcoming barriers to sexual health. Findings indicated that a very low percentage of participants revealed that they were physically abused (8.7%), felt sad much all the time (10.1%), depressed (8.7%), unable to control their sexual feeling (13.1%) or behavior (11.8%), and attempted suicide (7.5%). Although participants self-identified this component as barriers to sexual health, students, schools, sex educators, and health providers can regard these barriers as serious issues to prevent adolescents from negative outcomes.

Component six: Body image. Findings indicated that approximately half of participants were satisfied with their body looks (50.1%); whereas, the other half were dissatisfied with some parts of their body (50.3%). As can be seen in Table 3, the majority of participants were in the normal BMI range. However, almost one third of participants felt that they were overweight (31.3%). Dissatisfaction of body image may cause psychological health problems for adolescents, and this finding is supported by research (Latner et al., 2011; Thongpriwan & McElmurry, 2006). When comparing levels of BMI and body satisfaction by gender among Asian students, Later et al. indicated that

male college students had higher BMI and body satisfaction than females. They further indicated that female Asians were dissatisfied with their BMI and body image.

Component seven: Masturbation and fantasy. Findings showed that approximately half of the participants took a neutral position when they were asked to share about masturbation. Approximately 40% of the participants agreed that masturbation is very safe sex practices and not a sinful (44.8%). Almost 28% of the participants thought that masturbation is a healthy way to learn about their sexual desires, a form of sexual expression, and a healthy expression of being close to one another. However, some participants did not believe that masturbation is not healthy when horny (27.8%) and not a good way to affirm their sexuality (27%). These findings are similar to findings from Robbins et al. (2011). Robbins et al. explained that masturbation is a part of sexual development, and it is common across the lifespan. It is as normal as other sexual activities. In their study on masturbation among adolescents, they did not find specific reasons for adolescents masturbating; however, it is understandable that sex hormone and pleasure sensation influence masturbation onset in adolescent boys rather than girls.

Component eight: Positive sexuality. Findings indicated that more than half of participants viewed sexuality in a positive way (52.2%). Approximately one-third of participants agreed that they knew what kinds of sexual behaviors that they like (34.3%), agreed that their sex life was exiting (35.5%), and they disagreed that their sex life is boring (36.9%). This study found that learning and understanding about sexuality was positive. If adolescents have positive attitudes about sexuality, they may be more likely to

seek accurate sexual information. Robinson et al. (2002) stressed that persons should explore their sexuality in order to know what they want and live their lives with responsive sexual health.

Component nine: Intimacy and relationships. Findings indicated that more than half of participants revealed that they were satisfied in their current sexual relationships. Almost half of the participants agreed that they considered sex talk with their partners as satisfying. Some (45.7%) even felt that their sexual partners were sensitive to their needs and desires. Overall the participants felt comfortable in their sexual relationships, how they communicated about sex through sex talk, and their sexual partners' sensitivity to their needs.

Component ten: Spirituality and values. This component addressed several items related to God or deity. In this study, almost 98% participants were Buddhist; consequently, they did not agree or viewed that sexual behavior was connected to God. In Thai culture, parenting seems to influence adolescents' cognitive understanding of spirituality and values. This seems to be supported by Barry et al. (2015) who found that strong parental religious values on sexual beliefs have direct influence on adolescents' perceptions on sexual practices. Family rules and regulations passed down from generation-to-generation may create conflicts for adolescents due to the changes of tradition, norms, and childrearing in each family.

Research Question Two

Do the components of the Sexual Health Inventory correlate with each other?

There were the both positive and negative significant correlations among the components of the Sexual Health Inventory. The following discussion addresses each of the ten components.

Component one: Talking about sex. Findings showed that "Talking about Sex" significantly correlated with all components but not with "Spirituality and Values." "Talking about Sex" was strongly and positively correlated with "Masturbation and Fantasy" and "Positive Sexuality" and was negatively correlated with "Sexual Anatomy and Functioning," "Sexual Health Care and Safer Sex," and "Challenges-Overcoming Barrier to Sexual Health."

This study found that "Talking about Sex" revealed perceptions of sexual health and sexual practices among adolescents due to the correlations among components. The majority of participants (51%) rated peers rather than parents or teachers as a person that they discussed about sexuality with (See Table 9 and Figure 8). When talking about their sex life, sexual feelings and behavior, sexual fantasy, masturbation, or other sexual matter, adolescents may feel more comfortable discussing with peers at the same age and same environment. This component is supported by Epstein and Ward (2010) who found that discussing sexual information, such as sexual intercourse with peers made adolescents feel more positive about sex with many of them thinking that sex was "cool" (p. 121) and appropriate to explore. Epstein and Ward further pointed out that teens may think that their peers and/or friends understand, can provide sexual information, and may

not judge them as same as parents. Some topics related to sexual functioning, such as orgasm and erection (See Table 14) and sexually transmitted diseases may create difficulties talking with others because peers may not enable this information for them.

Component two: Culture and sexual identity. Findings showed that "Culture and Sexual Identity" was positively and significantly correlated with "Masturbation and Fantasy," "Positive Sexuality," and "Intimacy and Relationships". However, the correlation values were very low.

This study found that culture, traditions, norms, beliefs, personal past experiences, and family disciplines may influence sexuality development during adolescence. Parent-to-adolescent (Marhefka et al., 2009; Sridawruang et al., 2010; Vuttanont et al., 2006; Wilson et al., 2010), teacher-to-student, or peer-to-peer communication (Epstein & Ward, 2008; Vuttanont et al., 2006), including school curriculum and portrayal of the media, may directly or indirectly influence individuals' sexual attitudes.

Component three: Sexual anatomy and functioning. For this component, a higher score indicates less positive sexual health. Findings showed that "Sexual Anatomy and Functioning" was positively and significantly correlated with "Challenges: Overcoming Barriers to Sexual Health" and "Spirituality and Values," but negatively and significantly correlated with "Sexual Health Care and Safer Sex," "Body Image," "Positive Sexuality," and "Intimacy and Relationships".

This study further found that generally participants were able to control their sexual feelings and behaviors when they encountered difficulties in their sexual lives. It seemed that participants were able to deal with sexual dysfunction or relationship

difficulties. These findings are supported by Smerecnik et al. (2010) who described that Muslim norms/beliefs viewed masturbation as a sinful act that people should not do it. This religious belief may influence adolescents to control their sexual expression by not masturbating.

More than half of participants indicated that they had not considered suicide (59.0%) or had attempted suicide (59.4%). This may be because of their religious beliefs. Almost all participants (97.6%) were Buddhist and often participated in religious services. Therefore, they might have been taught that suicide is unacceptable.

Component four: Sexual health care and safer sex. Findings showed that "Sexual Health Care and Safer Sex" was negatively and significantly correlated with "Challenges: Overcoming Barriers to Sexual Health," "Body Image," "Positive Sexuality," "Intimacy and Relationships," and "Spirituality and Values," There were no positive correlations with other components.

These findings indicated that a majority of participants felt fearful of getting STDs and wanted sexual information, such as STDs and contraceptive use. When participants receive accurate sexual knowledge, they may be less likely to encounter difficulties in sexual relationships and sexual feelings. Gavin et al. (2010) suggested that schools should implement programs that could lessen sexual risky behaviors, such as STIs and promote sexual and reproductive health for adolescents.

Component five: Challenges-overcoming barrier to sexual health. For this component, a higher score indicated more challenges or concerns about positive sexual health. Findings showed that "Challenges: Overcoming Barrier to Sexual Health" was

positively and significantly correlated with “Spirituality and Values” and “Masturbation and Fantasy,” but negatively correlated with “Intimacy and Relationships.”

These findings indicated that some adolescents felt that they could control themselves and came up with positive solutions to deal with negative feelings. In other words, adolescents may know how to manage sexual feelings in positive ways.

Component six: Body image. Findings showed that “Body Image” was positively and significantly correlated with “Masturbation and Fantasy,” “Positive Sexuality,” “Intimacy and Relationships,” and “Spirituality and Values.” However, the correlation values were quite low.

Similar research indicated that perceptions of positive body images made participants feel more positive about themselves (Holsen et al., 2012; Siegling & Delaney, 2013). In this study, the overall participants’ BMI was at a standard level, not underweight or overweight. However, some participants were dissatisfied with their body looks and uncomfortable with some parts of their bodies. Hurlock (1975) indicated that adolescents’ body changes appear as normative development during adolescence period. Adolescents may gain more height, weight, muscle, and body enlargement due to their individual maturity.

Component seven: Masturbation and fantasy. Findings showed that “Masturbation and Fantasy” was strongly positively correlated with “Positive Relationships” and positively and significantly correlated with “Intimacy and Relationships” and “Spirituality and Values.”

These findings indicated that some participants perceived masturbation in a positive way. This may indicate that some participants know that masturbation is healthy and it helps release sexual feelings and desires. If adolescents can deal with sexual desires positively, they may be successful in managing their sexual relationships. Robbins et al. (2011) found that masturbation can be viewed as body awareness or sexual pleasure which is a normal development in during adolescence.

Component nine: Intimacy and relationships. Findings showed that "Intimacy and Relationships" was negatively and significantly correlated with "Spirituality and Values" with low correlation values.

These findings indicated that almost half of all participants reported that they did not have a current sexual partner, but the other half was sexually active. This component finding further indicated that the majority of participants with sexual partners were neutral, neither agreeing nor disagreeing, about the satisfaction of sexual relationships. In some sexual relationships, couples do not express how they feel or what they want from their partners; whereas, some couples avoid talking about sexual matters with their partners.

Research looking at Asian culturally intimate relationships and values tend to support these findings. Smerecnik et al. (2010) indicated that Muslim adolescents tended to respect cultural values. Adolescents' sexual behaviors, such as sex outside marriage or sex with non-Muslim, were unacceptable among Muslims. When adolescents have conflicts and confusion about societal norms and values, they may have difficulties with sexual partners and their relationships.

Research Question Three

Do the perceptions of sexual practices among undergraduate students, as measured by the Sexual Health Inventory, differ when groups are compared by students' gender, family income, or parents' levels of education?

Due to correlations among the component scores, multivariate analyses of variance were used to make group comparisons. The 10 components served as dependent variables. Categories for family income were collapsed to form two groups and parents' levels of education were collapsed to form three groups.

Gender. This study found that undergraduate male participants had significantly higher scores on "Talking about Sex," "Challenges: Overcoming Barriers to Sexual Health," "Body Image," "Masturbation and Fantasy," and "Positive Sexuality." The undergraduate female participants had significantly higher scores on "Anatomy and Functioning" and "Sexual Health Care and Safer Sex." There were no significant differences by gender for "Culture and Sexual Identity," "Intimacy and Relationships," and "Spirituality and Values."

While males tended to be more open or comfortable talking about sex and sexuality, they also reported more challenges related to sexual health. It was not surprising that males tended to be more satisfied with their body images. Similar findings were reported by Siegling and Delaney (2013). Higher scores for males in "Masturbation and Fantasy" were supported by previous studies that examined masturbation prevalence (Robbins et al., 2011).

Higher scores by female participants regarding "Sexual Health Care and Safer Sex" may be related to more emphasis on sexually transmitted diseases in sex education for girls. A study by Vuttanont et al. (2006) noted that more girls than boys recalled being taught about HIV/AIDS.

Family Income. In this study, levels of family income were combined into two groups: (a) lower income, families with income from less than 5,000 Baht to 10,000 Baht; and (b) higher income, families with income from 10,001 to more than 100,000 Baht.

When compared by family income, the combination of mean scores for the 10 components showed that participants whose parents had higher income viewed Component 7: Masturbation and Fantasy and Component 8: Positive Sexuality differently than those whose parents had lower income with higher mean scores. There were no significant differences by family income groups for the other dependent variable components.

The findings suggested that participants from higher income families may have more opportunities to explore and experiment their sexual lives to affirm their sexual pleasure, fantasies, and desires than participants from lower income families.

Parents' Education Levels. In this study, parents' education levels were combined to form three groups (a) lower education level, (b) middle education level, and (c) higher education level. Most of participants' parents had lower education levels.

When comparing the combination of mean scores for the 10 components with parents' education as the independent variable, results showed that the mean scores in

Component 2: Culture and Sexual Identity were significantly different. Follow-up analyses revealed that Higher and Middle Education groups differed significantly from Lower Education groups. The findings indicated that participants with parents who had more education generally felt that their sexuality was accepted and consistent with the community's values.

The mean score of participants with parents in the Higher Education level group were significantly higher than the Middle and Lower Education level groups in Component 5: Challenges-Overcoming Barriers to Sexual Health. These findings should be interpreted with caution since the scores for all groups were predominantly in the Strongly Disagree and Disagree ratings. The challenges of physical and sexual abuse, depression or suicidal thoughts were very low. Perhaps participants with parents in the Higher Education group were more willing to admit some of these concerns about sexual health.

Additional Analyses

In this study, Body Mass Index (BMI) was divided into three groups (a) lower BMI group, (b) moderate BMI group, and (c) higher BMI group. When Body Image mean scores of Component 6: Body Image were compared with participants' BMI, results showed that Body Image scores were correlated with lower BMI scores. Holsen et al. (2012) described that male and female adolescents viewed their body image differently. The current study shows that body image is important to first-year college students. In this study, female adolescents felt more dissatisfied with their body image

than male adolescents. Female adolescents who had lower BMI tended to feel more satisfied with their body image than female adolescents with higher BMI.

Results indicated that female participants with lower BMI scores feel more satisfied with their body shapes and looks rather than female participants with higher BMI scores.

Limitations

Four limitations found in this study are as follows.

1. The Sexual Health Inventory is a self-reporting instrument. There was no right or wrong answer. Items are sensitive and may not reflect true values and attitudes of some participants.
2. The Sexual Health Inventory was developed from an American perspective and some cultural meanings could have different interpretations for Thai participants.
3. Data were collected in one Rajabhat University in the Northern region of Thailand; therefore, the findings cannot be generalized to students enrolled at other Rajabhat Universities in Thailand.
4. Students who participated in this study were predominantly female Buddhists from families with low income and limited educational level.

Implications for Practice

Nine implications for research and practice were developed from an ecological perspective, based on the findings of the current study.

1. Peers, parents, and the media are primary sources that adolescents frequently seek for sexuality information. Adolescents should be provided accurate sexuality information to strengthen knowledge and positive attitude on sexuality.
2. Parent-to-adolescent and peer-to-peer communications about sexuality should be promoted.
3. Schools and universities should provide comprehensive sexuality education for parents, teachers, students, and communities.
4. Information about sexually transmitted diseases (STDs), such as AIDS, should be taught in families and schools in order to diminish the false stereotype about people who were living with HIV. It is important to provide factual knowledge to change negative attitudes and support those people.
5. It is important to continue sexuality education throughout the lifespan with a strong emphasis on early learners through late adolescents in order to provide needed sexuality information for sex educators, parents, and adolescents.
6. Schools and community services should develop activities and programs that educate individuals, families, and communities on healthy sexual practices, including HIV and AIDS awareness.
7. Hospitals should consider expanding intervention and prevention practices to meet the needs of health issues relating for sexuality.
8. Health caregivers should provide accessible sources of information to individuals and families in consequently strengthening communities.

9. Government should develop healthy sexual education policies, regulations, initiatives, and grant funding to support families at the macro level.

Recommendations for Future Research

Five recommendations for future research are as follows.

1. The Sexual Health Inventory has 103 items (7 pages) which is quite long. Participants may become fatigued when filling out the later portion of the inventory. Responses might become less accurate. Future studies should take in consideration the length of the questionnaire.
2. An electronic version of the Sexual Health Inventory assessment should be provided to participants for their convenience.
3. A quantitative study helps researchers to collect massive information, while a qualitative study helps describe in details. Therefore, qualitative focus groups or individual interviews should be conducted along with a quantitative survey to expand findings and to further understand participants' perceptions on sexual health.
4. Sexuality is a sensitive issue. Individuals in across cultural environment may perceive it differently due to their cultures, traditional norms, and family doctrines. Selection of instruments and methodologies should be carefully considered in order to avoid biases and support open communications.
5. Explore possible interactions among demographic variables, such as gender, sexual identity and orientation, parents' educational levels, and family income.

Summary

This research study examined perceptions of sexual practices among undergraduate students from a Rajabhat University in Thailand by using the Sexual Health Inventory developed by Edwards (2004). This chapter provided a summary of the study, methodology of procedures, findings, and interpretations. In addition, limitations, implications for practice, and recommendations for future research were addressed. This study found that it is vital to provide comprehensive sexuality education for areas within students' lives, such as schools, homes, peers, and communities. The comprehensive sexuality education can benefit adolescents by providing accurate information that will allow them to form their own decision-making on sexual practices.

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APPENDIX A

The Content Form

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH
แบบตอบรับความยินยอมการเข้าร่วมการวิจัย

Title: "Perceptions of Sexual Practices in Undergraduate Students in Rajabhat University"
หัวข้อ: ตระบวนการรับรู้เกี่ยวกับพฤติกรรมทางเพศ ของนักศึกษาระดับปริญญาตรี ในมหาวิทยาลัยราชภัฏของไทย

Investigator: Pimara Thongsaeng ..... ppimara@twu.edu 940-536-4368
ผู้วิจัยหลัก นางสาวพิมรา ทองแสง
Advisor: Joyce Armstrong, PhD..... jarmstrong@mail.twu.edu 940-898-2690
ที่ปรึกษาหลักวิจัย ดร. จอยซ์ อาร์มสตรอง

Explanation and Purpose of the Research (คำอธิบายวัตถุประสงค์การวิจัย)
You are being asked to participate in a research study for Ms. Thongsaeng's thesis at Texas Woman's University. The purpose of this research is to examine the perceptions of sexual practices in first-year students of a Thai university. You have been asked to participate in this study because you are a college student in the freshmen in Thai university.
ท่านเป็นผู้ที่ถูกขอความร่วมมือ นางสาวพิมรา ทองแสง นักศึกษาของมหาวิทยาลัยเท็กซัส วูแมนส์ ยูนิเวอร์ซิตี้ ในการทำการวิจัย ซึ่งมีวัตถุประสงค์ด้านการศึกษาตระบวนการรับรู้เกี่ยวกับพฤติกรรมทางเพศของนักศึกษาระดับปริญญาตรีชั้นปีที่ 1 ในมหาวิทยาลัยราชภัฏของไทย

Description of Procedures (คำอธิบายขั้นตอน)
As a participant in this study, you will be informed about the purposes, procedures, and outcomes of this research. You will be asked to spend 30-45 minutes to fill out the questionnaire. The researcher will ask you questions about perceptions relating to your sexual practices and overall sexual health. If you do not wish to participate, you can leave classroom or turn it as a blank or incomplete questionnaire so that nobody knows whether or not you participate.
ในฐานะที่ท่านเป็นผู้ให้ข้อมูลในการวิจัยนี้ ท่านจะได้รับการแจ้งข้อมูลดังนี้ วัตถุประสงค์การศึกษาวิจัย ตระบวนการให้ข้อมูล และ ผลลัพธ์ของการวิจัยนี้ แบบสอบถามนี้ใช้เวลาตอบประมาณ 30-45 นาที หากท่านไม่ประสงค์จะเป็นส่วนหนึ่งในงานวิจัยครั้งนี้ ท่านสามารถลุกออกจากห้องได้ทันที หรือส่งแบบสอบถามเปล่าคืน

Potential Risks (ความเสี่ยงที่อาจมี)
A possible risk in this study is discomfort with these questions you are asked. If you become tired or upset you may take breaks as needed. You may also stop answering questions at any time. If you feel that you need to talk to a teacher about your discomfort, the researcher has provided you with a list of resources.
หากคุณรู้สึกลำบากใจในการตอบคำถามบางข้อ เหนื่อยหน่ายหรือตระหนักใจคุณสามารถพักการให้ข้อมูลเมื่อไรก็ได้ หากคุณต้องการอาจารย์หรือปรึกษาเกี่ยวกับความลำบากใจ ทางนักวิจัยสามารถจัดหาสนับสนุนด้านข้อมูลเพิ่มเติมให้ได้

Another risk in this study is loss of confidentiality. There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions. Confidentiality will be protected to the extent that is allowed by law. A code name, not your real name, will be used. No one will know your real name. The questionnaire that you filled out will be stored in a locked cabinet in the researcher's office. Only the researcher and her advisor will see the answers. The questionnaire will be shredded within 5 years after the study is finished. The results of the study will be reported in scientific magazines or journals but your name or any other identifying information will not be included.

_____
Initials (ลงชื่อ)

ความเป็นส่วนตัว การศึกษาครั้งนี้อยู่ภายใต้ความเป็นส่วนตัวของคุณตามกฎหมาย การลงรหัสของชุดแบบสอบถามจะไม่ใช้ชื่อจริงของผู้ให้ข้อมูล และแบบสอบถามจะได้ รับการเก็บรักษาอย่างมิดชิดในตู้ปิดล็อคได้ของนักวิจัยซึ่งอนุญาตเฉพาะผู้วิจัยและอาจารย์ที่ปรึกษาเข้าถึงได้เท่านั้น แบบสอบถามจะถูกทำลายหลังจากเสร็จสิ้นการวิจัยไปแล้ว 5 ปี ผลการศึกษาวิจัยจะสรุปโดยรวม โดยไม่มีการเปิดเผยอัตลักษณ์ส่วนบุคคล ของผู้ให้ข้อมูล และจะตีพิมพ์รายงานสรุปผลในวารสารทางวิชาการเท่านั้น

The researchers will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.
นักวิจัยจะป้องกันปัญหาที่อาจจะเกิดขึ้นอย่างดีที่สุด อุดมสามารถแจ้งนักวิจัยได้ทุกเมื่อเกี่ยวกับความเสี่ยงที่อาจเกิดขึ้นเพื่อที่จะให้การช่วยเหลือได้ ทางมหาวิทยาลัยเท็กซัส วูแมนส์ ยูนิเวอร์ซิตี้ จะยอมรับสิทธิ์ในการให้การรักษาพยาบาลหรือจ่ายค่าใช้จ่ายชดเชยอาคารบาดเจ็บที่ท่านมี

Participation and Benefits (ความร่วมมือการศึกษาและรับผลประโยชน์)
Your involvement in this study is completely voluntary and you may withdraw from the study at any time. Following the completion of the study your school's library will receive textbooks on sexuality and related resources for your participation. If you would like to know the results of this study we will mail them to you.*
อุดมได้ยินดีให้ความร่วมมือร่วมในการศึกษาวิจัยนี้ หากต้องการที่จะถอนตัวการศึกษาวิจัยอุดมสามารถทำได้ทุกเมื่อ หลังจากเสร็จสิ้นการศึกษาแล้ว ทางห้องสมุดของมหาวิทยาลัยของอุดมจะได้รับเอกสาร ตำรา และแหล่งข้อมูลเกี่ยวกับเพศศึกษาเพื่อเป็นประโยชน์ต่อส่วนรวม หากต้องการทราบรายงานการวิจัย อุดมสามารถระบุแจ้งได้*

Questions Regarding the Study (ข้อสงสัยเกี่ยวกับการศึกษาวิจัย)
You will be given a copy of this signed and dated consent form to keep. If you have any questions about the research study you should ask the researchers; their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at IRB@twu.edu.
อุดมจะได้รับสำเนาแบบตอบรับความยินยอมนี้เพื่อเก็บไว้ หากอุดมต้องการติดต่อนักวิจัย สามารถติดต่อได้ตามช่องทางที่แจ้งไว้ข้างต้น หากอุดมมีคำถามด้านสิทธิ์ของผู้ให้ข้อมูลหรือสัตยะการศึกษาวิจัยนี้ อุดมสามารถติดต่อมหาวิทยาลัยเท็กซัส วูแมนส์ ยูนิเวอร์ซิตี้ ได้โดยตรงที่ สำนักงานวิจัยและโครงการสนับสนุน เบอร์โทรศัพท์ 940-898-3378 e-mail IRB@twu.edu.

และ

_____
_____
Signature of Participant (ลายเซ็นผู้ให้ข้อมูล)
Date (วันที่)

*If you would like to know the results of this study tell us where you want them to be sent:
หากอุดมต้องการได้รับแจ้งผลของการศึกษาวิจัยนี้ กรุณาระบุช่องทางรับแจ้งผล

Email: _____
or Address: (หรือ ที่อยู่)
_____
_____
_____
_____

APPENDIX B

Rajabhat University Approval Letter

No.0537/1916

Nakhon Sawan Rajabhat University
Muang District, Nakhon Sawan Province

14 November 2014

Texas Woman's University
304 Administration Drive
P.O. Box 425589
Denton, TX 76204

Subject: Letter of Approval

Dear TWU Doctoral Committee,

On behalf of Nakhon Sawan Rajabhat University, please note that Miss Pimara Thongsaeng has permission from Nakhon Sawan Rajabhat University to conduct her study entitled, "Perceptions of Sexual Practices in Undergraduate Students in a Thai University in Thailand." We are aware that Miss Pimara Thongsaeng intends to conduct her research by administering a written survey to students who are enrolled at Nakhon Sawan Rajabhat University in Spring 2015.

I understand that this research will be carried out following sound ethical principles and that participation will be strictly voluntary. Therefore, as a representative of Nakhon Sawan Rajabhat University, I am granting Miss Pimara Thongsaeng to conduct her research at our University.

If you have any questions or concerns, please feel free to contact my office at (66) 56-219100-29

Sincerely yours,

(Asst. Prof. Dr. Banyat Chamnankit)
President of Nakhon Sawan Rajabhat University

Office of the President
Nakhon Sawan Rajabhat University,
Nakhon Sawan, Thailand 60000
Tel. +66(0)56219100 Fax. +66 (0)56882522

APPENDIX C

Permission Letter

From: Weston Edwards [mailto:weston@westonmedwards.com]
Sent: Wednesday, September 17, 2014 3:53 PM
To: Hotmail
Cc: Hamilton, Autumn R
Subject: Re: Permission for Edwards's Sexual Health Inventory 2004

HI Pimara,

I attempted to call you yesterday, and left a voice mail as well. I'm grateful for your interest. You have permission to use the 2004 Sexual Health Inventory assuming appropriate citations consistent with APA Writing Manual. Please provide a courtesy copy of your completed research to help us continue to develop the Sexual Health Inventory. In addition, I copied Dr. Autumn Hamilton who is a colleague of mine working on publishing an updated version of the Inventory. She can forward you the most recent version in light of the research she and I have done since the completion of my dissertation. You can use either version, in my opinion.

Good luck on your work!

All my best,
Weston

Weston M Edwards, Ph.D.
Licensed Psychologist
Sexual Health Institute, LLC
Committed to Healing, Coura
ge and Freedom
weston@westonmedwards.com
www.sexualhealthinstitute.org
mobile: 612.987.4482
Twitter: WEdwardsPhD
LinkedIn: Weston Edwards
Skype: WestonMEdwards
Available Books at www.LivingALifeILoveBooks.com