PREDICTABILITY OF PERSONAL FACTORS, FAMILY BACKGROUND, SENSE OF COHERENCE, AND SOCIAL SUPPORT ON AMPHETAMINE PREVENTIVE BEHAVIORS AMONG VOCATIONAL STUDENTS IN BANGKOK METROPOLIS

DUANGKAMOL KOWITWIBOOL

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Duangkamol Kowitwibool.

Mrs.Duangkamol Kowitwibool
Candidate

Asst.Prof.Wantana Maneesriwongul,
D.N.Sc. (Primary Care)
Major-Advisor

Yuwadee Luecha

Assoc.Prof.Yuwadee Luecha,
Ed. D.
Co-Advisor

Prof.M.R.Jisnuson Svasti,
Ph.D.
Dean
Faculty of Graduate Studies

Orasa Panpakdee

Assoc.Prof.Orasa Panpakdee,
D.N.S.
Chair
Master of Nursing Science
Faculty of Medicine Ramathibodi Hospital

Thesis
Entitled

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on
11 October, 2005

Duangkamol Kowitwibool
Mrs.Duangkamol Kowitwibool
Candidate

Asst.Prof.Wantana Maneesriwongul,
D.N.Sc. (Primary Care)
Chair

Yuwadee Luecha
Assoc.Prof.Yuwadee Luecha,
Ed. D.
Member

Prof.Rutja Phuphaibul,
D.N.Sc.
Member

Panudda Priyatruk
Assoc.Prof.Panudda Priyatruk,
MS. (Epidemiology)
Member

Prof.M.R.Jisnuson Svasti,
Ph.D.
Dean
Faculty of Graduate Studies
Mahidol University

Prof.Rajata Rajatanavin,
M.D., F.A.C.E.
Dean
Faculty of Medicine, Ramathibodi Hospital
Mahidol University

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Duangkamol Kowitwibool

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DUANGKAMOL KOWITWIBOOL 4337509 RACN/M

M.N.S. (COMMUNITY HEALTH NURSING)

THESIS ADVISORS : WANTANA MANEESRIWONGUL, D.N.Sc.;
YUWADEE LUECHA, Ed. D.

ABSTRACT

The purposes of this cross-sectional study were to: (1) explore personal factors, family background, sense of coherence, social support, and amphetamine preventive behaviors; and (2) examine the incorporated predictability of these variables on amphetamine preventive behaviors. A sample of 280 adolescent vocational students was recruited from 3 educational settings with the highest case report of amphetamine users among vocational schools in Bangkok Metropolis. Data were collected using self-administratered questionnaires. Statistical analysis used were Person's Product Moment Correlation Coefficients and Stepwise multiple regression.

Results revealed that most of the vocational students had a moderated level on the overall sense of coherence, social support, and amphetamine preventive behaviors (73.9%, 68.9%, and 73.9%, respectively). The significant predictors of amphetamine preventive behaviors ($p < 0.01$) were experience related to amphetamines, mother's occupation, and social support. These factors explained 23.6 percent of variance of amphetamine preventive behaviors.

These findings suggest that all personnel whose work involves adolescent students should cooperate to develop social support and provide intervention for adolescent students to strengthen their life skills. These actions will fortify drug preventive behaviors especially for amphetamines.

KEY WORDS : SENSE OF COHERENCE/ SOCIAL SUPPORT /
AMPHETAMINE PREVENTIVE BEHAVIORS /
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ความสามารถในการทำนายของปัจจัยส่วนบุคคล พื้นฐานครอบครัว ความเข้มแข็งในการมองโลก และแรงสนับสนุนทางสังคมต่อพฤติกรรมการป้องกันการใช้ยาบ้าของนักเรียนอาชีวศึกษาใน กรุงเทพมหานคร (PREDICTABILITY OF PERSONAL FACTORS, FAMILY BACKGROUND, SENSE OF COHERENCE, AND SOCIAL SUPPORT ON AMPHETAMINE PREVENTIVE BEHAVIORS AMONG VOCATIONAL STUDENTS IN BANGKOK METROPOLIS)

ดวงกมล โกวิทวิบูล 4337509 RACN/M

พย.ม. (การพยาบาลอนามัยชุมชน)

คณะกรรมการควบคุมวิทยานิพนธ์ : วันทนา มณีศรีวงศ์กูล, D.N.Sc., ยุวดี ฦาชา, Ed. D.

บทคัดย่อ

การศึกษาครั้งนี้เป็นการวิจัยภาคตัดขวางเพื่อศึกษาปัจจัยส่วนบุคคล พื้นฐานครอบครัว ความเข็มแข็งในการมองโลก แรงสนับสนุนทางสังคม และพฤติกรรมการป้องกันการใช้ยาบ้า รวมถึง เพื่อหาอำนาจการทำนายของปัจจัยเหล่านี้กับพฤติกรรมการป้องกันการใช้ยาบ้าของนักเรียนอาชีวศึกษา กลุ่มตัวอย่างเป็นนักเรียนอาชีวศึกษา จำนวน 280 คน ซึ่งศึกษาอยู่ในโรงเรียนอาชีวศึกษา 3 แห่งในกรุงเทพมหานคร ที่มีรายงานการใช้ยาบ้าสูงสุดในกลุ่มโรงเรียนของกรมอาชีวศึกษา การเก็บข้อมูลทำโดยใช้แบบสอบถาม และใช้สถิติสัมประสิทธิ์สหสัมพันธ์ของเพียร์สัน และการวิเคราะห์ถดถอยพหุแบบขั้นตอนในการวิเคราะห์ข้อมูล

ผลการศึกษาพบว่านักเรียนอาชีวศึกษา ส่วนใหญ่มีคะแนนความเข้มแข็งในการมองโลก แรงสนับสนุนทางสังคม และพฤติกรรมการการป้องกันการใช้ยาบ้าอยู่ในระดับปานกลาง ร้อยละ 73.9, 68.9, และ 73.9 ตามลำดับ ปัจจัยที่ร่วมทำนายพฤติกรรมการป้องกันการใช้ยาบ้าของนักเรียนอาชีวศึกษา คือ ประสบการณ์ที่เกี่ยวข้องกับยาบ้า อาชีพของมารดา และแรงสนับสนุนทางสังคม ซึ่งสามารถร่วมทำนายพฤติกรรมการป้องกันการใช้ยาบ้าของนักเรียนอาชีวศึกษาได้ร้อยละ 23.6

ผลการวิจัยครั้งนี้มีข้อเสนอแนะว่า บุคลากรทุกฝ่ายที่ปฏิบัติงานเกี่ยวข้องกับนักเรียนวัยรุ่นควรร่วมมือกันในการส่งเสริมแรงสนับสนุนทางสังคม และจัดกิจกรรมเพื่อเพิ่มทักษะในการใช้ชีวิตแก่นักเรียนวัยรุ่น ซึ่งจะช่วยเสริมสร้างพฤติกรรมการป้องกันการใช้ยาเสพติด โดยเฉพาะยาบ้า

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CHAPTER I
INTRODUCTION

Background and Rationale

The rapid development of social, economic, transportation, communication, science and technology initiates many problems that effect to anyone. Crime (includes sex crime), economic problems, neglect person (children and elderly), Acquired Immuno Deficiency Syndromes (AIDS), drug use, and other health problems are some of the current serious problems. Health problem is one of the major problems that affect from the rapid social revolution, while social environment is a significant determinant of health and disease pattern in any community. New public health problems and chronic disease have emerged (Uutela & Tuomilehto, 1992: 389).

Health problems effect to all groups of the people including adolescents who are unique from the other groups because in addition to effect of rapid social evolution, they have rapid development in physical change and mental change from children to adult. Some of specific health problems in adolescents are different from others, such as drug use, Human Immunodeficiency Virus (HIV) infection, unprotected sexual intercourse, being coerced to have sex, unwanted pregnancy, and sexually transmitted diseases.

Most of Asian countries are developing countries that also affect from the rapid social revolution. This has caused many health problems that lead to morbidity and mortality of the people. A Taiwanese study of 1,358 adolescent students aged 16-18 years in vocational school at Kaohsiung City found that prevalence of drug use was reported as follows: alcohol drinking, 70.7% (boys 75.1%, girls 51.4%); tobacco smoking, 56% (boys 61.8%, girls 30.2%); and illicit drug use 6.4% (boys 6.6%, girls 5.6%). Significant risk factors that emerged as common correlates with drug use were behavior problems, non-negative attitude toward parent's drug use, and peer influence (Yang, Yang, Liu, & Ko, 1998: 347-352).

Thailand is also affected by the rapid social development. As a result, drug use, unwanted pregnancy, HIV infection, and other sexually transmitted diseases have

become serious health problems among Thai youth. According to Office of the Narcotics Control Board (B.E. 2544: 1), the most common drug use is marijuana, 51.1%; heroin, 25.3%; and inhaler, 12.2%. Nowadays, because of the rapid change of social revolution, common drug use has changed from marijuana and heroin, to amphetamine (79.4%) in 2000. Drug use is health problems that initiate many serious social problems. Such as crime, lost of life and property, and improper sexual behavior.

In late1999; a study of 1,725 students aged 15 to 21 years old in 3 vocational schools in Chiang Rai, 48% of the male students and 43% in female students reported ever having had sexual intercourse. Overall, the mean number of lifetime sexual partners was 4.6 among male participants (median: 2) and 2.8 among female participants (median: 1). Sixteen percent of male participants and 11% of female participants who had such sexual partners reported consistent use of condom with steady partners. Among women with a history of sexual intercourse, 27% reported at least 1 pregnancy, and 83% were terminated. Among those with sexual intercourse experience, the prevalence of HIV infection, Neisseria gonorrhoeae, and Chlamydia trachomatis was 0.5%, 0.4%, and 5% respectively. In addition, twenty-nine percent of students reported ever having used amphetamines, and ten percent had an amphetamine-positive urine test (Van, *et al*, 2001:13).

From data of Office of the Narcotics Control Board (B.E. 2544: 2) found that numbers of first time use drugs population highest in age range 15-19 years. And most of age range that come to admission is 20-24 years follow by age range 15-19 years. More than half of populations that come to treatment for cessation drugs and most of population first time use drug are adolescents as shown in Table 1.

Table 1 Number of Drug Addicts in Treatment Centers Classified by Admission Age and First Time Use in Thailand. (Office of the Narcotics Control Board, B.E. 2544: 2)

Age Groups	Admission Age	First time Use
Below 15	899	7,194
15-19	**9,017**	**20,324**
20-24	**10,130**	7,151
25-29	7,105	2,813
30-34	4,566	1,539
35-39	3,592	809
39 up	6,233	765

National Statistical Office (B.E. 2539: 1) surveyed narcotic drug use such as marijuana, amphetamines, and heroin in Thai youth. It was found that in 1992-1995 rate of heroin use was decrease but the rate of amphetamine use was increase. The estimation of drug addict youth is about 80,600 cases. Similarly, the reported by ABAC's Pole (B.E. 2544: 2) is about 219,284 adolescent students who had experience related to amphetamines. The vocational students have highest prevalence of drug use (83,931 cases). The highest report of drug use is found in Bangkok Metropolis. (Office of the Narcotics Control Board, B.E. 2544: 3).

Adolescents studying in vocational school are prone to drug use (Copeland, 1996). Amphetamines and other substances addict in vocational students is one of health problems in addition to HIV infection, unprotected intercourse, being coerced to have sex, unwanted pregnancy, and sexual transmitted disease. Adolescent vocational students had less time for study. Their excessive unsupervised free time is statistically significant factor initiating drug use (Alkandari, Yacoub, & Omu, 2001: 78).

Drug use is significant problem in youth and family court. Drug use is a major problem of child and youth guilt (Arporn Saichea, B.E. 2540: 143-144). It was reported by the central youth and family court in 1996, there is 50.89 % of guilty child and youth come from drug use.

Drug use is psychological problem that causes psychosocial problem. Drug use initiate by the man who has thinking problem, emotional problem, and personality that express to behavior of drug use (Mongkon Montha, B.E. 2540: 119-120).

The cause of child and youth that repeat guilty after self-indulgent is drug addict, family pressure, social pressure. The factor that initiate drug re-addiction is psychological weakness, live in endemic area of drug used, loneliness. The study of (Chankanit Suriyamanee, *et al*, B.E. 2530: 67) expose the factors of drug re-addiction are psychological, weakness, live in endemic area that used drug, loneliness, and friend persuasion.

Many studies reveal in the same way that drugs use person has previous history of high-pressure stress, low self-esteem (Yalao, *et al*, 1997: 15, 60 cited by Nantiya Akeathikonkit, B.E. 2542). Correlation to many studies of psychologists that study in behavior of drugs addict have conclusion, cause of drug addict are lack of ability to manage with stress or lack of ability in self control, and low sense of coherence.

Antonovsky (1996a) suggests that the strength of an individual's sense of coherence, which develops throughout childhood and adolescence, stabilizes somewhere along the sense of coherence continuum approximately around the age of 30 years (Wolff & Ratner, 1999: 185).

Social support is a major factor that helps person to confront with social stress effectively Because of social support from the others will be bar from stress or absorb stress (Cohen & Wills, 1985: 310-313) According to Cohen (Cohen & Syme, 1985:44-46) social support is supporting of the others in social include family in many aspect 1) information and suggestion for manage with problem 2) emotional support that make the person high self esteem, adorable and to rest assured in trouble 3) supporting in subjects and services. From that make the people have willpower to confront with stress and many troubles. Weiss (Weiss, 1974 cite in Brandt & Weinert, 1981: 227-280) propose social interaction will make many types of social support such as alert and apprehensive together, to be bound closely, make people feel stable, participate in the social and make they feel worthy.

So the sense of coherence and social support are a basic and major factor in protection and manages with chronic stress, including increasing self-esteem. Low

self-esteem and stress are major factors that initiate drug use. According to Taylor (1991: 58), health promotion is particular philosophy leading to good health, and major aggressive role which nurses should concern. Consequently, as a community health nurse, it is important to explore factors related to amphetamine preventive behaviors among adolescent vocational students. In this study, Pender's Health Promotion Model (Pender, 2002: 60) was used as a conceptual framework.

This is a cross-sectional study to determine predictability of personal factor, family background, sense of coherence, and social support on amphetamine preventive behaviors among vocational students in Bangkok metropolis .The result of the study will explain how the sense of coherence and social support relate to behaviors that prevent themselves from amphetamine use.

Research Framework

Pender defined health promotion as a multidimensional pattern of self-initiated actions and perceptions that serve to maintain or enhance the level of wellness, self-actualization, and fulfillment of the individual or group, including activities in which a positive approach to living that leads individuals toward their highest potential for well-being (Pender, 1982, 1987). Pender (1996) revised Health Promotion Model as activities that improve quality of life, positive lifestyle, and achieve high-level well being.

The initial HPM stimulated a number of studies to determine the power of its seven cognitive-perceptual factors and five modifying factors to explain and predict health behaviors. The cognitive-perceptual factors were importance of health, perceived control of health, definition of health, perceived of health status, perceived of self-efficacy, perceived benefits, and perceived barriers. The modifying factors were demographic and biologic characteristics, interpersonal influences, situational influences, and behavioral factors. The initial model has since been replaced by the Health Promotion Model (revised) (Pender, 2002: 60) as depicted in figure 1.

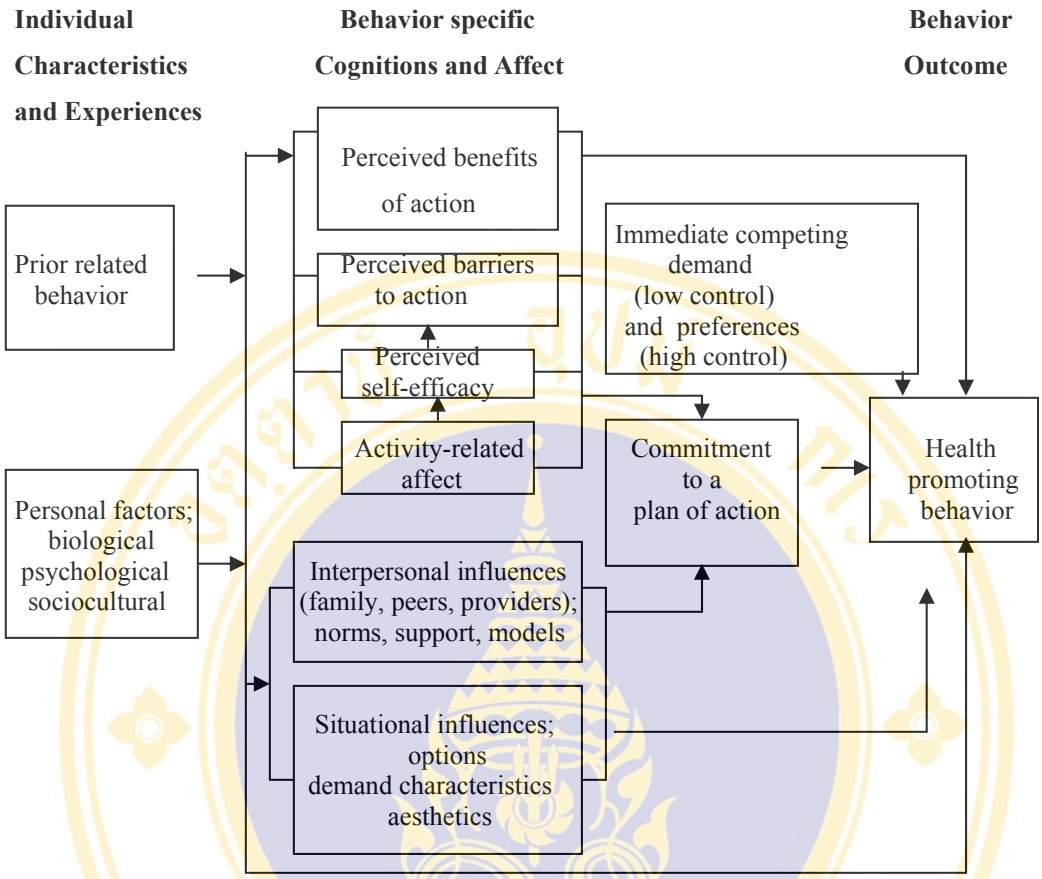

Figure 1 Health Promotion Model (Revised) (Pender, 2002: 60)

This study will focus on how individual characteristic and experience factors, and behavior-specific cognitive and affect factors, associated with amphetamine preventive behaviors among adolescent vocational students. Individual characteristic and experience factors were personal factors; (consist of age, gender, living with parents, time programs of vocational schools, and educational levels), experience related amphetamine, family background (father's occupation, mother's occupation, father's education, mother's education, and parents' marital status), and sense of coherence. Behavior-specific cognitive factor was social support. Research framework of this study is shown in figure 2.

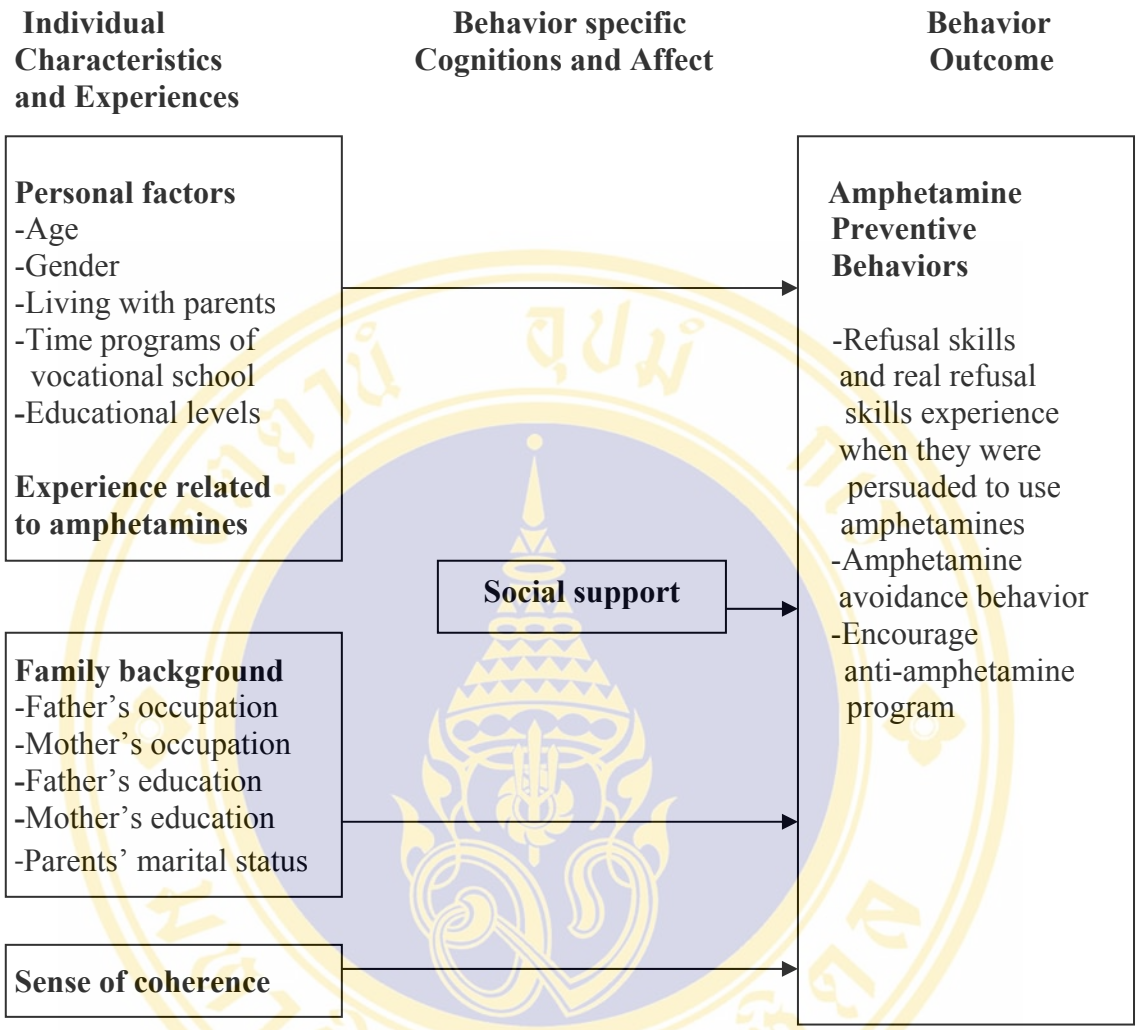

Figure 2 Research Framework

Objectives of the Study

1. To explore vocational students' personal factors, family background, sense of coherence, social support, and amphetamine preventive behaviors.
2. To determine predictability of personal factors (age, gender, living with parents, time programs of vocational schools, and educational levels), experience related to amphetamines, family background (father's occupation, mother's occupation, father's education, mother's education, and parents' marital status), sense of coherence, and social support on amphetamine preventive behaviors.

Research Hypotheses

Personal factors, experience related to amphetamines, family background, sense of coherence, and social support; are incorporated predictors of amphetamine preventive behaviors among vocational students.

Definition of Terms

Personal factors include age, gender, living with parents, time programs of vocational schools, and educational levels are defined as follows:

a. Age: period in years between the date of birth reported by adolescents and the date of data collection. Fraction of years, i.e. Less than 6 months will be not counted; 6 months or more will be counted as 1 year.
b. Gender: adolescents' self-report identify as male or female
c. Living with parents: person who adolescents lived with must be both father and mother.
d. Time programs of vocational schools are offered in regular hours (7 a.m.-2 p.m.), and evening hours (3 p.m.-6 p.m.).
e. Educational levels: educational years which adolescents are studying. It consists of 5 levels: junior vocation 1-3 or senior vocation 1-2

Experience related to amphetamines: adolescent's negative experience or exposure to amphetamines, such as having ever seen, smell, or try amphetamines.

Family background includes father's occupation, mother's occupation, father's education, mother's education, and parents' marital status are defined as follows:

a. Father's occupation: adolescent's father basis occupation that bring income to family. It was classified as government official/ state enterprise, merchant/ owns private, employee/ worker, industry, company, or others.
b. Mother's occupation: adolescent's mother basis occupation that bring income to family. It was classified as government official/ state enterprise, merchant/ owns private, employee/ worker, industry, company, or others.
c. Father's education: the highest education of adolescent's fathers reported in terms of years of formal study.

d. Mother's education: the highest education of adolescent's mothers reported in terms of years of formal study.
e. Parents' marital status: parents of students marriage situation at the time of data collection. It was classified as being married or single (divorce, separated, and widowed).

Sense of coherence refers to a strong confidence or intellectually understood and has been lived well with normal or good life, which was measured by Sense of Coherence Questionnaire's Antonovsky (1987) that was translated into Thai by Somchit Hanucharoenkul (B.E. 2532). Score on this scale range from a low of 29 to a high of 203. The higher scores mean higher sense of coherence.

Social support is defined as interaction among people, which brings about amphetamine preventive behaviors, maintain good behaviors and enhancing quality of personal social transaction across individual lifestyle, assessed by using 25 items of the PRQ part II (Brandt and Weinert, 1981). This instrument was translated into Thai by Rukchanok Koshakri (B.E. 2541). This interaction happens through 5 channels namely**:** social integration**,** assistance and guidance**,** opportunity for nurturance**,** self-worth, and intimacy. Possible scores ranged from 0 to 100, a higher score on this representing higher social support.

Amphetamine preventive behaviors are certain behaviors to avoid amphetamine use. Amphetamine preventive behaviors scale was modified from Kwanmuang Kaeodumkoeng's instrument (B.E. 2541: 160) these behaviors are relevant to: 1) refusal skills and real refusal skills experience when they were persuaded to use amphetamines, 2) amphetamine avoidance behavior, and 3) encourage anti-amphetamine program. Operationally, amphetamine preventive behaviors are defined as the composite score on the 24 items. Score on this scale range from a low of 0 to a high of 90. The higher scores mean higher amphetamine preventive behaviors.

Scope of the Study

This study is a cross-sectional study exploring personal factors, experience related to amphetamine, family background, sense of coherence, social support, and

amphetamine preventive behaviors of adolescent vocational students in Bangkok Metropolis area. Data was collected through May 2003.

Assumption

Answers to the questionnaire made by adolescent vocational students are reliable.

Expected Research Outcomes

Overall results from this study would provide better understanding of relationships between personal factors, experience related to amphetamine, family background, sense of coherence, social support, and amphetamine preventive behaviors. Results of this research could be utilized to improve community health nursing practice, education, and further research to prevent amphetamine of adolescent vocational students. Moreover this finding will help vocational school/ community health nurses, teachers, parents, and other members of society to become aware of sense of coherence, social support, and amphetamine preventive behaviors in adolescent vocational students including development of appropriate intervention in vocational schools to foster sense of coherence and social support in adolescent vocational students particularly.

CHAPTER II
LITERATURE REVIEW

This literature review encompasses the concepts and relationships to personal factors, experience related to amphetamines, family background, sense of coherence, social support, and amphetamine preventive behaviors of adolescent vocational students in Bangkok metropolis. Published statements and reports of studies were reviewed, analyzed and synthesized

The literature review focuses on (1) amphetamines among Thai adolescents, consisting of the amphetamine situation, amphetamine-usage situation among adolescents (especially vocational students), the association of the amphetamine situation and amphetamine-usage behavior, amphetamine prevention, and the period of adolescence; (2) Factors affecting amphetamine addition behaviors, such as personal factors, experience related to amphetamines, family background, sense of coherence, and social support.

Amphetamines among Thai Adolescents

The Amphetamine Situation

Economic development, from an agricultural to an industrial structure, has caused Thailand to change from a rural to an urban society. Economic inequalities between the metropolis and rural areas are increasing, especially for Bangkok and environs, which are experiencing faster rates of economic growth than other parts of the country. This development is making the ways of life and Thai traditional life-styles change. The modern life-style has many psychological and cultural impacts and effects on the people's ways of life, and these developments are instigating social problems in many areas.

Amphetamines are illegal synthesized substances that directly activate the central nervous system after ingestion, inhalation or injection, increasing alertness by producing euphoria, along with stress, confusion, and insomnia. The word amphetamine is often used to refer to a variety of stimulants ranging from over-the-

counter appetite suppressants and prescription pills for treating weight loss to synthetic methamphetamine, an illegal and highly psychologically addictive street drug. It is generally conceptualized as 3 chemical substances; 1) Amphetamine Sulfaten or Benzerdring, 2) Methamphetamine (also know as meth, speed, crack, crystal, and ice), and 3) Dextroamphetamine or Dexedrine Obetrol. In Thailand, these three types of substances are found in amphetamines, as well as other substances, such as Ephedrine, Caffeine, Pemolin Theophyllin, Penpropotex, and others (Office of the Narcotics Control Board, B.E. 2539).

In the United States, amphetamine tablets were available without prescription until 1951, and amphetamine-containing inhalers were available over the counter until 1959. During the 1960s, amphetamines were widely prescribed as a medication ostensibly to treat depression and obesity. Amphetamines became prevalent in Thailand in 1957, and were first brought to and spread throughout Thailand by American soldiers fighting in the Vietnam War. The high prevalence of amphetamine addiction was initially found only among industrial, agricultural, and transportation laborers. Later, this stimulant spread among people who visited night entertainment locations, musicians, prostitutes, taxi drivers, truck drivers, and factory workers. In 1969, amphetamine use spread to pupils and students who believed that it would help them stay up late studying for extended periods, and sometimes they were used as diet pills.

Amphetamine misuse is a severe and increasing public health problem in East Asia (Atlanta, 2000). In Thailand, an estimated 48 million tablets are used per year (Office of the Narcotics Control Board, B.E. 2544). These drugs originate mainly from adjacent Myanmar (Burma) and their Thai names are “yaa ba” or “mad tablet” and “yaa ma” or “horse tablet”, so-called because of the horse emblem on the original amphetamine product.

There has been an increasing illicit manufacture of other amphetamine-type stimulants (ATS), particularly amphetamine, in Southeast Asia. In 2002, cannabis remained overall the main drug of abuse in all of the countries of Southeast and Southwest Asia. Opiates, mainly opium and heroin, were also the drugs of choice except in Thailand, where opiate abuse declined, but ATS was the main drug of abuse due to its low cost and availability. A significant increase in ATS abuse, amphetamine,

and methamphetamine among the youth who smoked, sniffed, and inhaled them was reported in Cambodia, China, Indonesia, Laos, Myanmar, the Philippines, and Thailand (Kulsudjarit, 2004: 446).

The epidemiology of addictive drugs, as indicated by the statistics of patients who ceased substance abuse, shows that heroin was the most-used drug, but from B.E. 2538 the trend of patients who quit heroin use reduced, while there was an increase in the number of patients who quit amphetamines, especially in B.E. 2542-2544, as shown in Table 2.

Table 2 Number of Patients who Ceased Substance Abuse (Office of the Narcotics Control Board, B.E. 2545: 1)

Type of Drug	2536	2537	2538	2539	2540	2541	2542	2543	2544
Heroin	40,007	43,735	48,897	33,746	24,728	21,732	15,757	14,758	12,758
Amphetamine	368	477	1,113	4,036	10,024	14,529	**16,134**	**19,253**	**23,621**
Inhalant	1,178	868	876	801	1,041	725	712	597	675
Opium	4,283	2,922	2,665	2,307	2,376	2,214	2,508	2,498	2,960
Marijuana	848	906	511	482	522	336	430	445	610
Other	911	155	156	129	149	135	2,793	4,062	4,463
Total	47,595	49,063	54,218	41,501	38,840	39,671	38,334	41,613	45,087

The drug usage trend spread, and increased usage became more prevalent. Now, amphetamine usage, a serious problem, has spread to all groups of the population, especially adolescents, whether learning at school or not, including urban and rural areas. It has been widely used in educational institutes since 1992. Widespread amphetamine usage among teenage has sharply increased since 1993 (Manit Arunakul, B.E. 2541; Thamrong Tasananchalee, B.E. 2538: 373-379).

Adolescent Amphetamine Usage Situation

Smith and Nutbeam (1992) studied adolescent drug use in Wales, in the United Kingdom, and found that the most frequently reported substances were marijuana, solvents and glue, and psilocybin. Few of the young people reported multiple or regular drug use. The prevalence of drug use was higher for pupils from single-parent families, and more boys than girls reported using psilocybin.

Wright and Pearl (1995) found that in the previous five years in particular, young people's exposure to illicit drugs had increased dramatically. Despite increased education about drugs, pupils' knowledge remained limited. Social pressures remained the primary perceived reason for taking drugs. It was suggested that the media had a responsibility not to glamorize drugs.

Ruangkanchanasetr and colleagues (2005) collected survey questionnaires regarding youth risk behaviors from 2,311 Thai adolescents in 8 schools, 13 communities and 2 juvenile home institutions from January to February 2001, and found a significantly high prevalence of 6 major-risk behaviors among adolescents in Bangkok: 1. traffic safety, 2. violence, 3. depression, suicidal thoughts and attempts, 4. substance abuse, 5. sexual behaviors, and 6. learning problems. The prevalence of lifetime use vs. heavy amphetamine use was 37.8% vs. 4.6%, respectively.

An ABAC poll (B.E. 2544) surveyed students from grade 6 in secondary school until university students. Of 219,284 students with amphetamine-related experience, most were vocational school students (83,931). The statistical records for psychiatric patients in Chiang Mai Psychiatric Hospital (Suan Prung Hospital) showed increasing numbers of amphetamine-related psychiatric patients from B.E. 2539-2541, with 421, 1,459, and 2,667 per annum, respectively.

In conclusion, psycho-stimulant dependence in young individuals has become a serious problem in Thailand, where consumption of the so-called Yaa Ba methamphetamine tablets has become a fashionable trend, due to its easy availability in the form of a tablet (Ando, Hayashida, Nihira, Yamada, & Ohno, 2004).

Amphetamines among Vocational Students

Chou (1999) studied trends of substance use among adolescent students in Taiwan, 1991-1996. The rate of illicit substance use was lowest among high-school

students, followed by middle-school students, and higher among students in vocational schools and junior colleges. The percentage of smokers and drinkers who had started early (at age 12 or earlier) rose every year. The prevalence of smoking and drinking habits among girls increased consistently during the study period. The most commonly abused substance was amphetamine. However, in 1996, sniffing glue became more prominent among middle-school students, and flunitrazepam became the second most commonly abused substance among high-school students.

Sittinut Phaputnitisarn and Sansanee Ounttuam (B.E. 2545) found that Thai youth who were related to addictive drugs were more secondary-school, high-school and vocational-school students than university students or working youths, and noted many reasons for youths being drawn into the drug-addiction cycle: (1) well-accepted reasons, such as a broken family, peer influence, and school and community environment; (2) greater knowledge among youth in the school system than in the non-school system. There is a lack of knowledge of why the non-school system induces a drug addiction cycle because of the complexities of the situation, the environment and the development of subcultures (such as gangs). There are many reasons for youths in the non-school system to be at greater risk. When youths are at risk, they manufacture demand to stimulate supply, and in turn supply stimulates changes in the types of drugs, the drugs traded, and their availability. The major concern is why youth make the decision to use drugs. This matter requires further research and elucidation.

In multivariate analysis, methamphetamine use was highly correlated with the use of other substances, sexual activity, peer pressure, positive attitudes toward methamphetamine, and absence of a family confidant (Sattah, *et al*, 2002).

Amphetamine Prevention

Pender (1996: 34) stated that prevention can be divided into three levels:

1. Primary prevention: this is very important, because this is the prevention of hidden problems, and consists of:

1.1 Health promotion: for the good health of the population, such as health education, food recommendations, and personal hygiene. Generally not focused on specific diseases, but is general health promotion.

1.2 Specific prevention: prevention of specific disease, such as immunization for smallpox, accident prevention in industry. This prevention is designed to prevent problems before an incident occurs.

2. Secondary prevention: secondary prevention starts when disease occurs, in early diagnosis and treatment. This prevention comprises investigation and prognosis. Treatment commences immediately to prevent the spread of disease.

3. Tertiary prevention: when disease occurs, its is necessary to prevent further spread of disease to other people.

2.1 Prevention of disease spread, prevention of increased morbidity, reduction of morbidity.

2.2 Rehabilitation when disease occurs and organic morbidity occurs. Rehabilitation is needed for these organs to return to normal or sustain minimal handicap so that individuals can help themselves to the maximum. Any level of prevention is important at every stage. The most useful action is early prevention.

The Office of the Narcotics Control Board (B.E. 2545: 12-13) stated that addictive drugs not only affect drug-users, but also affect all aspects of society, such as biology, the family, the economy, communities, social problems, and national security. Prevention and treatment for addictive drugs is not the responsibility of anybody in particular, but everyone should cooperate to prevent this problem. Prevention should start in childhood and youth, because early prevention can inoculate against drug use. Details of the factors influencing drug-use prevention are as follows:

1. Children and Youth

- Learn more about the adverse effects of drugs and learn how to use drugs in the right way.
- Refuse persuasion and advertisements that drugs will make you relax, be happy and funny.
- Create attitudes not to try to use drugs, because some drugs create addiction when used only 1-2 times.
- Use free time in the right way, such as exercise, hobbies, a job, or some activity for the community.
- Contact good friends, not friends addicted to drugs.
- When one has a problem, consult parents or teachers for solutions.

2. Parents

- Continuous study of the adverse effects of addictive drugs
- Make good relationships among family members
- Make recommendations and suggestions about drugs to kids
- No smoking or drinking; behaving as a good role model for the family
- Support the family about the right way to use their free time
- Cooperate with government agencies in notifying them of places where drugs are made or sold

3. The Community

- Search for knowledge about drugs from individuals, institutes, and disseminate knowledge to community members
- Participate in community activities that prevent drugs
- Help addicted persons to quit drugs, demonstrate acceptance of people who quit drugs
- Cooperate with personnel in treating drug problems in the community, notifying sources of production, places where drugs used

4. Organizations, Companies, Institutions and Enterprises

- Control and pay close attention; look after workers and do not permit strangers to undertake any illegal dealings with drugs
- Instruct workers about the adverse effects of drugs
- Cooperate with the government in notifying the sources of drug production
- Give workers with drug-related problems a chance by sending them for drug rehabilitation, recommend cessation, and coordinate with drug treatment areas

In summary, all people related to adolescent students should cooperate creatively to prevent and solve the problem of students' amphetamine addiction.

Adolescence

Adolescence is a period of rapid change, when young people are experimenting with new experiences, have fewer negative attitudes about drug use, and believe that substance use is normal or something most people do. For these reasons, they are at risk of developing drug use behaviors more quickly than adults.

Adolescents first try substances that are legal for adults--alcohol (beer and wine), and cigarettes. Beer and wine precede the use of hard liquor or spirits. The use of alcoholic beverages precedes the use of marijuana, followed by other illicit or hard drugs, such as opiates and stimulants. Adolescents are unlikely to initiate marijuana or hard drug use without prior use or experimentation with alcohol and/or cigarettes. Legal and accessible drugs for adults, alcohol and cigarettes, are established as gateway drugs. Almost all adolescents enter the earliest stages of this sequence, with progressively fewer eventually advancing to later stages. As adolescents advance through this sequence of drug use, they continue to use gateway drugs, adding the other drugs to an expanding repertoire, as opposed to replacing the gateway drugs (Mill & Noyes, 1984 cited by Bukstein, 1995: 56).

Drug use by adolescents must be considered within a developmental context given the social, cognitive tasks of adolescence as well as the drive toward maturation and adulthood. In this transition between childhood and adulthood, the adolescent may be initially at risk due to constitutional or temperament characteristics that have a biologic or genetic origin. The adolescent is then exposed to parents, adults, peer models and attributes, popular culture, as well as media messages promoting and encouraging drug use. As adolescents attempt to achieve independence from their parents, they experiment with a variety of perceived adult behaviors, such as drug use. However, their limited cognitive development and judgment places them at risk for certain problematic consequences of drug use. These consequences may, in fact, inhibit further maturation or development and successful transition into young adulthood. Other developmentally specific factors may also place the adolescent at risk for drug use. These factors include an increased frequency of psychiatric disorders. Characteristics of the adolescents, their peers, families, and their social milieu appear to be predictive of further drug use problems in young adulthood and beyond (Bukstein, 1995: 71-72). Adolescents may turn to use a drug to relieve tension when pressures are intense. The types of drug users are as follows:

1. Casual users; “the experimenters”. These adolescents use mostly alcohol or marijuana in small quantities to maintain their position in the peer group and to decrease the anxieties experienced by their movement away from the family.

2. Sociological users; “the seekers”. These adolescents are aware of social realities and want to be active participants in the social process. They tend to be from separate communities in which they attempt to create a social process. They tend to form separate communities in which they attempt to create a society free of social conventions. Many seek relief from boredom through drugs and membership of this society. They lack the ability to express their inner feelings and tend to deal with their loneliness through mystical revelation and the group connection, with the hope of a conflict-free life with others.

3. Sick users; “the heads”. These adolescents use drugs to mask or correct maturational problems. This distinction is difficult to make. Those with serious interpersonal difficulties often are in a group that is bonded together by a high frequency of drug use. They turn to using an illicit substance in times of stress and prefer drug-induced.

Factors Affecting Amphetamine Addiction Behaviors

Personal factor variables, such as age, gender, living with parents, time programs of vocational schools, and educational levels were included, as follows:

Age

Age is probably related to trying amphetamines. Older adolescent students had significantly more health risk behaviors than younger adolescent students (Praisri, 2001: 83). In addition, Tasanachaikul (1997: 149) described middle adolescence as a time of great curiosity; they spent less time with the family and more with their peers in meeting developmental needs. Later adolescence has broader social interactions with the world that may expose them to health risk behaviors. Thus, young adolescents should be advised about the dangers and deterioration resulting from health risk behaviors that accumulate through adolescence. According to Noppadol Kannigar and colleagues (B.E. 2545), who studied a population aged 12-65 years in Bangkok and surrounding provinces, there are many personal factors that relate to addictive drug use in the population. Personal factors are gender, age, in or out of the educational period, stress, and accessibility of the drug source.

Gender

Gender is also related to amphetamine addiction. Males and females are used to thinking about things in different ways, so the gender difference approach assumes not only group differences, including differential social roles or social situations (Stewart & McDermott, 2004: 520). In the social customs of Thailand, male adolescents usually have more social freedom than female adolescents. Females should give a good account of themselves. According to Pender (1996: 68), gender is an individual biological factor that is related to this, and can explain or predict a person's behavioral outcome.

Amongrat Praditsarn (B.E. 2535) found that girls had higher levels of self-care practices than boys. Noppadol Kannika (B.E. 2545) found that males in Bangkok used amphetamines more than female (71.7 and 28.3%, respectively). According to Ruangkanchanasetr and colleagues (2005), being male was a risk factor for amphetamine use. Sattah, *et al* (2002) found 350 male and 150 female students reported a history of having ever used methamphetamine. In addition, 128 male and 49 female students had positive urine test results, indicating recent methamphetamine use. Similarly, Nemoto, Operario, & Soma (2002) found that Filipino methamphetamine users tended to be male in the San Francisco Bay area, USA. Not only the amphetamine usage rate was higher among males, but the rates of solvent, tobacco and alcohol use among males were substantially higher than among females (Liu, 2001). Smith and Nutbeam (1992: 227) found that more boys than girls reported using drugs. The National Institute on Drug Abuse (2005) found that the percentages of adult male arrestees testing amphetamine-positive in 2003 were highest in Honolulu (40.3%), Phoenix (38.3%) San Diego (36.2%), and Los Angeles (28.7%). The study by Mongkon Phumjitcham and colleagues (B.E. 2539) found that male students used amphetamines more than female students, at a ratio of 20 : 1. Chumnarh Manopaibool and colleagues (B.E. 2545) revealed that positive urine tests for amphetamine use were 41.3% for male adolescent students and 19% for female adolescent students. By contrast, Isralowitz and Rawson (2005) revealed that girls used cigarettes more than boys, boys used all types of alcohol more than girls, and boys used marijuana and hashish more than girls. No differences were reported in terms of the patterns of

ecstasy, inhalants, prescription drugs, amphetamines, cocaine, crack cocaine, opium, and heroin.

Living with Parents

Adolescent students who live with their parents have fewer health risk behaviors than adolescent students who live with other people. According to Sokol and Ulbrich (1992), Mexican and Puerto Rican adolescents living in female-headed households had higher rates of drinking, drug use, and overall risk-taking behaviors than those living with both parents.

Time Programs of Vocational Schools

Adolescent vocational students had less time than mathayomsuksa students for study. Alkandari, Yacoub, & Omu (2001: 78) investigated factors indicating the initial factors for substance abuse among 237 addicts receiving treatment at the Psychological Medicine Hospital, Kuwait. Multiple regression analysis was also computed for initial significant factors. One factor, "excessive unsupervised free time" was statistically significant.

Educational Levels

Education is the major component in developing the knowledge, skills, and positive attitudes necessary for problem solving (Jalowice & Power, 1981: 10-15). It also promotes educational ability, cognition, and understanding of health information. For example, students with a high level of education will have greater cognition and understanding about health-promoting behavior, and scientific knowledge than students with a low level of education.

Amphetamine-related Experience

Adolescence is a time of emerging autonomy. Over the course of time, satisfying experiences contribute to the development of a firm self-identity, whereas unsatisfactory experiences may precipitate identity crises (Grinder, 1973).

The Institute of Medicine and The Centre for Substance Abuse Prevention (1990, 1994 cited by Yuttatri, 2001: 39-43) classified four stages of addiction, where each stage is different in terms of the frequency of using drugs, and user behaviors. Each of the four stages may be described as follows:

Stage 1 Experimental use or use for social purposes. The addict uses a drug most of the time among friends on weekends or when alone

Stage 2 Frequent use or abuse. At this stage, drugs are used more often with a frequency of many times per week

Stage 3 Addiction or dependency is the stage when users consume substances every day

Stage 4 Recovery refers to the stage of emotional change. Drug users will succeed or not depending on how far they can stop their earlier behavior relating to drugs as well as behave appropriately.

Pender's Health Promotion Model (Pender, 2002) reveals that prior related behavior leads to behavioral outcome. Consequently, it is important to encourage adolescent students to avoid experiences related to amphetamines that lead to experimental drug use.

Family Background, such as parents' occupation, parents' education, and parents' marital status were included, as follows:

Parents' Occupation

Parents' occupation is an important factor that influences survival and important elements of self-care. Ubolrat Roongruangsilp (B.E. 2540: 193) found that parents' occupation was associated with education and family income. Parents' occupation was significantly related to the health-promoting behaviors of adolescent vocational students, and students whose parents worked in government official/state enterprise had better health-promoting behaviors than other occupations. According to the study by Phyllis (cited in Kamollthip Vijitsoonthornkul, B.E. 2542: 76), adolescents from high-income families have higher levels of alcohol-drinking behavior and greater ability to pay for alcohol than adolescents from low-income families. On the other hand, Sadudee Puhongsai (B.E. 2541) found that parents' occupation was not significantly related to health-promoting behaviors among high-school students.

Parents' Education

Ellickson and colleagues (1996) found that students whose parents had higher education drank less alcohol than students whose parents had less education. On the contrary, Nopporn Panitsuk (B.E. 2523: 109) revealed that family influence affected

adolescent amphetamine use, but the occupation or education of the parent did not affect amphetamine use.

Parents' Marital Status

Parents' marital status is a factor in the family relationship. Pimpan Sillapasuwan, Chukiat Vivatvongkaserm, Pavinee Yuprasert, Marisa Haraomao (B.E. 2540) studied the effectiveness of a drug- and substance-abuse prevention program among teenage students in secondary schools in Bangkok. The research revealed that lack of parents led to factors affecting drug abuse. The study by Flewelling and Bauman (1990 cited by Diclemente, *et al*, 1996) revealed that adolescents from single-parent families are more likely to use illicit substances than those from families in which the parents live together. The latter enhance health behaviors more than families whose parents are separated, divorced, or deceased. Amphetamine use was highly correlated with the absence of a family confidant (Chumnarh Manopaibool, *et al*, B.E. 2545). According to Varunee Phurisinsit (B.E. 2531) revealed that family relationship was significantly related to adolescent drug use.

Sense of coherence

Many theories have been used to explain why people have high-risk behaviors. One theory is the salutogenic model. Stress and its effects on human health are the foci of the salutogenesis model and sense of coherence is a central construct of the model, which is postulated to have three components: comprehensibility, manageability, and meaningfulness. Antonovsky (1996a) suggested that the strength of an individual's sense of coherence, which develops throughout childhood and adolescence, stabilizes somewhere along the sense of coherence continuum approximately around the age of 30 years (Wolff & Ratner, 1999: 185).

In the Salutogenesis Model, which is based on the field of study that explores the links between stress and disease, Antonovsky (1987) suggested that salutogenesis is meant to emphasize health promotion and disease prevention rather than the pathogenic origins of disease. Health in the salutogenesis model is conceptualized as a continuum in which health-ease is at the optimal end of the continuum and disease at the least favorable end. An individual's position and direction of movement along the

continuum are determined by the interplay of opposing forces of environment threat (e.g., stresses), one's resistance (e.g., generalized resistance resources), and the strength of one's sense of coherence (Wolff & Ratner, 1999: 183).

Sense of coherence is the key determinant in the maintenance of health and prevention of health breakdown. Antonovsky (1987) theorized that individuals with a strong sense of coherence have the ability to 1) define life events as less stressful (comprehensibility), 2) mobilize resources to deal with encountered stressors (manageability), and 3) possess the motivation, desire, and commitment to cope (meaningfulness).

Antonovsky (1987) suggested in addition to the mobilization of one's generalized resistance resource for successful coping with tension, stresses, or both, depends on an individual's sense of coherence as a whole. A generalized resistance resource is any one of a broad range of resources that neutralizes the barrage of stresses and life events that individuals frequently encounter (e.g., chronic stresses, major life events, acute daily hassles) or promotes successful tension management. Examples of generalized resistance resources include material resources, knowledge or intelligence, coping strategies, social supports and ties, cultural stability, stable values and beliefs, and genetic strengths (Antonovsky, 1987; Sullivan, 1989, 1993).

The adequacy of available generalized resistance resources is an important factor in determining whether a stressful situation will result in significant weakening of the individual's sense of coherence, which in turn may have negative or neutral health effects (Antonovsky, 1987, 1996b; Sullivan 1993).

The relationship between generalized resistance resources and sense of coherence is dynamic, catalytic, and reciprocal. A strong sense of coherence enables an individual to mobilize whatever generalized resistance resources are at his or her disposal (Antonovsky, 1987). In a state of tension, a strong sense of coherence will enable a person to mobilize generalized resistance resources, which promotes the further development and reinforcement of a strong sense of coherence (Antonovsky, 1987; Sullivan 1993). At this time, various sociocultural and personal factors (e.g., social class, gender, genetic makeup, and idiosyncratic fortune) continue to influence the development of an individual's sense of coherence (Antonovsky, 1996b).

There has been a great deal of research about the sense of coherence in many fields, such as sociology, psychology, and nursing. The study was applied in many groups of people, for example, students (Carmel & Bernstein, 1989; Flannery, 1990; Patcharin Nintachan, B.E. 2538), the general population (Coward, 1996; George, 1996; Lundberg, 1997; Nyamathi, 1991; Somchit Hanucharoenkul, B.E. 2532; Wolff, 1999), osteoarthritis (Kanokporn Sucamvang, B.E. 2540), rheumatoid arthritis (Buchi, *et al*, 1998), hemiplegia (Rena, *et al*, 1996), cancer (Suteerawut, 2001), diabetes mellitus (Lundman, 1993), and caregivers, such as cancer caregivers (Chuchuen Cheewapoonphon, B.E. 2541).

Nantiya Akeathikonkit (B.E. 2542) studied the effects of individual and group counseling, based on existential therapy, on the sense of coherence of delinquent females in Banpranee training school for girls, in Bangkok. The sense of coherence of delinquent females who were exposed to individual counseling based on existential therapy was significantly higher than the control group.

The studies indicate that an explicit sense of coherence is an important factor to protect humans from serious events and unwanted situations that lead to stress, such as everyday obstacles, work stress, post-traumatic stress, illness, and complex situations in the caregiving of sick persons to protect them from negative thinking and psychological problems, e.g., depression. Furthermore, a sense of coherence helps people adjust better and perceive serious problems appropriately.

Since no study had already been conducted on the subject, this study was designed to investigate the sense of coherence related to amphetamine preventive behaviors among adolescent vocational students.

Social support

Pender (1996: 71) stated that social support is one of the essential components influencing interpersonal factors. Interpersonal influence, which is composed of norms, social support, and modeling, has been shown to affect individuals engaging in health promoting behaviors in a number of health-related behaviors. Weiss (1974 cited by Tilden, 1985: 201) derived a definition of social support from empirical experience with young adults who were coping with situational crises, in the area of single parents. He saw social support as a combination of six categories of relational

provisions: attachment/intimacy, social integration, opportunity for nurturance, reassurance of worth, reliable alliance, and availability of guidance. Attachment/intimacy refers to gaining a sense of security and place; social integration is provided through a network of relationships in which participants share concerns, information and ideas; opportunity for nurturance refers to an adult taking responsibility for the well-being of another; reassurance of worth occurs through recognition of personal competence in a social role; a sense of reliable alliance is provided primarily through relationships with kin, in which the person is assured of continuing assistance; obtaining guidance occurs during stressful situations when the individual seeks emotional support and cognitive guidance from a trustworthy and authoritative figure (Ada, 1988: 108).

Weiss's model of relational functions on social support was synthesized and utilized by Brandlt & Weinert (1981: 277) to develop the Personal Resource Questionnaire (PRQ) Part II, which is used to measure perceived social support. This instrument consists of five sub-categories: attachment/intimacy, social integration, opportunity for nurturant behavior, reassurance of worth, and availability of informational, emotional, and material assistance (Brandlt & Weinert, 1981: 277; Weinert & Tilden, 1990: 212-213).

Current theories suggest that social support may have a protective function, serve a stress-buffering or moderating role in health maintenance, and be related to positive health outcomes and illnesses. Loss or lack of social support has been linked to a variety of conditions and illnesses (Ada, 1988: 107). Social support is helpful and protective to the person receiving the supportive actions. The concept of social support has received considerable attention as a major psychosocial variable in health related research; House & French (1980: 202-218) stated that social support decreases stress and depression, the major factors that initiate drug use among adolescents.

It was also found to have a significant relationship to amphetamine-preventive behaviors among adolescents (Homchan, 2002; Nongluk Toabanleapoum, B.E. 2539; Thunya Prukshyajiva, B.E. 2542). Thus, this study aimed to explore the role of social support related to amphetamine-preventive behaviors among adolescent vocational students.

CHAPTER III
MATERIALS AND METHODS

This cross-sectional study aims to identify predictability personal factors, experience related to amphetamines, family background, sense of coherence, and social support on amphetamine preventive behaviors in adolescent vocational students. The population, samples, settings, measurements, data collection, and data analysis are described in this chapter.

The Population and Samples

The populations of this study are Thai adolescent vocational students in Bangkok Metropolis and the samples are Thai adolescent vocational students who studying at A, B, C vocational schools. Three educational settings were selected from the three highest case reports of amphetamine users among vocational schools at Bangkok in 2001. Stratified random sampling technique was used in this study. First, vocational students were classified into regular and evening program. In each program, they were stratified into junior and senior program. One class was randomly selected from both programs at each school. However, the researcher was not able to recruit students from the evening program at school B. Thus, only students in regular program in school B participated in this study as show in figure 3.

Figure 3 Flow Chart of Sampling Technique.

In this research, there are 13 variables: age, gender, living with parents, time programs of vocational schools, educational levels, experience related to amphetamines, father's occupation, mother's occupation, father's education, mother's education, parents' marital status, sense of coherence, and social support. The calculated sample size by using the formula: $n > 10 (k + 2)$; where n = the number of the sample, k = the total number of variables (Biddle & Marlin, 1987: 10) is about 150. The smallest sample size is composed of 150 students. However, in this study composed of 286 adolescent vocational students.

Research Settings

This study was conducted in Bangkok Metropolis at three sites. There were 2,831 students at the school A, 1,666 students at the school B, and 4,671 students at the school C. Vocational schools are classified into junior vocational schools and senior vocational schools. The programs at vocational schools are offered in regular hours (7 a.m. - 2 p.m.), and evening hours (3 p.m. - 6 p.m.).

Measurements

Questionnaires of this study composed of four parts:

1. Background Characteristics Questionnaire

Background Characteristics Questionnaire includes age, gender, living with parents, time programs of vocational schools, educational levels, experience related to amphetamines, father's occupation, mother's occupation, father's education, mother's education, and parents' marital status.

2. The Sense of Coherence Questionnaire

The Sense of Coherence Questionnaire was developed by Antonovsky in 1987 and translated into Thai by Somchit Hanucharoekul in B.E. 2532. It consisted of 29 items, was formatted in 7-point Likert scale. The positive items were number 2, 3, 7, 8, 10, 13, 14, 16, 18, 20, 22, 23, 26, 27, 29. The negative items were number 1, 4, 5, 6, 9, 11, 12, 15, 17, 19, 21, 24, 25, 28. Possible total scores ranged from 29 to 203. A high score on this represented high sense of coherence and categorized into three levels as follows:

- Low sense of coherence is indicated by a score <mean-1SD
- Moderate sense of coherence is indicated by a score = mean ±1SD
- High sense of coherence is indicated by a score >mean+1SD

The sense of coherence questionnaire, Antonovsky verified the content validity by 4 experts. It was used in 26 studies on Israels, Americans, Canadians, ect., and the total Cronbach's alpha coefficients were between .85 - .97. Somchit Hanucharoenkul and colleagues (B.E. 2532) studied on 30 subjects (staff nurses) and 230 subjects (educator nurses, head nurse, and supervisor nurses), the Cronbach's alpha coefficients were .85 and .90. Kransada Sutthaviresan (B.E. 2535) used the sense of coherence questionnaire translated by Somchit Hanucharoekul to measure sense of coherence in 146 critical care nurses, the Cronbach's alpha coefficient was .90. Yaowarak Klinhom (B.E. 2540) studied on 90 family caregivers with schizophrenia; the Cronbach's alpha coefficient was .94. Kanokporn Sucamvang (B.E. 2540) adapted this instrument by using 7-point rating scale and studied on 150 osteoarthitis elderly, the Cronbach's alpha coefficient was .90. Chuchuen Cheewapoonphon (B.E. 2541) studied 200 family caregivers of advanced cancer patients, the Cronbach's alpha coefficient was.83.

3. The Personal Resource Questionnaire (PRQ) Part II

The Personal Resource Questionnaire (PRQ) Part II was developed by Brandt and Weinert (1981). Brandt and Weinert developed the PRQ as a measure of multidimensional characteristics of social support. The instrument has two parts. Information about the existence of a confidant is obtained from one item in part one. The second part is based on the relationship dimensions described by Weiss (1974). Content validity assessment was conducted. An internal consistency reliability coefficient of alpha was .89 (Ada, 1988). Brandt and Weinert (1981) further reported that the reliability coefficients for the dimensional subscales raged from .61 to .77. This instrument was translated into Thai by Rukchanok Koshakri in BE 2541 for measuring social support of 275 mathayomsuksa five students, the Cronbach's alpha coefficient was .872. It consisted of 25 items used 5-point Likert scale ranging from strongly dissimilar to strongly similar. The positive items were number 1, 2, 3, 5, 6, 8, 9, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 25. The negative items were number 4, 7, 10, 16, 24.The total score is between 0-100. Higher scores indicate high social

support. Rodniam (2000) studied 445 school children of grades 7^{th} – 12^{th}, the Cronbach's alpha coefficient was.82.

The questionnaire was composed of 25 items in five subscales as follows:

(1) Social integration comprising five items (6, 8, 9, 16, 18)

(2) Assistance and Guidance comprising five items (4, 14, 15, 22, 25)

(3) Opportunity for Nurturance comprising five items (7, 12, 17, 21, 24)

(4) Self- worth comprising five items (2, 3, 5, 13, 23)

(5) Intimacy comprising five items (1, 10, 11, 19, 20)

Possible scores ranged from 0 to 100, a high score on this represented high social support. According to Rukchanok Koshakri (B.E. 2541), criteria for categorized level of social support are as follow:

- Low social support is indicated by a score <mean-1SD
- Moderate social support is indicated by a score = mean ±1SD
- High social support is indicated by a score >mean+1SD

4. Amphetamine Preventive Behaviors Questionnaire

Amphetamine Preventive Behaviors Questionnaire was modified from Kwanmuang Kaeodumkoeng's (B.E. 2541). The original instrument composed of 5 subscales: 1) refusal skills and real refusal skills experience when they were persuaded to use amphetamines, 2) free-time management, 3) activity related to student role, 4) amphetamine avoidance behavior, and 5) encourage anti-amphetamine program were used to measure amphetamine preventive behaviors among mathayomsuksa three students in Angthong province. There were steps to develop this instrument: 1) review related literature, 2) define scope and structure of the instrument, 3) generated items accordingly with the structure, 4) validated the content and appropriateness of the language, and 5) try out the instrument among 50 students. However, the reliability of this instrument was not reported. Although this instrument was used among Thai adolescent students, the whole instrument was not perfectly appropriate to be used with the subjects in this study on amphetamine preventive behaviors. Therefore, the investigator modified this instrument in order to make it more appropriate to the subjects. The modified version was reviewed by five experts. Although the original instrument used a 4-points Likert scale for subscale "amphetamine avoidance behavior" and "encourage anti-amphetamine program", it

was suggested by the experts to use a 5-points Likert scale in stead. Additionally, 2 subscales “free-time management” and “activity related to student role” were dropped out because they were not directly related to amphetamine preventive behaviors. The final version of this instrument was composed of 24 items which assessing: 1) refusal skills and real refusal skills experience when they were persuaded to use amphetamines (6 items), 2) amphetamine avoidance behavior (7 items), and 3) encourage anti-amphetamine program (11 items) as follows:

Subscale 1: Refusal skills and real refusal skills experience when they were persuaded to use amphetamines.

(1) Refusal skills were composed of 5 items. Each item offers 4 choices scored as following:

3 points = if select the choice that clearly reveals refusal skills with reasons for approach the problem solving.

2 points = if select the choice that represents refusal skills by express themselves without reasons for approach the problem solving.

1 point = if select the choice that not clearly represents refusal skills without reasonable or the reasons may be replied and may make the other problems.

0 point = if select the choice that accept addiction or take risk for amphetamine addiction.

Sum score of refusal skills ranged from 0 to 15 points. According to Kwanmuang Kaeodumkoeng (B.E. 2541), scores on amphetamine preventive behaviors scales were classified based on Bloom’s concept (Bloom, 1968: 60) as follows:

> 80 percent (12 - 15 points) = good refusal skills

60-80 percent (9 - 12 points) = fair refusal skills

< 60 percent (0 - 9 points) = poor refusal skills

(2) Real refusal skills experience was composed of 1 item, the scores ranged from 0 to 3 points (Kwanmuang Kaeodumkoeng, B.E. 2541), with 4 choices scored as follow:

3 points = if select the choice that clearly reveals real refusal skills

experience with reasons for approach the problem solving.

2 points = if select the choice that represents real refusal skills experience by express themselves without reasons for approach the problem solving.

1 point = if select the choice that not clearly represents real refusal skills experience without reasonable or the reasons may be replied and may make the other problems.

0 point = if select the choice that accept addiction or take risk for amphetamine addiction.

Subscale 2: Amphetamine avoidance behavior was composed of 7 items. It was a self-administered questionnaire using a 5-points Likert scale. All items are scored as follows: never done (4 points), sometimes (3 points), 4 - 7 times/month (2 points), 2 - 3 times/week (1 point), and always (0 point). Sum score of amphetamine avoidance behavior ranged from 0 to 28 points.

> 80 percent (22 - 28 points) = good amphetamine avoidance behavior

60-80 percent (17 – 21 points) = fair amphetamine avoidance behavior

< 60 percent (0 - 16 points) = poor amphetamine avoidance behavior

Subscale 3: Encourage anti-amphetamine program was composed of 11 items. It was a self administered questionnaire using a 5-points Likert scale. All items are scored as follows: always (4 points), often (3 points), sometimes (2 points), rarely (1 point), and never done (0 point). Sum score of encourage anti-amphetamine program ranged from 0 to 44 points.

> 80 percent (35 - 44 points) = good participation in anti-amphetamine program

60-80 percent (26 - 34 points) = fair participation in anti-amphetamine program

< 60 percent (0- 25 points) = poor participation in anti-amphetamine program

Possible overall scores of 3 parts of amphetamine preventive behaviors ranged from 0 to 90. A higher score on this represented better amphetamine preventive behaviors. The overall scores were categorized into 3 levels as follows:

- Poor amphetamine preventive behaviors is indicated by a score <mean-1SD
- Moderate amphetamine preventive behaviors is indicated by a score = mean ±1SD
- Good amphetamine preventive behaviors is indicated by a score >mean+1SD

Validity

In this study, the sense of coherence questionnaire and the personal resource questionnaire (PRQ) part II which were used among adolescent students; thus, were not re-tested for their validity. Only the amphetamine preventive behaviors questionnaire was reviewed by five experts to validate the content and appropriateness of the language. The experts were a faculty member from Department of Nursing, Ramathibodi Hospital, a faculty member from Faculty of Public Health, Mahidol University, a faculty member from Public Health Nursing Department, Mahidol University, a physician of addiction medicine from Thanyarak Hospital, and a faculty member from the Department of Vocational Education. (see Appendix F). Improvement of the research tools was made in accordance with the experts' suggestions.

Reliability

The reliability testing of the research tools was conducted at Patumwan vocational school in Bangkok. Thirty vocational students who had similar characteristics to the future subjects were asked to answer the questionnaires. The reliability testing of the sense of coherence questionnaire was 0.78, and the personal resource questionnaire (PRQ) part II was 0.91. The Chronbach alphas of amphetamine preventive behaviors questionnaire part 1 to 3 were 0.72, 0.87, and 0.85, respectively. The overall reliability of the amphetamine preventive behaviors questionnaire was 0.80. When it was used with vocational students of 280 subjects, the alpha coefficient of sense of coherence questionnaire was 0.83, the personal resource questionnaire (PRQ) part II was 0.84, and amphetamine preventive behaviors questionnaire part 1 to 3 were 0.77, 0.92, and 0.92 respectively. The Chronbach alpha of the overall amphetamine preventive behaviors questionnaire was 0.84.

Data Collection

Prior to data collection, Department of Vocational Education, the questionnaires used in this study were approved by the Ministry of education (see Appendix G). A formal letter from Faculty of Graduate Study, Mahidol University was sent to the principal of the three selected vocational schools to request their

permission for data collection. Participation in this study was voluntary. Subjects were informed about the study's objectives. Additionally, subjects were assured that their participation or non-participation would not have any effects on their course grades or evaluation. Date was collected on anonymous survey forms, and confidentiality was emphasized. Total time spent in giving instruction and filling out the questionnaire was about 30 minutes. The questionnaire was edited for completion by the investigator before ending date collection at each school visit.

Data Analysis

All data were analyzed by using SPSS 11.5 for windows.

1. Descriptive statistics: data on personal factor, family background, sense of coherence, social support, and amphetamine protective behaviors were analyzed by using frequency distribution and appropriate statistics for central tendency and variability

2. Inferential statistics :

2.1 Pearson's product moment correlations were performed to examine relationships between each of the independent variables (personal factors, family background, sense of coherence, social support) and amphetamine preventive behaviors.

2.2 Multiple regressions was performed to predict amphetamine preventive behaviors by using personal factors, family background, sense of coherence, and social support. However, prior to regression analysis, Pearson's product moment correlation coefficients were used to detect correlations among pairs of predictors of amphetamine preventive behaviors.

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CHAPTER IV
RESULTS

A cross-sectional was conducted. The purpose was to determine predictability of personal factors (age, gender, living with parents, time programs of vocational schools, and educational levels), experience related to amphetamines, family background (father's occupation, mother's occupation, father's education, mother's education, and parents' marital status), sense of coherence, social support, and amphetamine preventive behaviors in adolescent vocational students. The results were presented in 5 parts as follows,

1. Background characteristics.
2. Sense of coherence among adolescent vocational students.
3. Social support among adolescent vocational students.
4. Amphetamine preventive behaviors among adolescent vocational students.
5. Factors predicting amphetamine preventive behaviors among adolescent vocational students.

Part 1: Background Characteristics

Two hundred and eighty six adolescent vocational students at three vocational schools in Bangkok Metropolis were invited to participate in this study. With a response rate of 97.9% (6 incomplete respondents), a total of 280 adolescent vocational students were voluntarily recruited. Their age ranged from 15 to 24 years old with a mean age of 17.86 years old (S.D. = 1.69).

There were more male students (57.5%) than female students (42.5%). One hundred sixty two subjects (57.9%) were recruited from Junior vocational schools, and one hundred eighteen subjects (42.2%) from Senior vocational schools. Most of subjects (83.2%) studied in regular time program.

More than a half (65.4%) of participants responded that they lived with both parents; however, 34.6% lived with father (3.6%), mother (13.2%), siblings (14.9%), peers (0.4%), and others (live in a dormitory) (2.5%). Most subjects reported that their parents (73.2%) were marriage, while the rest were widowed, separated, or divorced. More than a half (58.8 %) reported that their father had primary school education, and about two-third (68%) reported that their mother had primary school education. Less than a half (47.1%) reported that their father's occupation was employee/worker and approximately one-third (32.6%) reported that their mother's occupation was merchant/ owns private.

One hundred and nine subjects (38.9%) reported that their father did not use any substance, whereas 245 subjects (87.5%) reported that their mother did not use any substance. The majority of subjects (84.8%) did not have experience related to amphetamines while 15.2% had.

Table 3 Background Characteristics Data (N = 280)

Data	n	(%)
Age (years)		
15	18	(6.4)
16	50	(17.9)
17	53	(18.9)
18	60	(21.4)
19	55	(19.6)
≥20	44	(15.9)
	(Mean = 17.86 S.D. = 1.691 Min = 15 Max = 24)	
Gender		
Male	161	(57.5)
Female	119	(42.5)
Educational levels		
Junior vocational level	162	(57.9)
Senior vocational level	118	(42.2)
Time programs of vocational schools		
Regular time program	233	(83.2)
Evening time program	47	(16.8)
Living with parents		
With parents	183	(65.4)
With other people		
• Father	10	(3.6)
• Mother	37	(13.2)
• Sibling	42	(14.9)
• Peers	1	(0.4)
• Other (live in a dormitory)	7	(2.5)
Father's education		
None	5	(1.8)
Primary school (<6 years)	143	(51.1)
High school (7-12 years)	57	(20.4)
Diploma (13-14 years)	19	(6.8)
Bachelor degree or higher (>16 years)	19	(6.8)

Table 3 Background Characteristics Data (N = 280) (Cont.)

Data	n	(%)
Mother's education		
None	6	(2.1)
Primary school (<6 years)	176	(62.8)
High school (7-12 years)	52	(18.6)
Diploma (13-14 years)	16	(5.7)
Bachelor degree or higher (>16 years)	9	(3.2)
Father's occupation		
Government services/ State enterprise	25	(8.9)
Agriculture	15	(6.2)
Merchant/ Owns private	43	(17.8)
Employee/ Worker	114	(47.1)
Industry	8	(2.9)
Company	27	(9.6)
Others	10	(3.6)
Mother's occupation		
Government services/ State enterprise	16	(6.2)
Agriculture	12	(4.7)
Merchant/ Owns private	84	(32.6)
Employee/ Worker	83	(32.2)
Industry	15	(5.8)
Company	15	(5.8)
Others	33	(12.8)
Parents' marital status		
Married	205	(73.2)
Others (Widowed/Separated/Divorced)	75	(26.8)
Father used substance		
Yes	171	(61.1)
No	109	(38.9)
Mother used substance		
Yes	35	(12.4)
No	245	(87.5)
Experience related to amphetamines		
Yes	34	(15.2)
No	190	(84.8)

Part 2: Sense of Coherence among Adolescent Vocational Students

The majority of adolescent vocational students had a moderate level of sense of coherence in total score (73.9%), while some of them had a high level of sense of coherence (14.3%) and a few had a low level (11.8%) and the possible scores of sense of coherence ranged from 29-203 while reported scores by the subjects range from 74-193 with a mean score of 125.86 (S.D. = 18.91) as shown in Table 4.

Table 4 Frequency and Percentage of Sense of Coherence among Adolescent Vocational Students (N = 280)

Level of sense of coherence	**n**	**%**
Low	33	11.8
Moderate	207	73.9
High	40	14.3
(Mean = 125.86, S.D. = 18.91, Range 74-193)		

Part 3: Social Support among Adolescent Vocational Students

Social support was composed five subscales. The possible overall scores of social support ranged from 0 – 100, while reported scores by the subjects range from 25-88 with a mean score of 58.13 (S.D. = 11.58) as shown in Table 5.

Table 5 Mean, Standard Deviation, and Mean Interpretation of Social Support among Adolescent Vocational Students (N = 280)

Variables	Mean	S.D.	Possible Range	Actual Range
Social support in each subscale				
- Social integration	10.09	2.77	0- 20	0 - 18
- Assistance and Guidance	12.21	3.48	0 - 20	0 - 20
- Opportunity for Nurturance	11.23	2.48	0 - 20	4 - 18
- Self-worth	11.07	2.95	0 - 20	2 - 18
- Intimacy	13.52	3.33	0 - 20	3 - 20
Over all social support	58.13	11.58	0 - 100	25 - 88

The majority of adolescent vocational students had moderate social support (68.9%), while some of them had high social support (18.6%) and a few had low social support (12.5%) as presented in Table 6.

Table 6 Frequency and Percentage of Social Support among Adolescent Vocational Students (N = 280)

Level of social support	n	%
Low	35	12.5
Moderate	193	68.9
High	52	18.6

Part 4: Amphetamine Preventive Behaviors among Adolescent Vocational Students

Amphetamine preventive behaviors composed of 3 subscales. The possible total scores of amphetamine preventive behaviors ranged from 0 - 90 while reported scores by the subjects range from 10 – 90 with a mean score of 52.19 (S.D. = 10.56) as shown in Table 7.

Table 7 Mean, Standard Deviation, and Mean Interpretation of Amphetamine Preventive Behaviors among Adolescent Vocational Students in each Aspect and over all (N = 280)

Variables	Mean	S.D.	Possible Range	Actual Range
Amphetamine preventive behaviors in each aspect				
Part 1: Refusal skills and real refusal skills experience				
- Refusal skills	11.51	2.92	0 - 15	0 - 15
- Real refusal skills experience	2.49	0.90	0 - 3	0 - 3
Part 2: Amphetamine avoidance behavior	25.68	5.10	0 - 28	0 - 28
Part 3: Encourage anti-amphetamine program	12.51	8.27	0 - 44	0 - 44
Over all amphetamine preventive behaviors	52.19	10.56	0 - 90	10 - 90

The majority of adolescent vocational students had a moderate level of amphetamine preventive behaviors (73.9%), while some of them had a poor level of amphetamine preventive behaviors (11.8%) and 14.3% of students had a good level as presented in Table 8.

Table 8 Frequency and Percentage of Amphetamine Preventive Behaviors among Adolescent Vocational Students (N = 280)

Level of over all amphetamine preventive behaviors	n	%
Poor	33	11.8
Moderate	207	73.9
Good	40	14.3

Almost a half of adolescent vocational students had fair refusal skills (45.4%), while some of them had good refusal skills (42.1%) and 12.5% had poor refusal skills.

Approximately, three-fourth (71.8%) reported that adolescent vocational students select the choice that clearly reveals real refusal skills experience with reasons for approach the problem solving while, 10.7% of adolescent vocational students select the choice that representing real refusal skills experience by express themselves without reasons for approach the problem solving and 12.5% select the choice that does not clearly represent real refusal skills experience without reasonable or the reasons may be replied and may make the other problems. However, 5% of adolescent vocational students select the choice that accepts addiction or takes risk for amphetamine addiction.

For amphetamine avoidance behavior, the majority of adolescent vocational students had good amphetamine avoidance behaviors (87.5%), while some of them had fair amphetamine avoidance behaviors (6.8%) and a few had poor amphetamine avoidance behaviors (5.7%).

For encourage anti-amphetamine program, the majority of adolescent vocational students had poorly encouraged anti-amphetamine program (92.9%), while some of them had fairly encouraged anti-amphetamine program (5.4%) and an only few had good encouraged anti-amphetamine program (1.8%).

Level of Amphetamine Preventive Behaviors of Adolescent Vocational Students whose have ever Used Amphetamine when they were Persuaded from Friends.

Approximately, one-fourth of students (22.1%) reported that they had a history of having ever been persuaded to use amphetamines and 12 subjects of them (19.35%) used amphetamines. The majority of adolescent vocational students who have ever used amphetamine had a poor level of amphetamine preventive behaviors (91.67%), and only one had a moderate level (8.33%) as presented in Table 9.

Table 9 Frequency and Percentage of Amphetamine Preventive Behaviors among Adolescent Vocational Students who have ever used amphetamine (N = 12)

Level of amphetamine preventive behaviors	**n**	**%**
Poor	11	91.67
Moderate	1	8.33
(Mean = 28.75, S.D. = 10.16, Range 10-47)		

Table 10 Pearson Correlation Coefficients among Personal Factors, Experience related to Amphetamine, Family Background, Sense of Coherence, Social Support, and Amphetamine Preventive Behaviors

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Age	1.00													
2 Gender	-.152*	1.00												
3 Living with parents	-.167**	-.118*	1.00											
4 Time programs of school	. 354**	-.058	-.026	1.00										
5 Educational levels	.726**	-.364**	-.078	.190**	1.00									
6 Experience	.108	. 212**	.026	-.018	.013	1.00								
7 Father's occupation	.018	.041	.044	-.094	.088	.042	1.00							
8 Mother's occupation	-.016	.025	.018	-.013	.070	.055	. 301**	1.00						
9 Father's education	-.057	.057	-.025	-.068	-.117	-.022	.048	.036	1.00					
10 Mother's education	-.001	.079	-.051	-.003	-.027	.074	-.039	-.067	-.024	1.00				
11 Parents' marital status	-.102	.100	.797**	-.034	.010	-.034	.048	.010	.007	-.085	1.00			
12 Sense of coherence	-.061	.003	.162**	-.029	-.009	-.127	.028	.003	-.114	-.087	.172**	1.00		
13 Social support	.080	-.131*	.035	-.018	.087	-.031	.024	.032	-.013	-.126*	.080	.601**	1.00	
14 Amphetamine preventive behaviors	-.055	-.242**	.012	-.093	.058	-. 333**	-.158**	-.203**	-.003	-.011	.010	.210**	.231**	1.00

*p<.05, **p<.01, ***p<.001 Note: gender 1 = male, 0 = female; living with parents 1 = with parents, 0 = with father, mother, sibling, peer, and others; time programs of vocational schools 1 = regular, 0 = evening; education level 1 = senior vocational students, 0 = junior vocational students; experience related to amphetamines 1 = yes, 0 = no; father's occupation 1 = government official/ state enterprise, 0 = agriculture, merchant/ owns private, employee/ worker, industry, company, and others; mother's occupation 1 = government official/ state enterprise, 0 = agriculture, merchant/ owns private, employee/ worker, industry, company, and others; parents marital status 1 = couple, 0 = single and others.

Results in Table 10 showed that the correlations among all independent factors were mild to moderate (range from -.333 to .797). Before analysis, the principle of assumptions was tested. (see Appendix H). Therefore, all of these variables were included in multiple regression analysis using a stepwise method.

Part 5: Factors Predicting Amphetamine Preventive Behaviors among Adolescent Vocational Students

The final regression model derived from a stepwise multiple regression analysis revealed that only 3 variables were significantly incorporated predictors of amphetamine preventive behaviors: experience related to amphetamines, mother's occupation, and social support ($F_{(3,187)} = 19.27$, $p<.001$). Experience related to amphetamines, the first variable entered the model, explained 12.2% of variances in the total amphetamine preventive behaviors ($p < .001$). Mother's occupation, the second variable entered the model, additionally explained 5.9% of variances in the total amphetamine preventive behaviors ($p < .001$). The last variable, social support entered the model, additionally explained 5.6% of variances in the total amphetamine preventive behaviors ($p < .001$). Consequently, the final regression model could explain 23.6 % of variances in the total amphetamine preventive behaviors as presented in Table 11.

Table 11 Predictability of Predictors on Amphetamine Preventive Behaviors among Adolescent Vocational Students by Stepwise Multiple Regression Analysis

Step	Variables	Multiple R^2	R^2Change	B	t	p
	(Constant)	41.12				
1	Experience related to amphetamines	.122		-.325	-5.07	.000
2	Mother's occupation	.181	.059	-.252	-3.92	.000
3	Social support	.236	.056	.236	3.69	.000

Overall $F_{(3,187)} = 19.27$; $p < .001$

Note: experience related to amphetamines 1 = yes, 0 = no; mother's occupation 1 = government official/ state enterprise, 0 = agriculture, merchant/ owns private, employee/ worker, industry, company, and others.

Moreover, the Durbin-Watson value was 2.11, which was nearly 2 (range from 1.5 – 2.5), so it indicated no autocorrelation of the residual or error (Kunlay Wanichbuncha, B.E. 2545: 242)

If we know the value of the experience related to amphetamines (E), mother's occupation (M), and social support (S), we can predict the adaptation of amphetamine preventive behaviors among adolescent vocational students from the regression equation as follows.

The unstandardized regression coefficient equation for calculation was:

Amphetamine preventive behaviors = 41.12 – 9.56 (E) – 11.56 (M) + .23 (S)

In conclusion, the review of literature revealed experience related to amphetamines, mother's occupation, and social support were the variables that could predict the adaptation of amphetamine preventive behaviors among adolescent vocational students. However, there were other factors related to amphetamine preventive behaviors such as gender, father's occupation, and sense of coherence but they can not predict amphetamine preventive behaviors among adolescent vocational students.

CHAPTER V
DISCUSSION

In this chapter, the findings for background characteristics, sense of coherence, social support, and amphetamine preventive behaviors among adolescent vocational students, and hypothesis testing, are discussed.

Background Characteristics

The subjects in this study were 15-24 years old, with a mean age of 17.86 years (S.D. = 1.69), which accords with other studies with vocational students (Manee Piyaanant, *et al*, B.E. 2539; Nangnoi Rittipakdee, B.E. 2544; Praisri, 2001). According to Atwater (1998), middle adolescence corresponds to high-school years, and an age of about 15-17 years, and late adolescence includes the post-high-school years, overlapping with entry into adulthood, from about age 18 to the early 20s.

Most of the subjects (83.2%) studied in regular-time programs, which may be because Thai vocational schools had a plan to stop evening programs for junior vocational students. However, some departments still continue senior vocational programs in the evening, since most senior vocational students in those departments have to work during the daytime. The study by Chou (1999) found that the most commonly abused substance was amphetamine. The lowest rate of illicit-substance use was among high-school students, followed by middle-school students, and higher among students in vocational schools and junior colleges. Adolescents studying in vocational schools are prone to drug use (Copeland, Shope, & Waller, 1996), which may be because they have more free time that leads to factors initiating drug use (Alkandari, Yacoub, & Omu, 2001: 78). Pavinee Yuprasert (B.E. 2540) also found that inappropriate student leisure time could predict drug use. However, only 15.2% of the students in this study had experience related to amphetamines.

More than a half (58.8%) of subjects reported that their fathers had primary school educations, about two-thirds (68%) of their mothers, and a few subjects (1.8%

and 2.1%) reported that their fathers and mothers had no education, respectively. This result was similar to the study by Praisri (2001: 74), which found that 50.3% of the students' parents had a primary-school education and a few (0.9%) students reported that their had parents no education

Sense of Coherence among Adolescent Vocational Students

The possible scores for sense of coherence ranged from 29 to 203. This study found that scores for sense of coherence reported by the subjects ranged from 74 to 193, with a mean of 125.86 (S.D. = 18.91). The majority of adolescent vocational students had moderate-level sense of coherence (82.9%), while a few of them had high-level sense of coherence (14.3%), and very few had low-level (2.9%). This finding agrees with the study among adolescents conducted by Kidhathong (2003), which found that the adolescents had moderate-level sense of coherence. This was also similar to the study by Nantiya Akeathikonkit (B.E. 2542: 112), which found that female adolescents who were punished for drug use had moderate-level sense of coherence.

Social Support among Adolescent Vocational Students

In this study, social support includes: 1) social integration, 2) assistance and guidance, 3) opportunity for nurturance, 4) self-worth, and 5) intimacy. Possible scores for social support ranged from 0 to 100. This study found that the scores for overall social support reported by adolescent vocational students ranged from 25 to 88, with a mean score of 58.13 (S.D. = 11.58). Social integration ranged from 0 to 18 with a mean score of 10.09 (S.D. = 2.77). Assistance and guidance ranged from 0 to 20, with a mean score of 12.21 (S.D. = 3.48). Opportunity for nurturance guidance ranged from 4 to 18, with a mean score of 11.23 (S.D. = 2.48). Self-worth guidance ranged from 2 to 18, with a mean score of 11.07 (S.D. = 2.95). Intimacy guidance ranged from 3 to 20, with a mean score of 13.52 (S.D. = 3.33). The majority of adolescent vocational students had moderate-level overall social support (71.4%), while some of them had a high-level (16.1%), and a few had low-level (12.5%). These findings were similar to the report by Rodniam (2000), Rukchanok Koshakri

(B.E. 2541), who found that social support among adolescents at a moderate level.

Amphetamine-preventive Behaviors among Adolescent Vocational Students

Amphetamine-preventive behaviors include: 1) refusal skills and real refusal skills experience when persuaded to use amphetamines, 2) amphetamine avoidance behavior, and 3) encouraging anti-amphetamine program. The possible scores for amphetamine-preventive behaviors ranged from 0 to 90. This study found that the scores for overall amphetamine-preventive behaviors reported by the adolescent vocational students ranged from 10 to 90, with a mean score of 52.19 (S.D. = 10.56). Refusal skills ranged from 0 to 15, with a mean score of 11.51 (S.D. = 2.92). Real refusal skills experience range from 0 to 3, with a mean score of 2.49 (S.D. = 0.90). Amphetamine-avoidance behavior ranged from 0 to 28, with a mean score of 25.68 (S.D. = 5.10). Encouraging anti-amphetamine program ranged from 0 to 44, with a mean score of 12.51 (S.D. = 8.27). This finding agrees with a study among adolescents regarding amphetamine-preventive behaviors conducted by Kwanmuang Kaeodumkoeng (B.E. 2541), which found that the adolescent students had moderate-level amphetamine-preventive behaviors.

In this study, approximately one-fourth of students (22.1%) reported that they had a history of having ever persuaded another to use amphetamines and 12 of them (19.35%) used amphetamines. The majority of adolescent vocational students who had ever used amphetamines when they were persuaded by friends had poor-level amphetamine-preventive behaviors (91.67%), while only one had moderate-level (8.33%). The amphetamine-preventive behavior scores of adolescent vocational students who had ever used amphetamines when they were persuaded by friends, ranged from 10 to 47, with a mean score of 28.75 (S.D. = 10.16).

According to a number of studies (ABAC Poll, B.E. 2544: 485; Kandel & Logan, 1985; Nangnoi Rittipakdee, B.E. 2544: 465; Pavinee Yuprasert, B.E. 2540; Sattah, *et al*, 2002: 801; Tricker & Connolly, 1997: 105; Varunee Phurisinsit, B.E. 2531), peer influence was a significant factor influencing the decisions of adolescent students related to drug use. Moreover, the study of Kwanmuang Kaeodumkoeng

(B.E. 2541) found that peer group was significantly related to amphetamine preventive behaviors among adolescent students.

Research Hypotheses: Personal Factors, Family Background, Sense of Coherence, and Social Support; are incorporated Predictors of Amphetamine preventive behaviors among Adolescent Vocational Students

The results of this study supported this hypothesis. The finding revealed that experience related to amphetamines, mother's occupation, and social support, could explain 23.6% of the variance in the overall amphetamine preventive behaviors of vocational students. The finding from this study demonstrated that experience related to amphetamines, mother's occupation, and social support were factors that influenced amphetamine preventive behaviors.

Experience related to amphetamines was proved to be a predictor of amphetamine preventive behavior, accounting for 12.2% of variance in the scores for total amphetamine-preventive behaviors ($p < .001$). A standardized beta weight indicated a negative relationship between experience related to amphetamines and amphetamine preventive behaviors. Adolescent vocational students without significant experience related to amphetamines had more amphetamine preventive behaviors than those with significant experience related to amphetamines. This study supports the Health Promotion Model (Pender, 2002), that prior related behavior is significantly related to health behaviors.

Mother's occupation was a predictor of amphetamine preventive behaviors, accounting for 5.9% of variance in the scores for total amphetamine preventive behaviors ($p < .001$). A standardized beta weight indicated a negative relationship between mother's occupation and amphetamine preventive behaviors. Students whose mothers worked as government officials/in state enterprises had less amphetamine-preventive behaviors than those whose mothers had other occupations. According to many studies (Bandura, 1977; Bomar, 1989; Duffy, 1991; Murray & Zentner, 1989), mothers played a major role in their children's health in a direct way by performing laying the role of caregiver, and laying the foundation for bio-psychosocial life.

Mothers taught their children about experience and personal health behavior. Mothers influenced their children's behavior by creating norms for decision-making. Nowadays, most mothers work outside, leaving the burden of child care to daycare settings (Chuthamani Eiemsupan, *et al*, B.E. 2534), so that mothers have less concern for their influence on children regarding health supervision. This may lead children to improper health behaviors and biological and psychological incompetence in some respects (Bruhn, 1988).

Many studies (Homchan, 1996; Rodniam, 2000; Rukchanok Koshakri, B.E. 2541) have revealed that social support is beneficial in effective adjustment to stress (Antonovsky, 1982: 189-190). Kaplan, Cassel, and Gore (1977: 50-51) stated that social support is satisfaction of a basic social need that derives from interaction. In this study, most students had moderate-level social support. Social support was proved to be a significant predictor of amphetamine-preventive behavior, accounting for 5.6% of variance scores for total amphetamine-preventive behaviors ($p < .001$). A standardized beta weight indicated a positive relationship between social support and amphetamine-preventive behaviors.

Although many studies (Carmel & Bernstein, 1989; Chuchuen Cheewapoonphon B.E. 2541; Coward, 1996; Flannery, 1990; Gallagher, Wagenfeld, Baro, & Haepers, 1994; George, 1996; Kransada Sutthaviresan, B.E. 2535; Lundberg, 1997; Nantiya Akeathikonkit, B.E. 2542; Nyamathi, 1991; Patcharin Nintachan, B.E. 2538; Poppius, *et al*, 1999; Somchit Hanucharoekul, Prakong Intarasombat, & Panwadee Putwatana B.E. 2532) addressed the sense of coherence as an important factor to protect humans from serious events and unwanted situations that lead to stress, a sense of coherence was not incorporated as a significant predictor of amphetamine-preventive behaviors among adolescent vocational students in this study. However, a sense of coherence had a significant relationship to amphetamine-preventive behaviors ($r = .210$; $p < 0.01$). One possible reason may be that most of the subjects had a moderate level of sense of coherence. Another reason may be the small sample size.

Therefore, these results and the findings from this study partially support the Health Promotion Model (Pender, 2002), whereby individual characteristics and experience factors (experience related to amphetamines, family background) and a

behavior-specific cognitive factor (social support) are significant factors influencing health preventive actions.

Limitations of the Study

1. Data collection at school B was not completed according to plan (2 classes in the regular-time program and 2 classes in the evening program) because all of the students from the 4 classes studied in the regular-time program.
2. The findings of this study are limited to the study population of adolescents aged 15-24 years in three vocational schools in the Bangkok Metropolis area of only one province in Thailand. Thus, the findings of this study may not be generalizable to populations other than the study population.

CHAPTER VI
CONCLUSION

In this chapter, the conclusions of the study will be presented first. The section will then be closed with the recommendations of the results for nursing action, and future nursing study.

Research Conclusion

The sample composed of 286 adolescent vocational students at junior vocational schools or senior vocational schools in three vocational schools, Bangkok. With a response rate of 97.9% (6 incomplete respondents), a total of 280 adolescent vocational students were voluntarily recruited. Data was collected through May 2003. They were recruited by a multi-stage cluster sampling technique. The instruments in this study were the sense of coherence questionnaire, the personal resource questionnaire and amphetamine preventive behaviors questionnaires. The instrument used to measure amphetamine preventive behaviors was modified from Kwanmuang Kaeodumkoeng's (B.E. 2541). SPSS/FW was used to analyze data. Results of this study are as follows:

The sample was recruited at junior and senior vocational schools. One hundred and sixty two subjects (57.9%) were in Junior vocational program, and one hundred and eighteen subjects (42.2%) from Senior vocational program. Most of the subjects (83.2%) were regular time students. There were more male students (57.5%) than female students (42.5%). Age ranged from 15 to 24 years old with a mean age of 17.86 years old (S.D. = 1.69). More than a half (65.4%) of participants responded that they lived with both parents; however, 34.6% lived with father (3.6%), mother (13.2%), siblings (14.9%), peers (0.4%), and others (live in dormitory) (2.5%). Most subjects reported that their parents (73.2%) were marriage, while the rest were widowed, separated, or divorced. More than a half (58.8 %) reported that their father had primary school education, and about two-third (68%) reported that their mother had primary school education. Less than a half (47.1%) reported that their father's

occupation was employee/worker and approximately one-third (32.6%) reported that their mother's occupation was merchant/ private business.

Two hundred and forty five subjects (87.5%) reported that their mother did not use any drugs, whereas only one hundred and nine subjects (38.9%) reported that their father did not use any drugs. Most of the subjects (84.8%) did not have experience related to amphetamines.

Sense of Coherence Questionnaire was developed by Antonovsky (1987). According to the finings the majority of adolescent vocational students had a moderate level of sense of coherence in total score (82.9%), while some of them had high level of sense of coherence (14.3%) and only a few had a low level (2.9%). The total score of sense of coherence range from 74-193, with a mean of 125.86 (S.D. = 18.91).

The Personal Resource Questionnaire (PRQ) Part II, which was developed by Brandt and Weinert (1981) to measure of multidimensional characteristics of social support. The majority of adolescent vocational students had a moderate level of social support in total score (71.4%), while some of them had a high level of social support (16.1%) and a few had a low level (12.5%). The total score of social support range from 25-88, with a mean of 58.13 (S.D. = 11.58).

Amphetamine Preventive Behaviors Questionnaire was modified from Kwanmuang Kaeodumkoeng's (B.E. 2541) and the investigator modified this instrument. The majority of adolescent vocational students had a moderate level of amphetamine preventive behaviors in total score (96.8%), while some of them had a poor level of amphetamine preventive behaviors (1.4%) and only a few had a good level (1.8%). The total score of over all amphetamine preventive behaviors range from 10-90, with a mean of 52.19 (S.D. = 10.56).

Experience related to amphetamines, mother's occupation, and social support were able to explain 23.6 percent of variances of amphetamine preventive behaviors (Overall $F_{(3,187)} = 19.27$; $p < .001$).

Recommendations for Nursing Action

Amphetamines in adolescent vocational students is one of the most important national health problems in addition to HIV infection, unprotected intercourse, being coerced to have sex, unwanted pregnancy, and sexual transmitted disease. Strong

protect can reduce the risk of amphetamine addict.

Amphetamine prevention among adolescent vocational students is very important intervention to prevent the students from using amphetamines. Findings from this study is useful for parents, teachers, vocational school/ community health nurses and other members of society in developing amphetamine prevention programs to protect the amphetamine addict.

This study revealed that about 15.2% of the adolescent vocational students had some experience related to amphetamines and this experience significantly related to poorer amphetamine preventive behaviors. Thus, the every student should be provided with life skill training so that they can avoid initial use of amphetamines before the onset started.

Drug-free school policy should be seriously taken into consideration of school administrative board. Collaborations between school and home should be encouraged. The school health nurses should have strategy to bring about participations from teachers, students and parents.

Giving their family members information about amphetamine preventive behaviors is essentially required for effective amphetamine prevention program. Social support was also significantly higher among the better amphetamine preventive behaviors. Thus, social support from family, friends, and teachers should be enhanced.

Recommendation for Future Study

1. Experimental research design or action research technique should be conducted using an intervention enhancing social support from peer group to enforce amphetamine preventive behaviors.
2. Amphetamine abuse is a complicated problem caused by various factors. Family is the closest to and most important unit for adolescents. Family should be provided with knowledge about amphetamines and how to support their child to have amphetamine preventive behaviors skills.
3. Amphetamine preventive behaviors skills training program is suggested for further study, such as life skill training, refusal skill training etc.

BIBLIOGRAPHY

Ada, M. L. (1998). Conceptualizations and measurement instruments. In Frank-Stromborg, M. (Ed.). Insrtuments for clinical nursing research. California: Appleton & Lange.

Alkandari, F. H., Yacoub, K., & Omu, F. (2001). Initiation factors for substance abuse. Journal of Advanced Nursing, 34(1), 78-85.

Ando, E., Hayashida, M., Nihira, M., Yamada, T., & Ohno, Y. (2004). GC-MS analysis of methamphetamine and amphetamine in hair of Thai drug addicts. Nihon Arukoru Yakubutsu Igakkai Zasshi, 39(3), 168-179.

Antonovsky, A. (1982). Health, stress, and coping. San Francisco: Jossey-Bass.

_____ (1987). Unraveling the mystery of health: How people manage stress and stay well (4th ed). San Francisco: Jossey-Base.

_____ (1996a). The sense of coherence: An historical and future perspective. Israel Journal of Medicine Sciences, 32, 170-178.

_____ (1996b). The salutogenic model as a theory to guide health promotion. Health Promotion International, 11, 11-18.

Atlanta, Inc. (2000). Referral service for drug addiction treatment: methamphetamine information. Retrieved December 18, 2000. http// www.addiction.com.

Atwater, E. (1992). Adolescence. (3rd ed.). MJ: Prentice Hall.

Bandura, A. (1977). Social learning theory. New Jersey: Prentice-Hall.

Berkman, L. F. & Glass, T. (2000). Social Intergration, Social networks, Social support, and Health. in L. F.Berkman & I. K. Kawachi. Social Epidemiology. New York: Oxford University Press.

Biddle, B.I. & Marlin, M.M.(1987). Causality, confirmation, credibility, and structural equation modeling. Child development, 58, 4-17.

Bomar, P.J. (Ed.) (1989). Nurses and family health promotion: Concepts assessment and interventions. Baltimore: Williams and Wilkins.

Brandt, P. A. & Weinert, C. (1981). The PRQ—A Social Support Measure. Nursing Research, 30(5), 277-280.

Buchi, S., *et al*. (1998). Sense of coherence-A protective factor for depression in rheumatoid arthritis. The Journal of Rheumatology, 25(5), 869-875.

Bukstein, O.G. (1995). Adolescent substance abuse: Assessment, prevention, and treatment. New York: John Wiley & Sons.

Callaghan, P. & Morrissey, J., (1993). Social support and health: a review. Journal of advanced nursing, 18(2), 203-210.

Carmel, S., *et al*. (1991). Life events, sense of coherence, and health: Gender differences on the Kibbutz. Social Science & Medicine, 32(10), 1089-1096.

Chou, P. (1999). Time trend of substance use among adolescent students in Taiwan, 1991-1996. Jouanal Formos Med Assoc, 98(12), 827-831.

Cohen, S. & Syme, S. L. (1985). Issue in the Study and Application of Social Support in S, Cohen & S. L. Syme. Social Support and Health, Florida: Academic Press.

Cohen, S. & Wills, T. (1985). Stress, social support and buffering hypothesis. Psychological Bulleting, 98, 310-357.

Copeland, L. A., Shope, J. T., & Waller, P. F. (1996). Factors in adolescent drinking/ driving: binge drinking, cigarette smoking, and gender. Journal of School Health, 66 (7), 254-260.

Coward, D.D. (1996). Self-transcendence and correlates in a health population. Nursing Research, 45(2), 116-121.

Desu, M.M., & Raghavarao, D. (1990). Sample size methodology. San Diego, CA: Academic Press.

Duffy, M.E. (1991). Health promotion in the family current finding and directivous for nursing research. In K.A. Saucier (Ed.), Perspective in family and Community Health. St. Louis: Mosby Year Book.

Dusenbury, L., Khuri, E. & Millman, R.B. (1992). Adolescent substance abuse: A sociodevelopmental perspective. In J.H. Lowinson, P. Ruiz, R.B. Millman & J.G.

Ellickson, P.L., McGuigan, K.A., Adams, V., Bell, R.M., & Hays, R.D. (1996). Teenagers and alcohol misuse in the United States. Addiction, 91(10), 1487-1503.

Ferrini, A. F. & Ferrini, R. L. (1993). Health in the Later Years (2nd ed.). Missouri: McGraw-Hill.

Flannery, R.B. & Flannery, G.J. (1990). Sense of coherence, life stress, and psychological distress: A prospective methodological inquiry. Journal of Clinical Psychology, 46(4): 415-420.

Franks, M. M. & Stephens, M. A. P. (1996). Social Support in the Context of Caregiving: Husbands' Provision of Support to Wives Involved in Parent Care. Journal of Gerontology: Psychological Sciences, 51B (1), 43 - 52.

Gallagher, T.J., Wagenfeld M.O., Baro, F., & Haepers, K. (1994). Sense of coherence, coping and caregiver role overload. Social Science & Medicine, 39(12), 1615-1622.

George, V.D. (1996). Field-workers' sense of coherence and perception of risk when making home visits. Public Health Nursing, 13(4), 244-252.

Gibson, P. R., Cheavens, J., & Warren, M. L. (1998). Social Support in Persons with Self-Reported Sensitivity to Chemicals. Research in Nursing & Health, 21, 103-115.

Grinder, R.E. (1973). Adolescence. United Stated of America: Oxford University Press.

Gunnarsson, M., Fahlke, C., & Balldin, J. (2004). Adolescents who have tried illicit drugs and experienced psychiatric symptoms seldom seek professional help. A pilot study of 18-year old high school students in an urban district. Lakartidningen, 101(14), 1280-1282.

Hall, A, & Wellman, B. (1985). Social Networks and Social Support. in S. Cohen & S. L. Syme. Social Support and Health. Florida: Academic Press.

Homchan, Y. (2002). An application of Protection Motivation Theory and social support for Amphetamine prevention among grade-6 students in Muang district, Nakonnayok province. Master of Science (Public Health), Major in Health Education and Behavioral sciences, Faculty of Graduate Studies, Mahidol University.

Hongrapipat, R. (1998). The Comparison of the Effectiveness between Self-Efficacy Theory and Social Support as Applied to Health Education Program on Behavioral Modification among Type 2 Diabetes Mellitus Patients Attending Services at Sikhoraphum Hospital of Surin Province. Masters' Thesis in Health Education and Behavioral Science (Public Health), Faculty of Graduate Studies, Mahidol University.

House, J. S. & Kahn, R. L. (1985). Measures and Concepts of Social Support in S, Cohen & S. L. Syme. Social Support and Health, Florida: Academic Press.

Hubbard, P., Muhlenkamp, A. F., & Brown, N. (1984). The Relationship Between Social Support and Self-Care Practices. Nursing Research, 33(5), 266-270.

Isralowitz, R. & Rawson, R. (2005). Gender differences in prevalence of drug use among high risk adolescents in Israel. Addict Behavior, Jun 9, [Epub ahead of print].

Jacobson, D.E. (1986). Types and Timing of Social Support. Journal of Health and Social Behavior, 27, 250-264.

Jalowice, A., & Power, M.J. (1981). Stress and coping in hypertension and emergency room patients. Nursing Research, 10, 10-15.

Kandel, D. B., & Logan, J.A. (1984). Patterns of drug from adolescent to early adulthood: I. Periods of risk initiation, continued use. Science, 187, 818-821.

Kane, C. F. (1988). Family social support: Toward a conceptual model. Advance Nursing Science, 10(2), 18-25.

Kaplan, B. H., Cassel, J. C., & Gore, S. (1977). Social Support and Health. Medical Care, 15(5), 47-58.

Kidhathong, S. (2003). Hope, Sense of Coherence, and Quality of Life of Adolescent Students of Parents with HIV/ AIDS. Master of nursing science (Psychiatric And Mental Health Nursing), Faculty of Graduate Studies, Mahidol University.

Kirscht, J. P., Becker, M. H., & Eveland, J. P. (1976) Psychological and Social Factors as Predictors of Medical Behavior. Medical Care, 14(5), 422-431.

Kitrungrote, L. (2000). Severity of Side Effects, Self-esteem, Social Support, and Role Adaptation of Cervical Cancer Patients Receiving Radiation Therapy. Masters' Thesis in Adult Nursing (Adult Nursing), Faculty of Graduate Studies, Mahidol University.

Kulsudjarit, K. (2004). Drug problem in southeast and southwest Asia. Annals of the New York Academy Science, 1025, 446-457.

Langrod (Eds.), Substance abuse: A comprehensive textbook (2nd ed.) Baltimore: Williams & Wilkins.

Lhimsoonthon, B. (2000). The Relationships between Resilience factors, Perceived life adversities, Personal characteristics, and Substance use behavior of Slum adolescents lingering in a public playground, Master of nursing science (Community Health Nursing), Faculty of Graduate Studies, Mahidol University.

Liu, Z., *et al.* (2001). The use of psychoactive substances among adolescent students in an area in the south-west of China, Addiction, 96 (2), 247-250.

Lundberg, O. (1997). Childhood conditions, sense of coherence, social class, and adult ill health: exploring their theoretical and empirical relations. Social Science & Medicine, 43(2), 163-171.

Lundman, B. & Norberg, A. (1993). The significance of a sense of coherence for subjective health in person with insulin-dependent diabetes. Journal of Advanced Nursing, 18, 381-386.

Muhlenkamp, A. & Sayles, J. A. (1986). Self-Esteem, Social Support, and Positive Health Practices. Nursing Research, 35(6), 334-338.

Munro, B.H. (1997). Statistical methods for health care research. (3rd ed.) Philadelphia: J.B. Lippincott.

Murray, R.B., Zentner, J.P. (1989). Nursing concepts for health promotion. New York: Prentice Hall.

Neeskul, N. (2001). Development of the service model for amphetamine addicted youths in Thanyarak Hospital. Doctoral dissertation, Faculty of Graduate Studies, Mahidol University.

Nemoto, T., Operario, D, & Soma, T. (2002). Risk behaviors of Filipino methamphetamine users in San Francisco: implications for prevention and treatment of drug use and HIV. Public Health Report, 117, Suppl 1: S30-38.

Norbeck, J. S. (1982). The Use of Social Support in Clinical Practice. JPNMHS, 20, (12):22-29.

Norbeck, J. S., Lindsey, A. M., & Carrieri, V. L. (1981). The Development of an Instrument to Measure Social Support. Nursing Research, 30(5): 264-269.

Nyamathi AM. (1991). Relationship of resources emotional distress, somatic complaints, and high-risk behaviors in drug recovery and homeless minority women. Research in Nursing & Health, 14, 269-277.

Panitrat, R. (2001). The relationship among dysfunctional attitudes, learned resourcefulness, and amphetamine use in Thai adolescents. Doctoral dissertation, Frances Pyne Bolton School of Nursing, Case Western Reserve University.

Pathomneela, W. (2000). Factors affecting the male adolescence's drug use (amphetamine) in the Medical Correctional Institution in Pathumthani. Master's thesis in criminology and criminal justice, Faculty of Graduate Studies, Mahidol University.

Pender, N. J. (1996). Health Promotion in Nursing Practice, Connecticut: Appleton & Lange.

Pender, N. J. (2002). Health Promotion in Nursing Practice, New Jersey: Pearson Education Inc.

Polit, D.F., & Hungler, P. (1999). Nursing research Principles and Method. (6^{th} ed.). Philadelphia: Lippincott.

Poppius, E., *et al*. (1999). The sense of coherence, occupation and the risk of coronary heart disease in the Helsinki Heart Study. Social Science & Medicine, 49, 109-120.

Prasatkettkan, W. (2001). The Relationship between Selected Basic Conditioning Factors, Self-efficacy, Social Support and Self-care Behavior in The Thai Muslim Elderly in The Bangkok Metropolitan Area. Masters' Thesis in Public Health Nursing (Public Health), Faculty of Graduated Studies, Mahidol University.

Praisri, J. (2001). Factors Influencing Health Risk Behaviors among Adolescent Students. Master of nursing science (Community Health Nursing), Faculty of Graduate Studies, Mahidol University.

Prommajit, P. (2001). Preventive strategies in a family context for Methamphetamines abuse: A case study of study of students in public secondary schools in one northern province. Doctoral dissertation, Faculty of Graduate Studies, Mahidol University.

Raymondo, J. C. (1999). Statistics Analysis in the Behavioral Sciences. Boston: McGraw-Hill College.

Rena, F., Moshe, S., Abraham, O. (1996). Couples' adjustment to one partner's disability: The relationship between sense of coherence and adjustment. Social Science & Medicine, 43(2), 163-171.

Rodniam, J. (2000). The relationships among life events, social support, and self-esteem of adolescents in a charity boarding school. Master of nursing science (Community Health Nursing), Faculty of Graduate Studies, Mahidol University.

Roth, P. (1989). Family social support. In P. J. Bomar (Ed.). Nurse and family health promotion : Concepts, assessment, and intervention. Mexico: W. B. Suanders.

Ruangkanchanasetr, S. *et al*. (2005). Youth risk behavior survey: Bangkok, Thailand. Journal of Adolescent Health, 36(3), 227-235.

Sattah, M.V., *et al*. (2002). Prevalence of and risk factors for methamphetamine use in northern Thai youth: results of an audio-computer-assisted self-interviewing survey with urine testing. Addiction, 97 (7), 771-772.

Smith, C. & Nutbeam, D. (1992). Adolescent drug use in Wales. British Journal Addict, 87(2), 227-233.

Sokol, J.S. &Ulbrich, P.M. (1992). Family structure adolescent risk taking behavior: comparison of Mexican, Cuban, and Puerto Rican American. Inter Journal Addiction, 27(10), 1197-1209.

Sotthiyapai, S. (2002). Effects of Group Self-Control Skill Training on Self-Control Behaviors in Juvenile Delinquents with Amphetamine use. Master of nursing science (Psychiatric and Mental Health Nursing), Faculty of Graduate Studies, Mahidol University.

Stansfeld, S. A. (1999). Social support and social cohesion. in M. Marmot and R. G. Wilkinson. Social determinant of health. New York: Oxford University Press.

Stewart A.J.,& Mcdermott, C. (2004). Gender in psychology. Annual review psychology, 55, 519-544

Streiner, D. L. & Norman, G. R. (1991). Health Measurement Scales: A Practical Guide to their Development and Use. New York: Oxford University Press.

Suteerawut, N. (2001). A study of Sense of Coherence, Perceived benefits of action in Health-promotion and Health-promoting behaviors on colorectal cancer patients, Master of Nursing Science (Adult Nursing), Faculty of Graduate Studies, Mahidol University.

Tabachinick, G.B., & Fidell, S.L. (1996). Using multivariate statistics. (3rd ed.). New York: Harper Collins College publishers Inc.

Tasanachaikul, N. (1997). A spread of drug among children and youths. Bangkok: The Committee of the nation research council.

Taylor, S.E. (1991). Health Psychologic. (2nd ed). United States of America: Me Graw Hill, Inc.

Tiden, V. P. (1985). Issues of Conceptualization and Measurement of Social Support in Construction of Nursing Theory. Research in Nursing and Health, 8, 199-206.

Tricker, R. & Connolly, D. (1997). Drugs and the college athlete: an analysis of the attitudes of student athletes at risk. Journal Drug Education, 27(2), 105-119.

Uutela, A., & Tuomilehto, J. (1992). Changes in disease patterns and related social trends. Social Science Medicine, 35(4), 389-399.

Vakahili, H.F., Harrison, R.S. & Janzen, F, V. (2000). The influence of family-based risk and protective factors on adolescent substance use. Journal of Family Social Worker, 4(1), 21-34.

Van, G.F., *et al*. (2001). Rapid assessment of sexual behavior, drug use, human immunodeficiency virus and sexually transmitted diseases in northen Thai youth using. Pediatrics, 108(1), 13.

Weinert, C. (1987). A Social Support Measure: PRQ85. Nursing Research, 36(5), 273- 277.

Weinert, C. (1988). Measuring social support: Revision and further development of the personal resource questionnaire. In. C. F. Walze & O. L. Strickland. (Eds.), Measurement in Nursing Research, Philadelphia: F. A. Davis.

Weinert, C. & Tilden, V. P. (1990). Measures of Social Support: Assessment of Validity. Nursing Research, 39(4), 212-216.

Wills, T. H. & Shinar, O. (2000) Measuring Perceived and Received Social Support in S. Cohen, L. G. Underwood, & B. H. Gottlieb. Social Support Measurement and Intervention. New York: Oxford University Press.

Wolff, AC. & Ratner, PA. (1999). Stress, social support, and sense of coherence. Western Journal of Nursing Research, 21 (2), 182-197.

Wright, JD. & Pearl, L. (1995). Knowledge and experience of young people regarding drug misuse, 1969-94. British Medical Journal, 310 (6971), 20-24.

Yang, M.S., Yang, M.J., Liu, Y.H., & Ko, Y.C. (1998). Prevalence and related risk factors of licit and illicit substances use by adolescent students in southern Taiwan. Public Health, 112(5), 347-352.

Yuttatri, P. (2001). The effects of the application of a relapse prevention program on self-control and remission from Methamphetamine dependence among teenagers. Doctoral dissertation, Faculty of Graduate Studies, Mahidol University.

IN THAI

กนกพร สุคำวัง. (2540). (Kanokporn Sucamvang B.E 2540). แบบจำลองเชิงสาเหตุของคุณภาพชีวิตผู้สูงอายุโรคข้อเข่าเสื่อม. วิทยานิพนธ์พยาบาลศาสตร์ดุษฎีบัณฑิต บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

กมลทิพย์ วิจิตรสุนทรกุล. (2542). (Kamolthip Vijitsoonthornkul B.E. 2542). ปัจจัยที่มีอิทธิพลต่อการดื่มเครื่องดื่มแอลกอฮอล์ของนักเรียนอาชีวศึกษาชายในกรุงเทพมหานคร. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกสุขศึกษาและพฤติกรรมศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

กังสดาล สุทธวิรีสรรค์. (2535). (Kransada Sutthaviresan B.E. 2535). ความเข้มแข็งในการมองโลก แรงสนับสนุนทางสังคมและความเหนื่อยหน่ายของพยาบาลในหออภิบาลผู้ป่วยหนัก. วิทยานิพนธ์ปริญญาพยาบาลศาตรมหาบัณฑิต สาขาการพยาบาล บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

กัลยา วานิชย์บัญชา. (2545). (Kunlay Wanichbuncha B.E. 2545). การใช้ SPSS for Windows ในการวิเคราะห์ข้อมูล. กรุงเทพมหานคร : ซี เค แอนด์ เอส โฟโต้สตูดิโอ.

ขวัญเมือง แก้วดำเกิง. (2541) . (Kwanmuang Kaeodumkoeng B.E.2541). ปัจจัยส่งเสริมพฤติกรรมป้องกันการเสพยาบ้าของนักเรียนมัธยมศึกษาตอนต้น จังหวัดอ่างทอง. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) วิชาเอกสุขศึกษาและพฤติกรรมศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

จุฑามณี เอี่ยมสุพรรณ และคณะ (Chuthamani Eiemsupan and colleagues B.E. 2534). การวิจัยทางการพยาบาลเพื่อการพัฒนาสังคมและวิชาชีพ. ใน มิติการปฏิบัติการพยาบาลในทศวรรษหน้า (หน้า 207-221). กรุงเทพ: รุ่งเรืองธรรม.

ชมนาถ มโนไพบูลย์ และคณะ. (2545). (Chumnarh Manopaibool and colleagues B.E. 2545). ความชุกและปัจจัยเสี่ยงของการใช้สารเมทแอมเฟตามีนในวัยรุ่นไทย จังหวัดเชียงราย: ผลการศึกษาจากการตอบแบบสอบถามผ่านจอคอมพิวเตอร์และการตรวจปัสสาวะ. วารสารวิชาการสาธารณสุข, 11 (2): 188-198.

ชูชื่น ชีวพูนผล.(2541). (Chuchuen Cheewapoonphon B.E. 2541). อิทธิพลของภาวะสุขภาพของผู้ป่วยความเข้มแข็งในการมองโลกของญาติผู้ดูแล และความรู้สึกเป็นภาระในการดูแลต่อการปรับตัวของญาติผู้ดูแลผู้ป่วยมะเร็งระยะลุกลาม.วิทยานิพนธ์ปริญญาพยาบาลศาสตรดุษฎีบัณฑิต (พยาบาลศาสตร์) บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ชาญคณิต ก.สุริยามณี และคณะ. (2530). (Chankanit Suriyamanee and colleagues B.E. 2530). ปัจจัยที่มีผลต่อการติดยาเสพย์ติดซ้ำของวัยรุ่น. ใน สรุปย่อผลงานวิจัยยาเสพติด. หน้า 66-68. กองวิชาการและวางแผนสำนักงาน คณะกรรมการป้องกันและปราบปรามยาเสพติด สำนักนายกรัฐมนตรี. กรุงเทพฯ: สำนักนายกรัฐมนตรี.

ธิดา กิจจาชาญชัยกุล. (2542). (Thida Kijjachanchaikul B.E. 2542). การประยุกต์ทฤษฎีความสามารถตนเองร่วมกับแรงสนับสนุนทางสังคมในการดูแลสุขภาพตนเองของผู้ป่วยความดันโลหิตสูงชนิดไม่ทราบสาเหตุของโรงพยาบาลขามทะเลสอจังหวัดนครราชสีมา. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกสุขศึกษาและพฤติกรรมศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ธำรง ทัศนาญชลี. (2538). (Thamrong Tasananchalee B.E. 2538). การบำบัดรักษาผู้ติดยาและสารเสพติด: ระบบรูปแบบและระบาดวิทยา. วารสารกรมการแพทย์, 20(10), 373-379.

ธัญญา พฤกษยาชีวะ. (2542). (Thunya Prukshyajiva B.E. 2542). การประยุกต์ทฤษฎีแรงจูงใจเพื่อป้องกันโรคร่วมกับแรงสนับสนุนทางสังคมในการป้องกันการเสพย์แอมเฟตามีนของนักเรียนมัธยมศึกษาตอนต้นสังกัดกรมสามัญศึกษาจังหวัดลพบุรี. วิทยานิพนธ์ปริญญาสาธารณสุขศาสตรมหาบัณฑิต สาขาวิชาสุขศึกษาและพฤติกรรมศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

นงลักษณ์ โตบันลือภพ.(2539). (Nongluk Toabanleapoum B.E.2539). การประยุกต์ทฤษฎีแรงจูงใจในการป้องกันโรค ร่วมกับแรงสนับสนุนทางสังคมเพื่อป้องกันการพึ่งยาแอมเฟตามีนของนักเรียนมัธยมศึกษาตอนต้น อำเภอเมือง จังหวัดลำปาง. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาสุขศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

นพดล กรรณิกา และคณะ. (2545). (Noppadol Kannigar and colleagues B.E. 2545) ประมาณการจำนวนผู้เกี่ยวข้องกับยาเสพติดในกรุงเทพมหานครและปริมณฑล. หนังสือเรื่องย่อการประชุมวิชาการสารเสพติดระดับชาติ ครั้งที่ 1 (25-27 ก.ย.2545).

นพพร พานิชสุข. (2523). (Nopporn Panitsuk B.E. 2523). อิทธิพลของครอบครัวที่มีผลต่อการใช้ยากระตุ้นประสาทประเภทแอมเฟตามีนของเด็กวัยรุ่น. วิทยานิพนธ์ปริญญาสังคมสงเคราะห์ศาสตร์มหาบัณฑิต คณะสังคมสงเคราะห์ศาสตร์ มหาวิทยาลัยธรรมศาสตร์.

นันทิยา เอกอธิคมกิจ. (2542). (Nantiya Akeathikonkit B.E. 2542). การเปรียบเทียบผลของการให้คำปรึกษาแบบภวนิยมเป็นรายบุคคลและเป็นกลุ่มเพื่อพัฒนาความเข้มแข็งในการมองโลกของเยาวชนหญิงในสถานฝึกและอบรมเด็กและเยาวชนหญิงบ้านปรานี กรุงเทพมหานคร. วิทยานิพนธ์ปริญญาการศึกษามหาบัณฑิต (วิชาเอกจิตวิทยาการแนะแนว) บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ.

แน่งน้อย ฤทธิภักดี. (2544). (Nangnoi Rittipakdee B.E.2544). การดำเนินการป้องกันและแก้ไขการแพร่ระบาดของยาบ้า ในโรงเรียนอาชีวศึกษา กรุงเทพมหานคร. วิทยานิพนธ์ปริญญาศึกษาศาสตรมหาบัณฑิต (การบริหารการศึกษา) สาขาการบริหารการศึกษา ภาควิชาการศึกษา มหาวิทยาลัยเกษตรศาสตร์.

พัชรินทร์ นินทจันทร์. (2538). (Patcharin Nintachan B.E. 2538).ความสัมพันธ์ระหว่างความเข้มแข็งในการมองโลกกับความวิตกกังวลประจำตัวของนักศึกษาพยาบาลโรงเรียนพยาบาลรามาธิบดี. วิทยานิพนธ์พยาบาลศาสตรมหาบัณฑิต สาขาวิชาสุขภาพจิตและการพยาบาลจิตเวช บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่.

พิมพ์พรรณ ศิลปสุวรรณ ชเกียรติ วิวัฒน์วงศ์เกษม ภาวิณี อยู่ประเสริฐ และมาริสา หะลาเมาะ. (2543).(Pimpan Sillapasuwan, Chukiat Vivatvongkaserm, Pavinee Yuprasert, Marisa Haraomao B.E. 2543). รายงานการวิจัยเรื่องประสิทธิผลของการจัดโครงการป้องกันการใช้ยาและสารเสพติดในกลุ่มนักเรียนวัยรุ่น กรุงเทพมหานคร. ทุนสนับสนุนการวิจัยจากมหาวิทยาลัยมหิดล ประเภท ข ปี2540. กรุงเทพ: มหาวิทยาลัยมหิดล.

ภาวิณี อยู่ประเสริฐ. (2540). (Pavinee Yuprasert B.E. 2540). ปัจจัยที่มีอิทธิพลต่อการใช้สารเสพติดของนักเรียนวัยรุ่นในกรุงเทพมหานคร. วิทยานิพนธ์ปริญญาสาธารณสุขศาสตรมหาบัณฑิต (วิชาเอกพยาบาลสาธารณสุข) บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

มงคล ปลื้มจิตรชม และคณะ. (2539). (Mongkon Phumjitcham and colleagues B.E. 2539). ปัจจัยที่มีผลต่อพฤติกรรมการเสพยาม้าของนักเรียนมัธยมศึกษาตอนปลาย จังหวัดนครปฐม. วารสารวิชาการสาธารณสุข, 5(4), 526-534.

มงคล มณฑา. (2540). (Mongkon Montha B.E. 2540). การใช้กระบวนการทางจิตวิทยาในการบำบัดรักษาผู้ติดยาเสพย์ติด. ใน เอกสารทางวิชาการประกอบการศึกษาถึงวิธีการและแนวทาง และเทคนิคต่างๆเกี่ยวกับการนำวิธีการชุมชนบำบัด ปรับประยุกต์ใช้ในกระบวนการยุติธรรม. หน้า 119-141. กองแพทย์ สถานพินิจเด็กและเยาวชนกลาง ศาลเยาวชนและครอบครัวกลาง กระทรวงยุติธรรม.

มานิตย์ อรุณากูร. (2541). (Manit Arunakul B.E.2541). ประวัติความเป็นมาของสารออกฤทธิ์ต่อจิตประสาท ใน สุชาติ เลาบริพัตร (บรรณาธิการ), คู่มือแนวทางการดำเนินงานแก้ไขปัญหาการระบาดของยาบ้า ด้านการแพทย์และสาธารณสุข (7-15). กรุงเทพ: โรงพิมพ์ชุมนุมสหกรณ์ การเกษตรแห่งประเทศไทย.

มานี ปิยะอนันต์ และคณะ.(2539). (Manee Piyaanant and colleagues B.E. 2539). การศึกษาการใช้แอมเฟตามีนในกลุ่มนักเรียนอาชีวชาย. สารศิริราช, 48 (1): 220-226.

เยาวลักษณ์ กลิ่นหอม. (2540). (Yaowarak Klinhom B.E. 2540). ความสัมพันธ์ระหว่างคุณภาพชีวิตและความเข้มแข็งในการมองโลกของสมาชิกครอบครัวผู้ป่วยจิตเภท. วารสารวิทยาลัยพยาบาลราชบุรี. 9(2):32-37.

รักชนก คชไกร.(2541). (Rukchanok Koshakri B.E.2541). ความเครียด บุคลิกภาพแบบเข้มแข็ง แรงสนับสนุนทางสังคม กับพฤติกรรมการเผชิญปัญหาของวัยรุ่น : นักเรียนชั้นมัธยมศึกษาปีที่ 5 สังกัดกรมสามัญศึกษา กรุงเทพมหานคร. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกอนามัยครอบครัว บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

วารุณี ภู่ริสินสิทธิ์. (2531). (Varunee Phurisinsit B.E. 2531). การกระทำผิดของเด็กและเยาวชน : แนวคิดทางสังคมวิทยา. กรุงเทพมหานคร: โอ. เอส. พริ้นติ้งเฮาส์.

สดุดี ภูห้องไสย. (2541). (Sadudee Puhongsai B.E. 2541). ปัจจัยที่มีผลต่อพฤติกรรมส่งเสริมสุขภาพของนักเรียนชั้นมัธยมศึกษาตอนปลาย อำเภอเมือง จังหวัดขอนแก่น. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกอนามัยครอบครัว บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สิทธิณัฐ ประพุทธนิติสาร และ ศันสนีย์ อ่อนท้วม. (2545). (Sittinut Phaputnitisarn & Sansanee Ounttuam B.E. 2545). สถานภาพระดับพื้นที่ และกลุ่มประชากรการวิเคราะห์องค์ความรู้ประเด็นเด็กและเยาวชนกับยาเสพติด.หนังสือเรื่องย่อการประชุมวิชาการสารเสพติดระดับชาติ ครั้งที่ 1 (25-27 ก.ย.2545).

สำนักงานคณะกรรมการการป้องกันและปราบปรามยาเสพติด(2539). (Office of the Narcotics Control Board B.E. 2539). ผลงานวิจัยที่เกี่ยวข้องกับการลดอุปสงค์ในการใช้ยาเสพติด พ.ศ.2532-2539. กรุงเทพมหานคร: สำนักนายกรัฐมนตรี.

สำนักงานคณะกรรมการการป้องกันและปราบปรามยาเสพติด(2544). (Office of the Narcotics Control Board B.E. 2544). สถานการณ์ยาเสพติดประเทศไทย. กรุงเทพมหานคร. (อัดสำเนา).

สำนักงานคณะกรรมการการป้องกันและปราบปรามยาเสพติด(2545). (Office of the Narcotics Control Board B.E. 2545). สถานการณ์ยาเสพติดประเทศไทย. กรุงเทพมหานคร. (อัดสำเนา).

สำนักงานคณะกรรมการการป้องกันและปราบปรามยาเสพติด(2545). (Office of the Narcotics Control Board B.E. 2545). ความรู้เรื่องยาเสพติด. กรุงเทพมหานคร. (อัดสำเนา).

สำนักงานสถิติแห่งชาติ(2539). (National Statistical Office B.E. 2539). รายงานสถิติการใช้ยาเสพติด. กรุงเทพมหานคร. (อัดสำเนา).

สำนักวิจัยเอแบค-เคเอสซีอินเตอร์เน็ต (เอแบคโพลล์)(2544). (ABAC's Pole B.E. 2544). ประมาณการจำนวนนักเรียน-นักศึกษาที่เกี่ยวข้องสิ่งเสพติด: กรณีศึกษาตัวอย่างนักเรียน-นักศึกษาจากสถาบันการศึกษาทุกสังกัดทั่วประเทศ.ในสถานการณ์ยาเสพติด. หน้า 1-6. สำนักงานคณะกรรมการการป้องกันและปราบปรามยาเสพติด. กรุงเทพมหานคร.

สมจิต หนุเจริญกุล ประคอง อินทรสมบัติ และ พรรณวดี พุธวัฒนะ. (2532). (Somchit Hanucharoekul, Prakong Intarasombat, and Panwadee Putwatana B.E. 2532). สิ่งรบกวนในชีวิตประจำวัน ความเข้มแข็งในการมองโลก และการรับรู้ถึงความผาสุกในชีวิตของอาจารย์พยาบาลในมหาวิทยาลัย.วารสารพยาบาล. 38 (3): 169-190.

ธนัชพร สิริยานนท์. (2544). (Tanutporn Siriyanonda B.E. 2544). ประสิทธิผลของโปรแกรมสุขศึกษาเพื่อป้องกันการเสพยาบ้าในนักเรียนชั้นมัธยมศึกษา สังกัดกรมสามัญศึกษา กรุงเทพมหานคร.วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาสุขศึกษาและพฤติกรรมศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อมรรัตน์ ประดิษฐ์สาร. (2535). (Amongrat Praditsarn B.E. 2535). การให้คุณค่าต่อสุขภาพและการดูแลตนเองของเด็กวัยเรียน. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาวิชาพยาบาลศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

อาภรณ์ สายเชื้อ. (2540). (Arporn Saichea B.E. 2540). วิธีการชุมชนบำบัดกับเด็กและเยาวชนในสถานพินิจ. เอกสารทางวิชาการประกอบการศึกษาถึงวิธีการและแนวทางและเทคนิคต่างๆเกี่ยวกับการนำวิธีการชุมชนบำบัดปรับประยุกต์ใช้ในกระบวนการยุติธรรม. หน้า 143-149. กองแพทย์ สถานพินิจและคุ้มครองเด็กและเยาวชนกลาง ศาลเยาวชนและครอบครัวกลาง กระทรวงยุติธรรม กรุงเทพ : กระทรวงยุติธรรม.

อุบลรัตน์ รุ่งเรืองศิลป์. (2540). (Ubolrat Roongruangsilp B.E. 2540). พฤติกรรมส่งเสริมสุขภาพของนักศึกษาวิทยาลัยอาชีวศึกษา จังหวัดประจวบคีรีขันธ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สาธารณสุขศาสตร์) วิชาเอกสุขศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

APPENDIX

Appendix A

Human rights for Research Population

Verbal Explanation to subject in the Experimental Group

I am Duangkamol Kowitwibool, a graduate nursing student at the school of nursing, Faculty of Medicine, Ramathibodi Hospital, Mahidol University. I am currently conducting research on "To determine predictability of personal factors (age, gender, living with parents, time programs of vocational schools, and educational levels), experience related to amphetamines, family background (father's occupation, mother's occupation, father's education, mother's education, and parents' marital status), sense of coherence, and social support on amphetamine preventive behaviors.". You are invited to participate in this study because your characteristics were appropriate. Right to refuse for participation in this study is totally your. You will be assured that your participation or non-participation will not have effects on your grade. If you are agreeing to participate in this study, you will complete this questionnaire for approximately 30 minutes. If you have any questions, I would be glad to explain them to you. All information from your response for this study will be kept secretly and will be used only to present an overall picture, not individual.

The information from this research will be beneficial to promote vocational students' health. Thank you for your kind cooperation.

Duangkamol Kowitwibool
Graduate Nursing Student

Appendix B

แบบสอบถามข้อมูลส่วนบุคคล

คำชี้แจง โปรดทำเครื่องหมาย √ ลงใน ☐ หรือเติมข้อความลงในช่องว่างให้ตรงกับความเป็นจริง

1. ท่านเกิดวันที่..... เดือน..... พ.ศ. ..... อายุ ..... ปี
2. เพศ ☐ 1. ชาย ☐ 2. หญิง
3. ท่านกำลังเรียนอยู่ชั้น

   ☐ 1. ปวช.1 ☐ 2. ปวช.2 ☐ 3. ปวช.

   ☐ 4. ปวส. 1 ☐ 5. ปวส.2

   เวลาในการศึกษา ☐ 1. รอบเช้า ☐ 2. รอบค่ำ

4. สภาพครอบครัวของท่านเป็นอย่างไร

   ☐ 1. บิดา มารดา อยู่ด้วยกัน ☐ 2. บิดาถึงแก่กรรม

   ☐ 3. มารดาถึงแก่กรรม ☐ 4. ทั้งบิดา มารดาถึงแก่กรรม

   ☐ 5. บิดา มารดา แยกกันอยู่ ☐ 6. บิดา มารดา หย่าร้างกัน

   ☐ 7. อื่นๆ (ระบุ) .....

5. ปัจจุบันท่านพักอาศัยอยู่กับใคร

   ☐ 1. บิดา มารดา ☐ 2. บิดา

   ☐ 3. มารดา ☐ 4. อยู่คนเดียว

   ☐ 5. ญาติพี่น้อง ☐ 6. เพื่อน หรือคนรู้จัก

   ☐ 7. ปู่ ย่า ตา ยาย

   ☐ 8. อื่นๆ (ระบุ) .....

6. อาชีพหลักของผู้ปกครอง (ถ้ามีทั้ง บิดา มารดา ผู้ปกครอง กรุณาระบุทั้ง 3 กรณี)

   คำชี้แจง โปรดทำเครื่องหมาย √ ลงในตารางตามความเป็นจริง

อาชีพ	บิดา	มารดา	ผู้ปกครอง (ระบุ).....
1. รับจ้างทั่วไป			
2. เกษตรกรรม			
3. ค้าขาย			
4. อุตสาหกรรม (โรงงาน)			
5. รับราชการ			
6. รัฐวิสาหกิจ หรือบริษัทเอกชน			
7. อื่นๆ (ระบุ)			

7. การศึกษาสูงสุดของผู้ปกครอง (ถ้ามีทั้ง บิดา มารดา ผู้ปกครอง กรุณาระบุทั้ง 3 กรณี)

การศึกษา	บิดา	มารดา	ผู้ปกครอง (ระบุ).....
1. ไม่ได้เรียนหนังสือ			
2. จบชั้น ป.4			
3. จบชั้น ป.6 หรือ ป. 7			
4. จบชั้น ม.ศ. 3 (ม.4)			
5. จบชั้น ม.ศ. 5 (ม.6)			
6. จบอนุปริญญา หรือเทียบเท่า			
7. จบปริญญาตรี หรือสูงกว่า			

8. บุคคลในครอบครัวของท่านเคยใช้สารเสพติด ชนิดใดบ้าง

คำชี้แจง หากเคยใช้ให้ทำเครื่องหมาย √ ลงในตาราง และหากไม่เคยใช้ให้เว้นว่างไว้

บุคคลในครอบครัว	บุหรี่	สุรา	สารระเหย	กัญชา	เฮโรอีน	ยาบ้า	อื่นๆ (ระบุ .....)
1. บิดา							
2. มารดา							
3. ผู้ปกครอง							
4. ญาติพี่น้อง							

9. ท่านรู้หรือไม่ว่ายาบ้ามีรสชาติอย่างไร

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Appendix C

แบบวัดความเข้มแข็งในการมองโลก

คำชี้แจง ข้อความต่อไปนี้ เป็นการสอบถามการมองชีวิตในแง่มุมต่างๆของนักเรียน ในแต่ละข้อ คำถามจะมีตัวเลขให้เลือกตั้งแต่ 1 ถึง 7 โดยที่ตำแหน่งเลข1 ถึง 7 จะมีข้อความที่บ่งบอกลักษณะตรงกันข้าม ส่วนตัวเลขตรงกลางจากเลข 2 ถึง 6 จะบ่งชี้ถึงความมากน้อยของความรู้สึกนึกคิด โดยอาศัยข้อคามในตำแหน่งเลข1 ถึง 7 เป็นหลัก กรุณา**วงกลม** รอบตัวเลขที่ตรงกับความรู้สึกของท่านมากที่สุด

ตัวอย่าง ท่านมีความพึงพอใจกับผลการเรียนในปัจจุบันนี้ของท่านมากน้อยเพียงใด

1 2 3 4 5 6 (7)

ไม่พอใจเลย พอใจเป็นอย่างมาก

แสดงว่า ท่านมีความพึงพอใจเป็นอย่างมากกับผลการเรียนของท่าน

กรุณา**วงกลม**รอบตัวเลขที่ตรงกับความรู้สึกของท่านมากที่สุด

1. เมื่อท่านพูดคุยกับบุคคลอื่น ท่านมีความรู้สึกบ้างหรือไม่ว่าคนอื่นไม่เข้าใจท่าน

1 2 3 4 5 6 7

ไม่เคยรู้สึกเลย มักรู้สึกเช่นนี้เสมอ

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2. ในอดีตที่ผ่านมา เมื่อท่านต้องทำสิ่งใดก็ตามที่ต้องอาศัยความร่วมมือจากบุคคลอื่น ท่านมีความรู้สึกอย่างไร

1 2 3 4 5 6 7

ทำไม่สำเร็จอย่างแน่นอน ทำสำเร็จอย่างแน่นอน

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3. นอกจากญาติหรือเพื่อนสนิทแล้ว ขอให้ท่านนึกถึงบุคคลที่ท่านติดต่ออยู่ในชีวิตประจำวันว่าท่านรู้จักเขาเหล่านั้นมากน้อยเพียงใด

1 2 3 4 5 6 7

รู้สึกว่าพวกเขาเป็นคนแปลกหน้า — รู้จักพวกเขาเหล่านั้นเป็นอย่างดี

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4. ท่านมีความรู้สึกว่า ท่านไม่สนใจกับสิ่งที่เกิดขึ้นรอบๆตัวท่านบ่อยเพียงใด

1 2 3 4 5 6 7

ไม่เคยรู้สึกเลย — รู้สึกว่าเป็นเช่นนี้บ่อย

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5. ในอดีตที่ผ่านมา ท่านเคยพบกับความแปลกใจในการกระทำของบุคคล ซึ่งท่านคิดว่าท่านรู้จักเขาเป็นอย่างดีบ้างไหม

1 2 3 4 5 6 7

ไม่เคยพบเลย — เคยพบอยู่เสมอ

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6. ท่านรู้สึกบ้างไหมว่าคนที่ท่านไว้ใจทำให้ท่านต้องผิดหวัง

1 2 3 4 5 6 7

ไม่เคยรู้สึกเลย — เคยรู้สึกอยู่เสมอ

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7. ท่านมองชีวิตของท่านอย่างไร

1 2 3 4 5 6 7

เต็มไปด้วยสิ่งที่น่าสนใจ — มีแต่สิ่งจำเจ ซ้ำซาก

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8. จนกระทั่งบัดนี้ ชีวิตของท่านมีจุดประสงค์ หรือเป้าหมายบ้างหรือไม่

1 2 3 4 5 6 7

ไม่มีเลย — มีอย่างชัดเจน

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9. ท่านมีความรู้สึกว่า ท่านไม่ได้รับความยุติธรรมบ้างหรือไม่

1	2	3	4	5	6	7
รู้สึกเช่นนี้บ่อย						รู้สึกเช่นนี้น้อยมากหรือไม่เคยเลย

10. ในช่วง 10 ปีที่ผ่านมา ชีวิตของท่านเป็นอย่างไร

1	2	3	4	5	6	7
เต็มไปด้วยการเปลี่ยนแปลงที่ไม่ทราบเลย ว่าต่อไปจะเกิดอะไรขึ้น						มีความมั่นคง

11. ท่านมีความคิดอย่างไรกับสิ่งที่ท่านจะทำในอนาคต

1	2	3	4	5	6	7
น่าตื่นเต้นท้าทาย						น่าเบื่อหน่าย

12. ท่านมีความรู้สึกว่า ท่านอยู่ในสิ่งแวดล้อมที่ไม่คุ้นเคย และไม่ทราบว่าจะทำอะไรบ่อยเพียงใด

1	2	3	4	5	6	7
บ่อยมาก						น้อยมาก หรือไม่เคยเลย

13. คำอธิบายการมองชีวิตของท่านที่ตรงที่สุดคือ

1	2	3	4	5	6	7
คนเรามักจะหาทางแก้ปัญหาหรือทุกข์ในชีวิตได้เสมอ						ปัญหา หรือความทุกข์ในชีวิต ไม่มีทางจะแก้ไขได้

14. เมื่อท่านคิดถึงชีวิตของท่าน ท่านมักจะ

1	2	3	4	5	6	7
รู้สึกยินดีที่มีชีวิตอยู่						มักจะถามตนเองว่าทำไมจึงต้องมีชีวิตอยู่

15. เมื่อท่านพบกับปัญหาที่ยุ่งยาก แนวทางแก้ไขของท่านมักจะ

1	2	3	4	5	6	7
สับสนและหาทางออกได้ยาก						แจ่มชัดเสมอ

16. ท่านรู้สึกอย่างไรกับสิ่งที่ท่านกระทำอยู่ทุกวันนี้

1	2	3	4	5	6	7
ยินดีและพอใจมาก						เหนื่อยหน่ายและทุกข์ใจ

17. ชีวิตของท่านในอนาคตอาจจะ

1	2	3	4	5	6	7
เต็มไปด้วยความเปลี่ยนแปลง โดยที่ท่านไม่ทราบว่าต่อไปจะเกิดอะไรขึ้น						อนาคตแจ่มชัดและมั่นคง

18. ในอดีตที่ผ่านมา เมื่อท่านพบกับสิ่งที่ไม่สมหวัง ท่านมักจะ

1	2	3	4	5	6	7
ปล่อยให้ตนเองเป็นทุกข์ จนไม่เป็นอันกินอันนอน						บอกกับตนเอง ว่าเมื่อมันเกิดขึ้น ก็จะอยู่กับมันให้ได้ และดำเนินชีวิตต่อไป

19. ท่านมีความรู้สึกนึกคิดสับสนบ่อยเพียงใด

1	2	3	4	5	6	7
บ่อยมาก						น้อยมาก หรือไม่มีเลย

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20. เมื่อท่านรู้สึกยินดีในสิ่งที่ท่านได้กระทำลงไป

1	2	3	4	5	6	7
ท่านจะรู้สึกยินดีตลอดไป						มักจะมีเหตุการณ์มาลบเลือนความยินดีนั้นเสีย

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21. บ่อยแค่ไหนที่ท่านเกิดความคิดว่า ความรู้สึกที่กำลังเกิดขึ้นภายในจิตใจของท่านนั้นไม่น่าจะเกิดขึ้น

1	2	3	4	5	6	7
บ่อยมาก						น้อยมาก หรือไม่มีเลย

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22. ท่านคาดคิดไว้ว่า ชีวิตส่วนตัวของท่านในอนาคตจะ

1	2	3	4	5	6	7
ไม่มีความหมายหรือเป้าหมายเลย						เต็มไปด้วยความหมายและเป้าหมายอย่างเต็มเปี่ยม

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23. ในอนาคต ท่านคิดว่าจะมีกี่คนที่ท่านจะไว้เนื้อเชื่อใจ และพึ่งพาได้เสมอหรือไม่

1	2	3	4	5	6	7
แน่ใจว่าจะมี						สงสัยอยู่ว่าจะมีหรือไม่

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24. ท่านเกิดความรู้สึกไม่แน่ใจว่าอะไรจะเกิดขึ้นต่อไปบ่อยเพียงใด

1 2 3 4 5 6 7

บ่อยมาก น้อยมาก หรือ ไม่มีเลย

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25. คนเราทุกคนไม่ว่าจะแข็งแกร่งอย่างไรก็ตาม บางครั้งในบางสถานการณ์จะรู้สึกจมอยู่ในความทุกข์ ท่านมีความรู้สึกเช่นนี้บ่อยแค่ไหนในอดีตที่ผ่านมา

1 2 3 4 5 6 7

ไม่เคยเลย บ่อยมาก

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26. เมื่อเหตุการณ์ที่ท่านคาดคิดไว้เกิดขึ้นจริง ท่านมักจะพบว่า

1 2 3 4 5 6 7

ท่านคาดคิดถึงความสำคัญของเหตุการณ์นั้นน้อยหรือมากเกินไป ท่านคาดคิดเหตุการณ์ได้ตรงกับความเป็นจริง

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27. เมื่อท่านคิดถึงความลำบากที่อาจจะต้องเผชิญในส่วนสำคัญของชีวิต ท่านมีความรู้สึกว่าท่านจะประสบความสำเร็จในการเอาชนะอุปสรรคนั้นได้หรือไม่

1 2 3 4 5 6 7

ได้แน่นอน ไม่ได้อย่างแน่นอน

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28. ท่านมีความรู้สึกว่าสิ่งที่ท่านกระทำอยู่ในทุกวันนี้ไม่ค่อยมีความหมายบ่อยเพียงใด

1 2 3 4 5 6 7

รู้สึกบ่อยมาก น้อยมากหรือ ไม่เคยเลย

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29. ท่านมีความรู้สึกไม่แน่ใจว่า ท่านจะควบคุมสถานการณ์ต่างๆในชีวิตได้บ่อยแค่ไหน

1 2 3 4 5 6 7

บ่อยมาก น้อยมาก หรือ ไม่มีเลย

Appendix D

แบบวัดแรงสนับสนุนทางสังคม

คำชี้แจง โปรดทำเครื่องหมาย √ ลงในช่องว่างทางขวามือให้ตรงกับความเป็นจริงตามความรู้สึกต่อการได้รับความช่วยเหลือหรือการได้รับการสนับสนุน ดังกล่าวในข้อความนั้นๆ

ไม่จริงเลย	หมายถึง	ท่านมีความรู้สึกว่าไม่ตรงกับความเป็นจริงเลย
จริงเล็กน้อย	หมายถึง	ท่านมีความรู้สึกว่าตรงกับความเป็นจริงเล็กน้อย
จริงปานกลาง	หมายถึง	ท่านมีความรู้สึกว่าตรงกับความเป็นจริงปานกลาง
จริงมาก	หมายถึง	ท่านมีความรู้สึกว่าตรงกับความเป็นจริงค่อนข้างมาก
จริงมากที่สุด	หมายถึง	ท่านมีความรู้สึกว่าตรงกับความเป็นจริงมากที่สุด

ข้อคำถาม	ไม่จริงเลย	จริงเล็กน้อย	จริงปานกลาง	จริงมาก	จริงมากที่สุด
1. ฉันมีคนใกล้ชิดที่ทำให้ฉันรู้สึกอบอุ่นและปลอดภัย					
2. ฉันรู้สึกว่าตนเองมีความสำคัญต่อกลุ่ม					
3. คนส่วนใหญ่บอกให้ฉันรู้ เมื่อฉันทำงานดี					
4. ฉันไม่สามารถพึ่งพาญาติพี่น้องหรือเพื่อน เมื่อฉันมีปัญหา					
5. ฉันได้พบปะอย่างเพียงพอกับคนที่ทำให้ฉันรู้สึกว่าฉันมีคุณค่า					
6. ฉันให้เวลากับคนที่มีความสนใจตรงกับฉัน					
7. ฉันมีโอกาสน้อยที่จะได้ดูแลผู้อื่น					
8. มีคนบอกว่าเขาชอบที่จะทำงานร่วมกับฉัน					
9. ฉันมีบุคคลที่พร้อมจะช่วยเหลือฉันในระยะยาวได้ถ้าฉันต้องการ					
10. ไม่มีใครที่จะรับฟังความรู้สึกของฉันได้					
11. ในกลุ่มเพื่อนของฉันเราชอบช่วยเหลือซึ่งกันและกัน					
12. ฉันมีโอกาสที่จะกระตุ้นผู้อื่นให้พัฒนาความสนใจและทักษะ					
13. คนในครอบครัวทำให้ฉันรู้สึกว่า ฉันมีความสำคัญต่อครอบครัว					
14. ฉันมีญาติ หรือเพื่อนที่จะช่วยเหลือฉันถึงแม้ว่าฉันจะไม่สามารถตอบแทนเขาได้					

ข้อคำถาม	ไม่จริงเลย	จริงเล็กน้อย	จริงปานกลาง	จริงมาก	จริงมากที่สุด
15. เมื่อฉันอารมณ์เสีย มีผู้ที่ฉันสามารถอยู่ด้วยโดยปลอบให้ฉันเป็นตัวของตัวเอง					
16. ฉันรู้สึกว่าไม่มีใครมีปัญหาเหมือนกัน					
17. ฉันชอบกระทำบางสิ่งเป็นพิเศษ ในการทำให้ผู้อื่นมีความรู้สึกเพลิดเพลินขึ้น					
18. ฉันทราบว่าคนอื่นมีความซาบซึ้งในตัวฉัน					
19. ฉันมีบุคคลที่รักและเอาใจใส่ฉัน					
20. ฉันมีผู้ที่ร่วมทำงานเข้าสังคม และร่วมกิจกรรมรื่นเริงอื่นๆด้วย					
21. ฉันรับผิดชอบจัดการช่วยเหลือเมื่อมีผู้ต้องการ					
22. ถ้าฉันต้องการคำแนะนำจะมีผู้คอยให้ความช่วยเหลือฉันให้สามารถแก้ไขสถานการณ์นั้นๆได้					
23. ฉันรู้สึกว่ายังมีคนต้องการฉัน					
24. คนส่วนมากทำให้ฉันคิดว่า ฉันไม่ใช่เพื่อนที่ดีเท่าที่ควรจะเป็น					
25. ถ้าฉันเจ็บป่วยมีผู้ที่จะให้คำแนะนำแก่ฉันในการดูแลตนเอง					

Appendix E

แบบวัดพฤติกรรมการป้องกันการใช้ยาบ้า

คำชี้แจง โปรดทำเครื่องหมาย √ ลงใน ☐ เพียงตัวเลือกเดียวเท่านั้น

ชุด ก. ด้านการใช้ทักษะปฏิเสธ และประสบการณ์ในการปฏิเสธ

1. ถ้าท่านถูกเพื่อนชวน ไปเป็นเพื่อนหาซื้อยาบ้ามาเสพ ท่านจะทำอย่างไร
   - ☐ ก. ยอมไปเป็นเพื่อน หาซื้อยาบ้าด้วยกัน ครั้งเดียวคงไม่เป็นไร
   - ☐ ข. บอกเหตุผลไปว่า ตอนนี้ยังไม่ว่าง และไม่ไปเป็นเพื่อน
   - ☐ ค. บอกเพื่อนว่าไม่อยากไป เพราะไม่ต้องการมีส่วนร่วมในการทำผิดกฎหมาย
   - ☐ ง. บอกเพื่อนว่าไม่ไป พร้อมจูงใจให้เพื่อนเลิกเสพยาบ้า
   - ☐ จ. อื่นๆ (ระบุ).....

2. ถ้าท่านถูกเพื่อนพูดจาดูหมิ่น เพราะไม่ยอมเสพยาบ้า จะทำอย่างไร
   - ☐ ก. บอกว่า ไม่ชอบให้พูดจาแบบนี้อีก และขอให้เพื่อนเลิกเสพ
   - ☐ ข. แกล้งรับยาบ้ามา แต่ทำตกพื้น
   - ☐ ค. ทดลองเสพดูตามเพื่อน จะได้ไม่ถูกเพื่อนดูถูกดูหมิ่นอีก
   - ☐ ง. พูดว่าไม่อยากเป็นขี้ยา และหาทางหลีกเลี่ยงโดยเดินหนีไป
   - ☐ จ. อื่นๆ (ระบุ).....

3. ถ้าท่านถูกเพื่อนในกลุ่มขอยืมเงินไปซื้อยาบ้ามาเสพ จะทำอย่างไร
   - ☐ ก. บอกปฏิเสธไม่ให้ยืมเงิน เพราะเงินมีอยู่จำกัด จะเอาไว้เป็นค่ารถ ค่าอาหาร
   - ☐ ข. ปฏิเสธไม่ให้ยืม เพราะพ่อ-แม่กำชับมาไม่ให้ใครยืมเงิน
   - ☐ ค. ให้เพื่อนยืมเงิน โดยมีข้อแม้ว่า ให้คืนเงินภายในวันรุ่งขึ้น
   - ☐ ง. ปฏิเสธไม่ให้ยืม โดยให้เหตุผลความจำเป็นว่าควรใช้เงินในสิ่งที่มีประโยชน์ดีกว่าใช้เงิน เพื่อทำลายตัวเอง
   - ☐ จ. อื่นๆ (ระบุ).....

4. ถ้าท่านถูกเพื่อนในกลุ่มบังคับให้เสพยาบ้า จะทำอย่างไร
   - ☐ ก. บอกให้เพื่อนเสพไปก่อน แล้วหาทางหลบเลี่ยงออกมาจากกลุ่ม
   - ☐ ข. บอกความในใจว่าห่วงใยเพื่อน พร้อมชักชวนให้งดเสพ
   - ☐ ค. บอกเพื่อนว่า ถ้ารักกันจริง อย่าฝืนใจกัน
   - ☐ ง. ตัดสินใจลองดูสักครั้ง เพราะคงขัดเพื่อนตอนนั้นไม่ได้
   - ☐ จ. อื่นๆ (ระบุ)……...

5. ถ้าท่านถูกเพื่อนเอายาบ้ามาฝากไว้จะทำอย่างไร
   - ☐ ก. ไม่อยากรับฝาก แล้วรีบลุกหนีออกไปทันที
   - ☐ ข. ไม่รับฝาก และบอกเลิกคบเพื่อนคนนั้น
   - ☐ ค. บอกเพื่อนว่ารู้สึกไม่สบายใจ ที่มีของผิดกฎหมาย และไม่รับฝาก
   - ☐ ง. รับฝากเป็นครั้งคราว เพื่อแสดงว่ายังเป็นเพื่อนกันได้
   - ☐ จ. อื่นๆ (ระบุ)…….....

6. ท่านเคยถูกชวนให้เสพยาบ้าหรือไม่ (☐ เคย ☐ ไม่เคย)
   เมื่อถูกชวนให้เสพยาบ้า ท่านปฏิบัติตัวอย่างไร และในกรณีที่ไม่เคยถูกชวนให้เสพยาบ้า ถ้าถูกชวน ท่านจะปฏิบัติอย่างไร
   - ☐ ก. พูดเลิกคบกับเพื่อนที่ชวนให้เสพยาบ้า
   - ☐ ข. พูดปฏิเสธไป บอกให้เพื่อนรู้ว่าเป็นสิ่งไม่ดีและมีผลเสียอย่างไร
   - ☐ ค. พูดปฏิเสธคำชวน และแจ้งให้ครูทราบ
   - ☐ ง. ส่ายหน้า และบอกเพื่อนว่าครั้งนี้ครั้งเดียวนะ ต่อไปจะไม่เสพอีก
   - ☐ จ. อื่นๆ (ระบุ)……

ชุด ข. ด้านการไม่มั่วสุมกับเพื่อนที่เสพยาบ้า

ในช่วง 6 เดือนที่ผ่านมา ท่านได้ปฏิบัติตัวกับเพื่อนที่เสพยาบ้า อย่างไร

คำชี้แจง

เกือบทุกวัน	หมายถึง	ท่านได้ปฏิบัติกิจกรรมดังกล่าวเกือบทุกวัน
สัปดาห์ละ 2-3 วัน	หมายถึง	ท่านได้ปฏิบัติกิจกรรมดังกล่าวประมาณสัปดาห์ละ2-3 วัน
เดือนละ 4-7 วัน	หมายถึง	ท่านได้ปฏิบัติกิจกรรมดังกล่าวประมาณเดือนละ 4-7 วัน
บางเดือน	หมายถึง	ท่านได้ปฏิบัติกิจกรรมดังกล่าว บางเดือนนานๆครั้ง
ไม่เคยทำเลย	หมายถึง	ท่านไม่เคยปฏิบัติกิจกรรมดังกล่าวเลย

การปฏิบัติตน	เกือบทุกวัน	สัปดาห์ละ 2-3 วัน	เดือนละ 4-7 วัน	บางเดือน	ไม่เคยทำเลย
1. อยู่ในเหตุการณ์ขณะที่เพื่อนเสพยาบ้า					
2. ขาดเรียน /หนีออกจากบ้านไปมั่วสุมกับเพื่อนที่เสพยาบ้า					
3. ทดลองเสพยาบ้ากับเพื่อนๆที่เสพยาบ้า					
4. ไปเป็นเพื่อนกับเพื่อนที่เสพยาบ้า เพื่อหาซื้อยาบ้าด้วยกัน					
5. คบหาสมาคมกับเพื่อนที่เสพยาบ้า					
6. ดื่มเหล้า สูบบุหรี่ด้วยกันกับเพื่อนที่เสพยาบ้า					
7. เที่ยวเตร่ ไปไหน มาไหน ด้วยกันกับเพื่อนที่เสพยาบ้า					

ชุด ค. ด้านการมีส่วนร่วมในกิจกรรมป้องกันการเสพยาบ้า

ท่านได้เข้าร่วมกิจกรรมป้องกันการเสพยาบ้า ตามหัวข้อเหล่านี้ อย่างไร?

คำชี้แจง

ทุกวัน หมายถึง ท่านได้มีส่วนร่วมใน กิจกรรมดังกล่าวทุกครั้งที่มีการจัดกิจกรรม

ประจำ หมายถึง ท่านได้มีส่วนร่วมในกิจกรรมดังกล่าวเป็นประจำเกือบทุกครั้ง หากไม่ติดธุระสำคัญอื่นๆ

บางครั้ง หมายถึง ท่านได้มีส่วนร่วมในกิจกรรมดังกล่าว เฉพาะช่วงที่มีเวลาว่าง

นานๆครั้ง หมายถึง ท่านได้มีส่วนร่วมในกิจกรรมดังกล่าวนานๆครั้ง

ไม่เคยทำเลย หมายถึง ท่านไม่เคยมีส่วนร่วมในกิจกรรมดังกล่าวเลย

กิจกรรม	ทุกครั้ง	ประจำ	บางครั้ง	นานๆครั้ง	ไม่เคยทำเลย
1. ได้ร่วมกิจกรรมเผยแพร่ข่าวสาร โดยการจัดบอร์ด หรือจัดนิทรรศการ					
2. เดินรณรงค์ต่อต้านยาบ้า					
3. ประกวดคำขวัญป้องกันการเสพยาบ้า					
4. เขียนรายงาน หรือเรียงความ					
5. วาดภาพต่อต้านยาบ้า					
6. แจกเอกสาร หรือแผ่นพับ					
7. พูดเตือนเพื่อน หรือรายงานข่าวยาบ้า					
8. ฟังการบรรยายเกี่ยวกับยาบ้า					
9. เขียนป้ายเตือนและคำขวัญ ติดไว้ตามที่ต่างๆ					
10. ส่งจดหมาย หรือเอกสารเรื่องยาบ้าให้ผู้ปกครอง					
11. เข้าร่วมกิจกรรมทางศาสนา					

Appendix F

List of Experts for Questionnaires validity

The content validity of the amphetamine preventive behaviors questionnaire was determined by five consulting experts included:

1. Professor Rooja Phuphaibool
   Department of Nursing, Faculty of Medicine, Ramathibodi Hospital, Mahidol University
2. Associate Professor Chalermpol Tansakul
   Health Education and Behavioral Sciences Department, Faculty of Public Health, Mahidol University
3. Assistant Professor Varattama Sukvattananan
   Department of Public Health Nursing, Faculty of Public Health, Mahidol University
4. Dr. Aggoon Patagraeorn
   Head of Addiction Medicine, Thanyarak Hospital
5. Mrs. Nangnoi Rittipakdee
   Department of Vocational Education, Ministry of Education

Appendix G

ที่ ศธ 0911/2184 กรมอาชีวศึกษา
กระทรวงศึกษาธิการ กทม. 10300

27 พฤษภาคม 2546

เรื่อง อนุญาตให้นักศึกษาเก็บข้อมูลเพื่อประกอบการทำวิทยานิพนธ์

เรียน คณบดีบัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล

อ้างถึง หนังสือบัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ที่ ทม 0802.01(ศย)/695 ลงวันที่ 22 พฤษภาคม 2546

สิ่งที่ส่งมาด้วย แบบสอบถาม จำนวน 1 ชุด

ตามหนังสือที่อ้างถึง แจ้งว่า นางสาวดวงกมล เจ็งเจริญ นักศึกษาบัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล หลักสูตรปริญญาโท สาขาวิชการพยาบาลอนามัยชุมชน คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มีความประสงค์จะเก็บข้อมูลในสถานศึกษาสังกัดกรมอาชีวศึกษา รวม 4 แห่ง เพื่อทำวิทยานิพนธ์ เรื่อง "ความสามารถในการทำนายของปัจจัยส่วนบุคคล พื้นฐานครอบครัว ความเข้มแข็งในการมองโลก และแรงสนับสนุนทางสังคม ต่อพฤติกรรมการป้องกันการใช้แอมเฟตามีนของนักเรียนอาชีวศึกษา ในกรุงเทพมหานคร" รายละเอียดทราบแล้ว นั้น

กรมอาชีวศึกษา พิจารณาแล้วอนุญาตให้ นางสาวดวงกมล เจ็งเจริญ ดำเนินการเก็บรวบรวมข้อมูลเพื่อทำวิทยานิพนธ์ ในสถานศึกษาสังกัดกรมอาชีวศึกษา จำนวน 4 แห่ง ตามรายชื่อที่แนบได้

อนึ่ง แบบสอบถามที่กรมอาชีวศึกษาอนุญาตให้ใช้เก็บข้อมูล จะมีตราประทับและลายมือชื่อกำกับที่มุมบนด้านขวาของทุกแผ่น เพื่อเป็นต้นแบบในการเก็บข้อมูลต่อไป

จึงเรียนมาเพื่อโปรดทราบ และกรุณาส่งผลงานการทำวิทยานิพนธ์ให้กรมอาชีวศึกษาทราบในโอกาสต่อไปด้วย จักขอบคุณยิ่ง

ขอแสดงความนับถือ

(นางสิริรักษ์ รัชชุศานติ)
ศึกษานิเทศก์ 9 ทำหน้าที่
หัวหน้าหน่วยศึกษานิเทศก์
ปฏิบัติราชการแทน อธิบดีกรมอาชีวศึกษา

หน่วยศึกษานิเทศก์
โทร. 0-2281-5555 ต่อ 1802

Appendix H

Testing Assumptions of Multiple regression Analysis

The assumptions were tested before using multiple regression analysis as follows:

1. Normal Distribution

The residuals were tested for approximately normal distribution. If the distribution of the residual was normal; with one peak of 0.25 of a standard deviation above the mean; it meant the relationship is linear. Besides, the dependent variable is normally distributed for each value of the independent variable (Norusis, 1996 cited by Munro, 1997: 270). It has been show that a histogram of the standardized residuals was approximately normal and presented as follow:

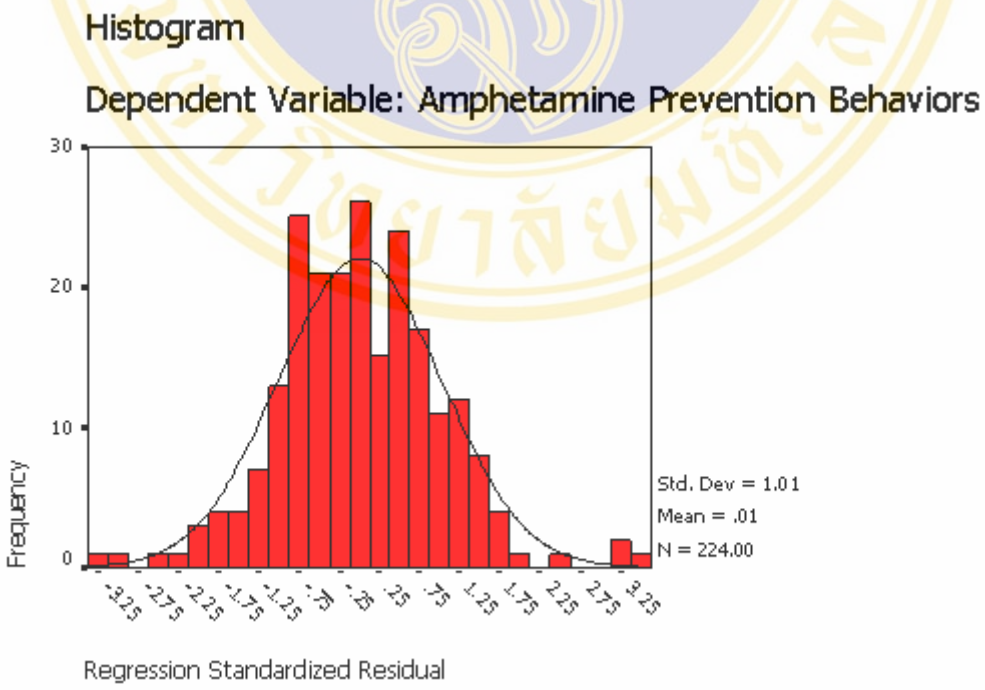

Figure 4 Histogram of Residuals

2. Homoscedasticity

To check this assumption, the residuals can be plotted against the predicted values and against the independent variables. When standardized predicted values are plotted against observed values, the data would from a straight line from the lower-left corner to upper right corner, if the model fit the data exactly. The result showed that the actual scores very around the prediction line, but in general they cluster fairly close to line (Figure 5).

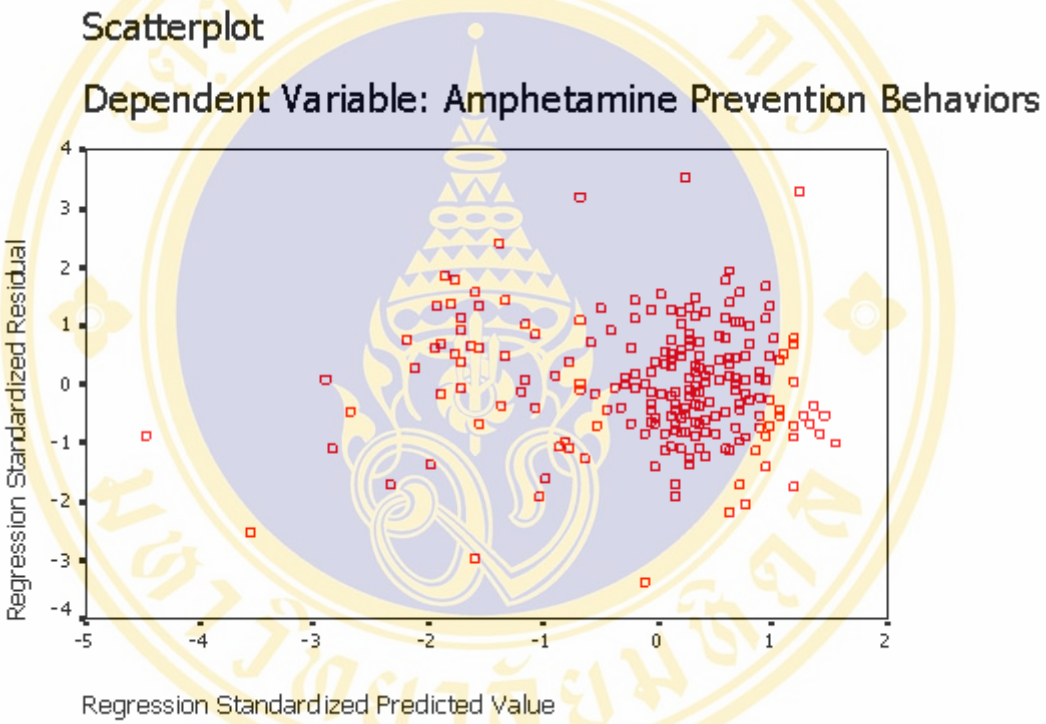

Figure 5 Scatter Plot of Regression Residual against the Predicted Values of Amphetamine Preventive Behaviors and the Independent Variable

When the residuals are from a normal distribution, the plotted values fall closed to the line in the normal probability plot. Thus, the probability was selected to check this assumption. The result showed that the plotted values fall close to the line in the normal probability paper plot as expected in a normal distribution (Figure 6).

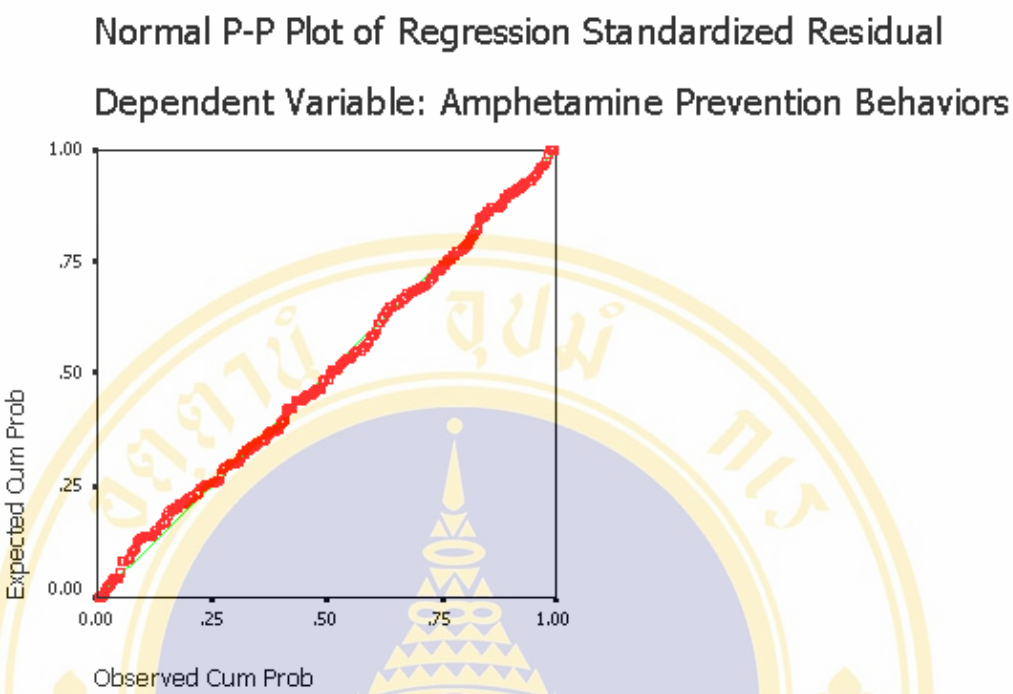

Figure 6 Normal P-P Plot of Regression Standardized Residual

3. Multicollinearity

The Person's Product Moment Correlation was performed to examine the relation between independent variables. The result of this analysis revealed that the highest correlation coefficient among the study variables was 0.797 (Table 10). The correlation coefficient among the variable among the variable was not higher than 0.90 (Tabachnick & Fidell, 1996: 84). That is an issue of multicollinearity was not in concern.

In summary, multiple regression analysis was employed in this study because the data have met all the assumptions required by this method.

BIOGRAPHY

NAME Mrs. Duangkamol Kowitwibool

DATE OF BIRTH 16 June 1975

PLACE OF BIRTH Bangkok, Thailand

INSTITUTIONS ATTENDED Mahidol University, 1997 :
Bachelor of Nursing
Mahidol University, 2005 :
Master of Nursing Science
(Community Health Nursing)

RESEARCH GRANT Princess Muntharoph Kamalasna Foundation,
The Nurse Association of Thailand

OFFICE & POSITION Siriraj Hospital,
Bangkok, Thailand
Position : Registered Nurse