DEVELOPMENT OF LIFE SKILL AND MORALITY WITH BUDDHIST MODEL APPLIED TO PREVENTION OF DRUG ABUSE: A CASE STUDY IN SECONDARY LEVEL SCHOOLS IN NAKHON PATHOM PROVINCE

SUMAJ KITISURAKULCHAI

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OF THE REQUIREMENTS FOR THE DEGREE OF
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Thesis

Entitled

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Sumaj Kitisurakulchai

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DEVELOPMENT OF LIFE SKILL AND MORALITY WITH BUDDHIST MODEL APPLIED TO PREVENTION OF DRUG ABUSE: A CASE STUDY IN SECONDARY LEVEL SCHOOLS IN NAKHON PATHOM PROVINCE.

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ABSTRACT

The objectives of the study are - first, to create a Buddhist model that would be appropriate to use in schools as a means of drug prevention; second, to study the Buddhist model concerning its ability to cultivate positive attitudes that would act as deterrents against drug abuse. The methodology that was used is experimental research. The data were collected from students at Wat Majal School through a pre and post Buddhist model application questionnaire. The 230 students were divided into an experimental group and a control group. The experimental group was taught the Buddhist model in order to verify the differences between the post test, of the control and experimental groups.

In conclusion, after studying the Buddhist model, students in the experimental group had a better knowledge of the basic Buddhist ideas being through. The result of the mean ($\overline{X}$) comparison from the understanding of Buddhist model questionnaire, both before and after of experimental group is using the Buddhist model. This give T-test at 22.828 and P-value equals to 0.000 which is less than Sig. 0.05, the result of mean comparison and the outcome of the understanding of Buddhist model questionnaire from using the Buddhist model in experimental group are different at the level of significance at 0.05 by statistics.

We can summarize that, after studying the Buddhist model, students in the experimental group had developed certain positive attitudes vis-à-vis drug abuse. The result of the mean comparison from Attitude prevention drug abuse survey, before (pre-test) and after (post-test) is exposed to the Buddhist model, of experimental group that is tested with T-test. This gives T-test equals to -32.337 and p-value equals at 0.000 which is less than Sig. of 0.05, mean comparison from Attitude prevention drug abuse from pre-test and post-test of experimental group are different at the significance level of 0.05.

Recommendations from this research were that the Buddhist model has helped to prevent teenage drug abuse through. Therefore schools should insert a Buddhist model to enhance morality amongst students in all activities. And, there should be more funding available to support such measures.

Definition: *Buddhist model* is the thinking in Yonisomanasilara way, believing in the law of karma, Sīla and adopting Buddhist way in life.

KEY WORDS: LIFE SKILL / BUDDHIST MODEL / PREVENTION OF DRUG ABUSE

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การพัฒนาทักษะชีวิตและศีลธรรมด้วยตัวแบบเชิงพุทธในการป้องกันการติดสารเสพติด: กรณีศึกษาโรงเรียนระดับมัธยมศึกษาตอนต้นในจังหวัดนครปฐม (DEVELOPMENT OF LIFE SKILL AND MORALITY WITH BUDDHIST MODEL APPLIED TO PREVENTION OF DRUG ABUSE: A CASE STUDY IN SECONDARY LEVEL SCHOOLS IN NAKHON PATHOM PROVINCE.)

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บทคัดย่อ

วัตถุประสงค์การวิจัย คือสร้างตัวแบบเชิงพุทธเพื่อป้องกันการติดสารเสพติดในโรงเรียนและเพื่อศึกษาว่าตัวแบบเชิงพุทธสามารถเพิ่มทัศนะคติในการต่อต้านการใช้สารเสพติด การศึกษาครั้งนี้เป็นการวิจัยเชิงทดลอง เก็บรวบรวมข้อมูลจากนักเรียนระดับชั้นมัธยมศึกษาตอนต้นทุกคนของโรงเรียนวัดมะเกลือ จังหวัดนครปฐม จำนวน 203 คน มาแบ่งออกเป็นสองกลุ่มคือ กลุ่มทดลองและกลุ่มควบคุม แล้วแยกกลุ่มออกกันใช้ตัวแบบเชิงพุทธกับกลุ่มทดลอง วัดผลโดยให้ทั้งสองกลุ่มทำแบบสอบถามก่อนและหลังการใช้ตัวแบบเชิงพุทธ แล้วนำมาประมวลผลและวิเคราะห์ข้อมูลด้วยโปรแกรม SPSS สรุปผลการวิจัยได้ดังนี้

หลังจากนักเรียนในกลุ่มทดลองได้รับตัวแบบเชิงพุทธพบว่ามีความเข้าใจเนื้อหาตัวแบบเชิงพุทธเพิ่มมากขึ้น เห็นได้จากค่า T-test=22.828 และ P=0.000 มีค่าน้อยกว่า Sig. =0.05 แสดงว่าผลการเปรียบเทียบคะแนนเฉลี่ยของแบบสอบถามความเข้าใจตัวแบบเชิงพุทธก่อนและหลังการใช้ตัวแบบเชิงพุทธของกลุ่มทดลองมีความแตกต่างกันอย่างมีนัยสำคัญที่ระดับ 0.05

สรุปว่านักเรียนในกลุ่มทดลองมีทัศนะคติในการต่อต้านการใช้สารเสพติดดีขึ้นหลังจากได้รับตัวแบบเชิงพุทธ จากค่า T-test=32.337 และ P=0.000 น้อยกว่า Sig. =0.05 แสดงว่าผลการเปรียบเทียบคะแนนเฉลี่ยของแบบสอบถามทัศนะคติในการต่อต้านการใช้สารเสพติดก่อนและหลังการใช้ตัวแบบเชิงพุทธของกลุ่มทดลองมีความแตกต่างกันอย่างมีนัยสำคัญที่ระดับ 0.05

ผู้วิจัยเสนอแนะให้โรงเรียนนำเอาเนื้อหาตัวแบบเชิงพุทธไปใช้ร่วมกับกิจกรรมต่างๆ โดยต้องได้รับการสนับสนุนอย่างเพียงพอ

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CHAPTER I
INTRODUCTION

1.1 Background and Significances of the Research

Drug Abuse is the very first fundamental problem of the country. This dangerous problem affected widely and mainly our population. The spreading route of drug in Thailand is changing along with the development and modernization of society. Starting in 1995, the allowances of the government to open an opium house increase drug addiction in all area. After the government order to terminate the opium house, the opium addicts switched from opium to heroin. This caused a massive increase of heroin addicted people. After 1958, the spreading of marijuana heroin was discovered as well as the addiction of inhalants. In 1975, the major group of drug addiction was the teenager. Since 1985, the spreading of methamphetamine started. In 1995, the use of cough medicine contained codeine mixed with soda drink was seen in the southern region. The spreading pattern of the methamphetamine was different from the other kinds of drug in the past. The methamphetamine was setup in Bangkok and then moved outward to all over every province. The consumption of methamphetamine is not only found among the labor group but also can be found in the teenager group as well as the campus students all around the country. The illegal drug party group was found with the association of the new drugs for example ecstacy, ketamine, ice, cocaine.

Drug abuse use drastically increased during the revolution of the country with the advent of new era of technology, economy, society and politics. The big changing unbalanced the social development and left the rural society behind. The society structures especially the family, religious, and educational institutes were ruined by the economic revolution leading to consumerism. The influence from the

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developed country like an instant package deteriorated the Thai society. The void of the fundamental culture worsens the system of thinking, causing the society loosing its discipline and regulation. These processes gave a malfunction to the society control system and worsen the enculturation to the new member of the society. This gave a good chance for the investor, manufacturer, supplier and trader to take advantage from the society. The drug addiction victims are the workers that rally their life with career competition, the economy rival and the ruin society and the non-working group especially the teenagers during their educational period (Supat, 1992). From many research like the study of teachers and students in mechanism field in Chiangmai province addicted to drugs (Nimit Ratsamee, 2001), drugs healing in Chiangmai province (Wannapa Sukstern, 2000) found out that the starting period of alcoholism and smoking are average at 13-15 years old. It is completely connected to hypothesis of younger is the worse. When starting drugs before the age of 15, there is huge tendency to addict more serious drugs in the future after being 19 years old like 4 times stronger (Grant & Dawson as cited in Windle, 1999). What happens today the methamphetamine addiction victims are majority the teenager, because these groups of victims are so naive and curious. Most of them rely solely on their friend and have a good potentiality to fall on the illicit group who takes advantages from them.

Drug traders attack the society very fast using all available strategies. The problem is not only addiction in school but also the illegal sales of the drug among friends. The drug smuggling by students aims at income gain and buying drugs for themselves. The outcome of the problem is the doomed future member to the society, the failure of the educational system, the disaster of the family, the budget to heal the drug victims, and the transmission of diseases carrying over by the drug victims. AIDs is the very serious problem found among the drug victims and the free sex amphetamine drug addicts. (ONCB., 1995)

From the above mentioned situations, the Thai government had urgently declared a very important policy. In December, 5 2003 His Majesty the king had worriedly spoke to Thai people. The government that at last declared a drug war

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under the strategy “unity of mind and unity in destructing the drugs”. The solution was focused on area approach and was performed in three ways: subjugation, assistance, and protection. It started on Febuary1, 2004 to April 30, 2004, December 3, 2004 was announced as Victory day to celebrate the king birthday on December 5, 2004. So drug – observant was provoked all over Thailand. By This policy, hardly subjugation had result a fearful condition for drug agents to be extra-judicially executed. They had harshly frightened from suppression, purgation and sequestration. Drug price increased and became difficult to buy. The drug investigation was performed at random to students and society realized this problem. All addicts were considered as drug patients and were cured freely and forcefully before being returned to society.

In the past, many strategies were used to fight the drug problems by subjugating, suppressing, and healing. It results tangibly and pleasantly. But these strategies had focused on measures to be done by number of officers and huge budgets.

Table 1-1: annual report shows the number of drug-addicted person and curing patient characterized by curing method.

(Unit: bath)

Type	**Accumulated works**			
	Working period from 1 Feb 2003 – 30 Sept 2003	**2004 Annual budget 1 Oct 2003 – 30 Sept 2004**	**2005 Annual budget 1Oct 2004 – 30 Sept 2005**	**2006 Annual budget 1Oct 2005 – 30 Sept 2006**
voluntary	254,832	19,034	16,746	14,940
forced to cure	16,693	17,982	31,345	42,433
in guilty period	42,849	4,865	5,771	6,253
all type	314,374	41,881	53,862	63,626

* Count only new addicted person/ excluding the old patients.

Source: 8th National drugs conference 18-20 July 2007

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Table 1-2: Unit cost per drug-addicted person

(Unit: baht/person)

Type	Unit Cost in 2006	Appropriate unit Cost by Thanyarak institute	Appropriate unit Cost by M.D. Chulalongkon university
External patient	2,500	3,658	8,199
Internal patient	5,500	13,857	41,419
Hardcore patient	16,500	40,406	124,257
catch up to cure	480	842	1,234

Source: 8th National drugs conference 18-20 July 2007

From table 1-1 annual report shows the number of drug-addicted person and curing patient characterized by curing method and table 1-2 Unit cost per drug-addicted person indicated the high unit cost of curing each drug-addicted person with the inadequate income distribution from the state. When addicts were distressful each community needs to have sympathy for them and distribute limited resources for them to heal them to overcome their own needs. A lot of addicts, who was completely healed, had reversed to addict the drugs, because the containing need for drug make dealers tries to trade it. Moreover, they were obstructed by officers and heavy punishment in inflexible imprisonment and a large amount fine was applied for this case. But these dealers continually tried to bring in the drugs to the country. The aim of subjugation and cure without a good, correct, and serious protection may lead to the drug spreading problems, it is comparable to subjugation and cure after drug addict, assigning a measure of protecting the risky group, especially students, from drug addict is excellent management for the problem, because physical, mental, and social lose of drug addicts is decreased. But it is difficult to achieve. The protection

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regularly was completed before the occurrence of problem. A considerable procedure is to educate pupil and students to be able to protect their own selves effectively.

Therefore, drug addict protection must be determined as the strategy that all of institutions : family religion and education used them to solve the problems. They had to desirably achieve a socialization or enculturation to new member of society. These strategies can use the concept of Thai way of life and culture that their background which is Buddhism as important component to cultivate the skill of life for supporting them to effectively be able to flight any daily life situations. This is conform to what WHO had declared that life skill is a capacity to evaluate, analyze situations, and decide to select a good solution. Especially components of life skill are to value by oneself, to decide reasonably, to reject and negotiate and to manage emotion. (WHO, 1994) or on other hand, effective life skill would create social protection and obtain capacity to revise a problems that happen in their life and decrease risk factors and increase protective factors in life of children and students.

Thai way of life and culture were influenced by the teachings of the Buddha, it is said that Buddhist way is the culture way of most Thai people. In the past, Thai education management is guided by the Dharma (teachings of Buddha) in the present; the root of formal education had nothing to do with Buddhism. Educational system and knowledge base from western countries were eulogized as a substance to manage educational system. It is completely different from Buddhism which focuses on the understanding of the nature of world and life. One can practice to live properly, so the person and others can be happy altogether. This purpose of Buddhism was presented through the law of Karma, Yonisomanasikāra and Sīla (the five precepts), which are discipline for personal and social life to live excellently as awakened one. These disciplines are considered as immunity to drug. The key to stop drug abuse is to decrease the need of drug.

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The solution is to discover effective, simple and economical strategy of prevention. It is the permanent way to prevent drug abuse in schools. From this reason the author is very enthusiastic to conduct the research study on “Development of life skill and morality with Buddhist model applied to prevention of drug abuse: A case study in secondary level schools in Nakhon Pathom province”. The researcher believes that prevention is the best way to cope with the problem.

1.2 Research Question

Does have Buddhist model to increasing attitude against drug abuse in secondary school?

1.3 Research Objectives

1.3.1 To create a Buddhist model appropriate to use in other schools as a measure to drug abuse prevention.

1.3.2 To study the Buddhist model on increasing attitude against drug abuse.

1.4 Research Framework

The populations in this research are the students in secondary school in the Buddhamonthon district, Nakhon Pathom province. The sample groups in this research are the students in secondary school from Wat Majal School (Kanjanaluk wittaya). The methods of sampling used are random sampling. The samples were divided into two groups: the control group and the experimental group. The experimental group would endure the Buddhist model while the control group would not. After the experiment the post-test of both groups would be compared.

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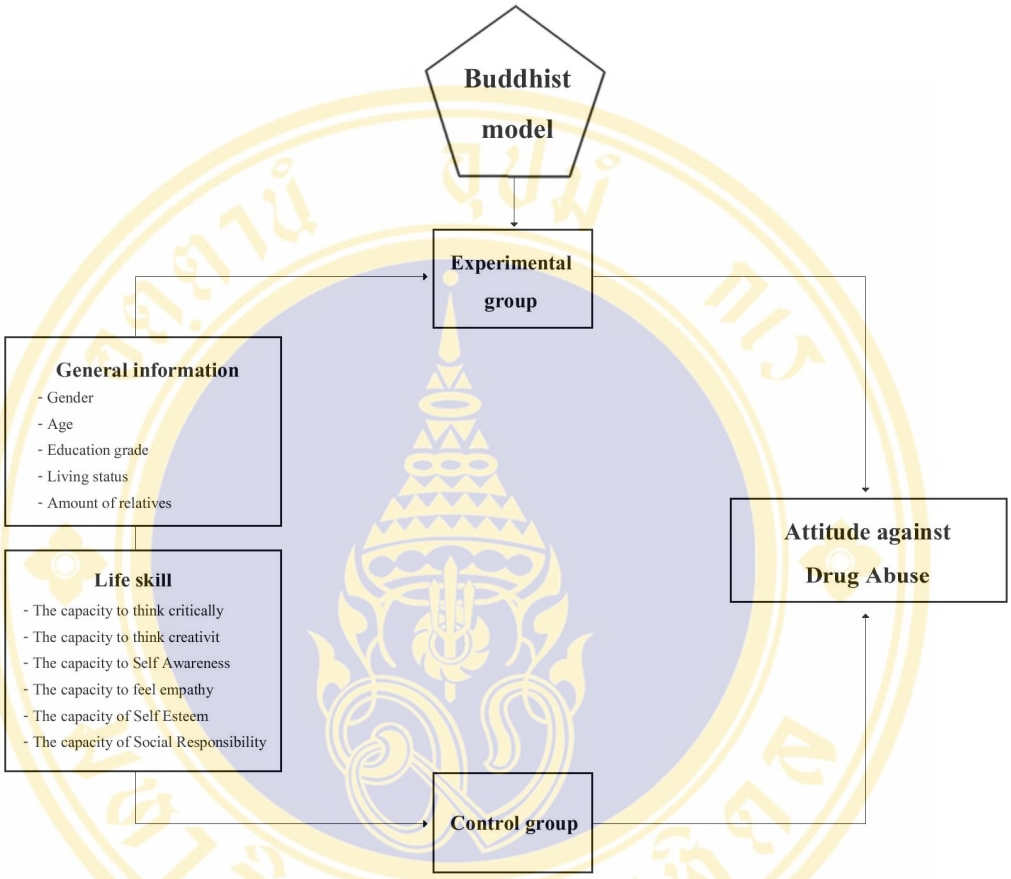
1.5 Conceptual Framework



1.6 Research Variables

There were 2 variables in this experiment

1.6.1 The Independent Variables

Backgrounds of students

Life skill

Buddhist knowledge

1.6.2 The Dependent Variables

Attitude against drug abuse in secondary school students

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1.7 Definition of Terms

1.7.1. **Life Skills** are abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life. (WHO, 1993 : 1)

1.7.2. **Sīla** is rule of morality; moral conduct from Buddhist teaching. (Phra Brahmagunabhorn (P.A. Payutto), Dictionary of Buddhism 2005: 349)

1.7.3. **The Law of Karma** according to Buddhist beliefs, Karma means action, which is performed either with an intention, or volitionally. Karma can be performed through three channels including bodily, verbal, and mental action. Karma is related to a natural process of causes and effects influencing everything. An action is either good or bad, within this life or next rebirth (Phra Brahmagunabhorn (P.A. Payutto), Dictionary of Buddhism 2005)

1.7.4. **Yonisomanasikāra** was reasoned attention; systematic attention; analytical thinking; critical reflection; thinking in term of specific conditionality; thinking by way of problem solving. (Phra Brahmagunabhorn (P.A. Payutto), Dictionary of Buddhism 2005)

1.7.5. **Buddhist model** is the thinking in Yonisomanasilara way, believing in the law of karma, Sīla and adopting Buddhist way in life.

1.8 Hypothesis

The Buddhist model is one of efficient approach toward increasing the attitude against drug abuse in secondary school students.

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1.9 Expected Benefits

1.9.1. To Confirm the Buddhist model is efficient against drug abuse.

1.9.2. To have evidence showing that life skill help prevent of drug abuse, through Buddhist model.

1.9.3. Establish an effective model for the prevention of drug abuse in secondary school study.

1.9.4. To give an effective model for other institutes.

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CHAPTER II
LITERATURE REVIEW

In the study of development of life skill and morality with Buddhist model applied to prevention of drug abuse in secondary school. The researcher had reviewed the documents on drug abuse, concepts of preventing drug abuse, life skill, risk factors and protective factors etc. The content had been categorized as follows;

1.1 Theoretical perspective on drug abuse

1.2 Concepts of preventing drug abuse

1.3 Concepts of Buddhist model

1.4 Related researches

1.1 Theoretical Perspective on Drug Abuse

Different people will be affected by drugs in different ways. Some people are more prone to addiction than others. A person who takes drugs may not realize that he has a problem. Unfortunately, some people who take drugs realize they have a problem after they have been arrested for a drug-related problem. A wide variety of drugs can be abused. Drug can be taken into the body in several ways such as oral ingestion (swallowing), inhalation (breathing in) or smoking, injection into the veins (shooting up), and depositing onto the mucosa (moist skin) of the mouth or nose (snorting) (Emedicinehealth, 2005: [online]). This section will examine drug abuse on several related concepts. The following discussion explains and clarifies those concepts.

1.1.1 Drug Classification

This drug classification is presented in Table 2-1, along with some examples of the more frequently encountered drugs of each particular class.

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Table 2-1: Drug Classification

Class	**Some examples**
CNS depressants	Alcohol, hypnotics, antianxiety drugs
CNS sympathomimetics or stimulants	Amphetamine, methylphenidate, all forms of cocaine, weight-reducing products
Opiates	Heroin, morphine, methadone, and almost all prescription analgesics
Canabinols	Marijuana, hashish
Hallucinogens	Lysergic acid diethylamide(LSD), mescaline, psilocybin, ecstasy
Solvents	Aerosol sprays, glues, toluene, gasoline, paint thinner
Over-the-counter drugs	Contain: atropine, scopolamine, weak stimulants, anti-histamines, weak analgesics
Others	Phencyclidine(PCP)

Source: Schuckit, M., 1995:9

1.1.1.1 General CNS Depressants

The most prominent effect of these drugs is the depression of excitable tissues at all levels of the brain, along with relatively few analgesic properties at the usual doses. The CNS depressants include most sleeping medications, antianxiety drugs, and alcohol. The antipsychotic drugs such as chlorpromazine or haloperidol (Haldol), are not CNS depressants, do not resemble the antianxiety drugs in their structures or predominant effects, are not physically addictive, and are rarely used to induce a “high”. (Schuckit, M., 1995:9)

1.1.1.2 CNS Sympathomimetics or Stimulants

The predominant effect of these drugs at the usual doses is the stimulation of CNS tissues through blockage of the actions of inhibitory nerve cells or by the release of transmitter substances (chemicals released from one brain cell to

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stimulate the next cell) from the cells or by direct action of the drugs themselves. The substance most relevant to clinical situations include all the amphetamines, methylphenidate (Ritalin). And all forms of cocaine. (Schuckit M., 1995:9)

1.1.1.3 Opiate Analgesics

These drugs, also called narcotic analgesics, are used clinically to decrease pain, and they include morphine and other alkaloids of opium as well as synthetic morphine-like substances and semi-synthetic opium derivatives. Prominent examples of these drugs include almost all pain-killing medications, ranging from propoxphene (Dravon) to methadone (Dolophine) and including oxycodone (Perrcodan) and pentazocine (Talwin). (Schuckit M., 1995:9)

1.1.1.4 Cannabinols (Principally Marijuana)

The active ingredient in all these substances is tetrahydrocannabinol (THC), which has the predominant effects of producing euphoria, an altered time sense, and, at doses higher than those usually found in clinical situations, hallucinations. (Schuckit M., 1995:9)

1.1.1.5 Hallucinogens or Psychedelics

The predominant effect of these substances is the production of enhanced sensory perceptions. These drugs can also produce hallucinations, usually of a visual nature. The hallucinogens have no accepted medical usefulness.

1.1.1.6 Solvents, Aerosols, and Glues

These substances include various fuels, aerosol sprays, glues, paints, and industrial solutions. They are used as drugs of abuse in attempts to alter the state of consciousness, producing primarily light-headedness and confusion.(Schuckit M., 1995:9)

1.1.1.7 Over-the-Counter Drugs and Other Prescription Drugs

A variety of substances are sold without prescription for the treatment of constipation, pain, nervousness, insomnia, and other common complaints. The

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sedative or hypnotic medications are the most frequently abused, contain antihistamines, and are taken by abuser to produce feelings of light-headedness and euphoria. Finally, there are a number of other prescription drugs that are much less likely than the aforementioned ones to be abused, including diuretics, antiparkinsonian drugs, laxatives, and some antipsychotics. (Schuckit M., 1995:9)

1.1.2 Definitions of Drug Abuse

Drug abuse has a wide range of definitions, all of them relating either to the misuse or overuse of a psychoactive drug or performance enhancing drug for a non-therapeutic or non-medical effect, or referring to any use of illegal drug in the absence of a required, yet practically impossible to get, license from a government authority. Use of drug may lead to criminal penalty in addition to possible physical, social, and psychological harm, both strongly depending on local jurisdiction. (Wikipedia, 2006: Drug abuse [Online]).

The definitions of drug abuse in this section fall into two main categories:

- Political and criminal justice definitions: National Institute on Drug Abuse
- Medical definitions: the American Psychiatric Association

1. The National Institute on Drug Abuse (2005) definitions:

- *Psychoactive Substance Use*

Drugs may be used in a socially accepted or medically sanctioned manner to modify or control mood or state of mind. Examples include having a drink with a friend or taking an anti-anxiety agent for an acute anxiety state in accordance with a physician's prescription. (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice [Online])

- *Psychoactive Substance Abuse (Or Problematic Use)*

The use of a substance to modify or control mood or state of mind in a manner that is illegal or harmful to one or others is considered problematic use, or abuse. Examples of the potential consequences of harmful use include

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accidents or injuries, blackouts, legal problems and sexual behavior that increases the risk for HIV infection. (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice [Online])

- *Addiction*

Addiction is characterized by the repeated, compulsive seeking or use of a substance despite adverse social, psychological and/or physical consequences. A wide range of substances, both legal and illegal, can be abused addictively. Addiction is often (but not always) accompanied by physical dependence, a withdrawal syndrome and tolerance. Physical dependence is defined as a physiologic state of adaptation to a substance, the absence of which produces symptoms and signs of withdrawal. (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice [Online])

Withdrawal syndrome consists of a predictable group of signs and symptoms resulting from abrupt removal of, or a rapid decrease in the regular dosage of, a psychoactive substance; the syndrome is often characterized by over activity of the physiologic functions that were suppressed by the drug and/or depression of the functions that were stimulated by the drug. (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice [Online])

Tolerance is a state in which a drug produces a diminishing biologic or behavioral response; in other words, higher doses are needed to produce the same effect that the user experienced initially. (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice [Online])

2. The American Psychiatric Association

The American Psychiatric Association (2000) has developed clinical criteria of DSM-IV to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) that is widely used for the diagnosis of substance-use related disorders.

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- DSM-IV-TR: Criteria for Substance Abuse

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12 – month period:

(1) Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance – related absences, suspensions, or expulsions from school; neglect of children or household)

(2) Recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)

(3) Recurrent substance – related legal problems (e.g., arrests for substance – related disorderly conduct)

(4) Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)

B. The symptoms have never met the criteria for Substance Dependence for this class of substance. (Behavenet, 2006: DSM-IV & DSM-IV-TR: Substance Abuse [Online])

- DSM-IV-TR: Criteria for Substance Dependence

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at anytime in the same 12 – month period:

(1) Tolerance, as defined by either of the following:

a) A need for markedly increased amounts of the substance to achieve intoxication or desired effect

b) Markedly diminished effect with continued use of the same amount of the substance

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(2) Withdrawal, as manifested by either of the following:

a) The characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for Withdrawal from the specific substances)

b) The same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms

(3) The substance is often taken in larger amounts or over a longer period than was intended

(4) There is a persistent desire or unsuccessful efforts to cut down or control substance use

(5) A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects

(6) Important social, occupational, or recreational activities are given up or reduced because of substance use

(7) The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance. (Behavenet, 2006: DSM-IV & DSM-IV-TR: Substance Abuse [Online])

1.1.3 Theories of Drug Abuse

There are many theories to describe drug abuse. This section will describe five theories such as;

1.1.3.1 Positive Reinforcement Model (Positive incentive (reward) theory)

The brain, command center of body, has the brainstem that is the most primitive structure at the base of it. (NIDA for Teens, 2005: The brain & addiction [online]) It has neurotransmitters which are brain chemicals necessary for the transfer of information within the nervous system. (Krahn, D. D., 1999) One neurotransmitter, dopamine, is a neurotransmitter which is derived from the amino acid tyrosine, and

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structurally related to norepinephrine. (WHO, 2004: 34) Most importantly dopamine function in the brain is central to the reward system. (Wikipedia, 2006: Dopamine [online]) The neurotransmitter dopamine transmits from one region of the brain to another by dopaminergic pathways. Four major dopaminergic pathways are mesolimbic pathway, mesocortical pathway, nigrostriatal pathway and tuberoinfundibular pathway.(Wikipedia, 2006: Dopaminergic pathways [online])

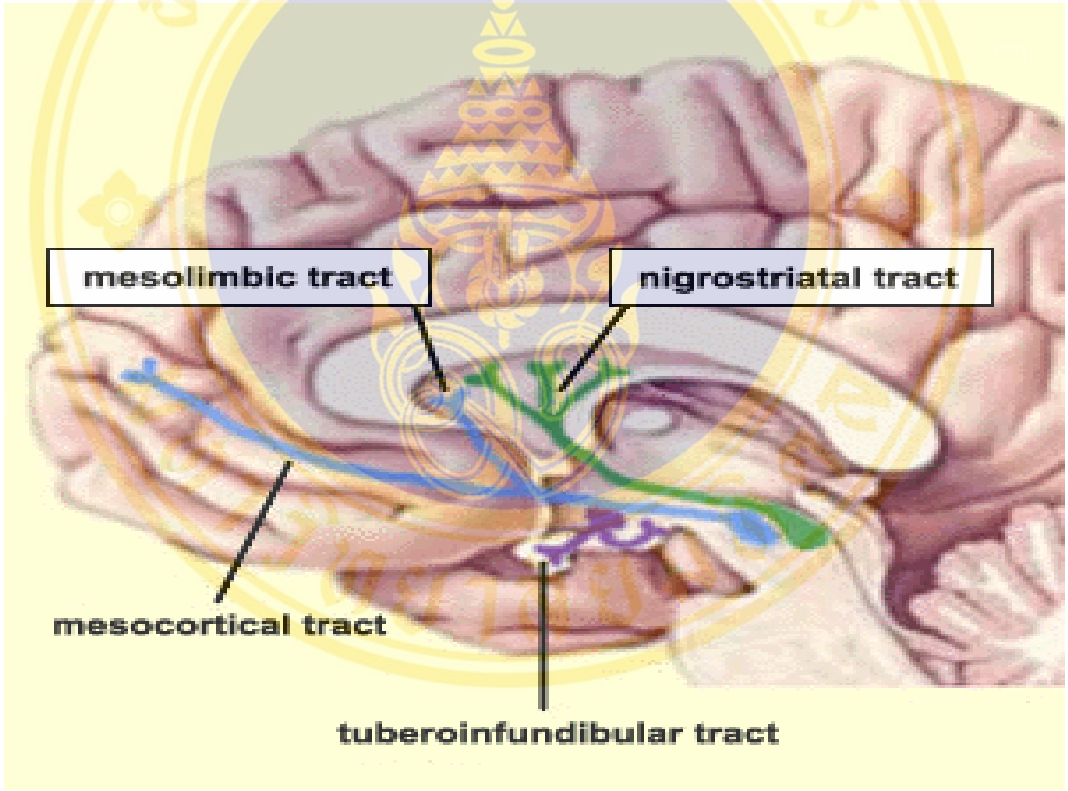

Figure 2-1: Four Major Dopaminergic pathways in the brain

Source: Canadian Institute of Neuroscience, Mental Health and Addiction and Canadian Institutes of Health Research. (2006). Pleasure and pain: Pleasure seeking behavior [Online]. Available: http://thebrain.mcgill.ca/flash/a/a_03/a_03_cl/a_03_cl_que/a_03_cl_que.html [2006, September 5].

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One in four major pathways, the mesolimbic pathway, is thought to be involved in producing pleasurable feeling or feelings of reward. The mesolimbic pathway link the ventral tegmentum in the midbrain to the nucleus accumbens in the limbic or reward system. (Wikipedia, 2006: Mesolimbic pathway [online]) Normally, the limbic system responds to pleasurable experiences by releasing the neurotransmitter dopamine in the nucleus accumbens produces positive reinforcement or feeling of pleasure. (NIDA for Teens, 2005: The brain & addiction [online]), (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice: Pathophysioligy[online]), (Kenyon, P., 2006) Ingestion of a variety of drugs of abuse, as well as food and water, results in an increase in dopamine levels. (Krahn, D. D.,19)

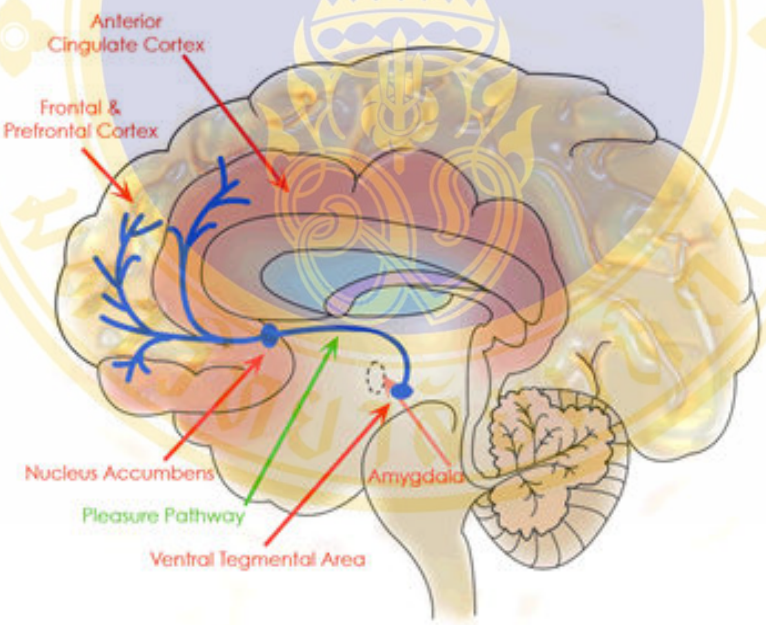

Figure 2-2: Pleasure Pathway

Source: The University Of Texas at Austin. (2006). Neurobiology of Addiction: CE for Health Care Professionals [Online]. Available: http://utopia.utexas.edu/explore/brainwaves/courses/neuro/index.php?view=2 [2006, September 6].

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Phillips et al. (1992) found that there are three pathways in the brain reinforcement system. Such as, the first cells in frontal cortex, hippocampus, thalamus and amygdala send descending fibres that release DA and stimulate cells in the nucleus accumbens. The next cell in the nucleus accumbens send descending fibres that release DA and stimulate cells in the VTA. So the mesocorticolimbic system consists of cells in the VTA which send ascending fibres that release DA and stimulate cells in the nucleus accumbens, frontal cortex, amygdala and septum. Display complete reward system. (Kenyon, P., 2006)

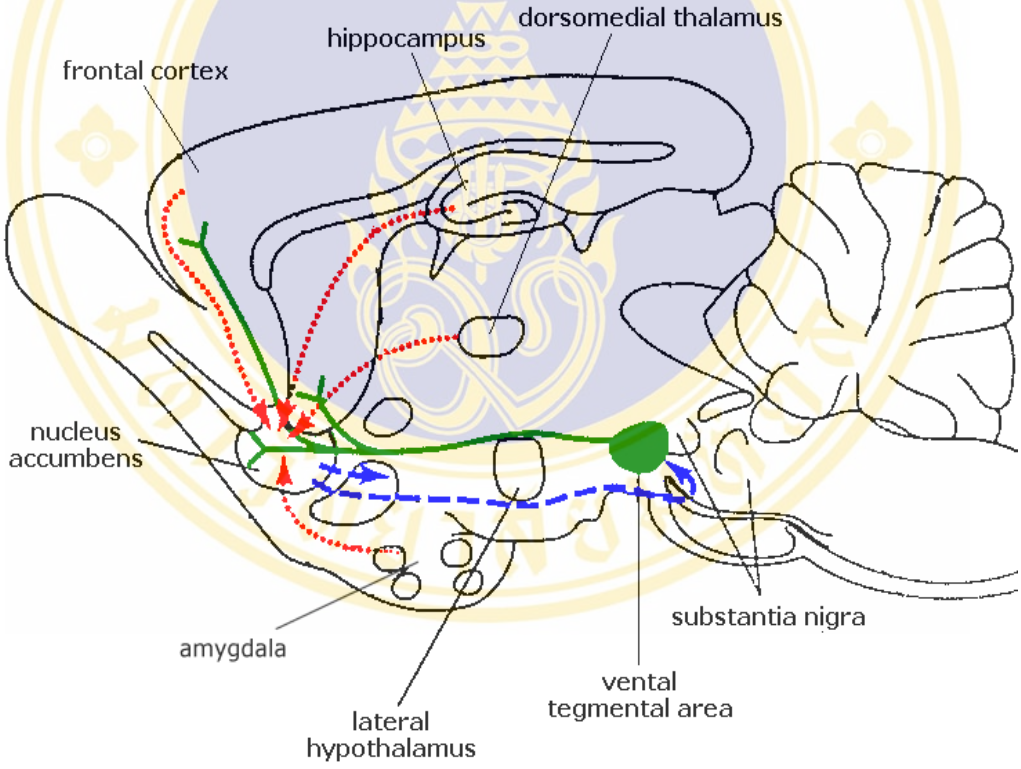

Figure 2-3: Three pathways in the brain reinforcement system.

Source: Kenyon, P. (2006). SALMON (Study and Learning Materials On-Line), University of Plymouth, Department of Psychology. PSY364 Evolutionary Psychobiology: Drug Addiction [Online]. Available: http://salmon.psy.plym.ac.uk/year3/psy337DrugAddiction/theorydrugaddiction.html [2006, October 23].

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Pleasure, which scientists call reward, is a very powerful biological force for our survival. If you do something pleasurable, the brain is wired in such a way that you tend to do it again. (NIDA for Teens, 2005: Effects of Drugs of Abuse on the Brain [online]) All drugs of abuse, such as amphetamine, nicotine, alcohol and cannabis as well as natural reinforces such as food, water and sexual contact (referred to White, 1996; Di Chiara, 1995), primarily affect the brain's limbic system.(NIDA for Teens,2005:The brain & addiction [online]), (Kenyon P., 2006) Although different drugs of abuse all appear to increase dopamine release in the nucleus accumbens, their dissimilar pharmacology means that they act in very different ways, and at different loci within the mesolimbic pathway.(Bailey C., 2006)

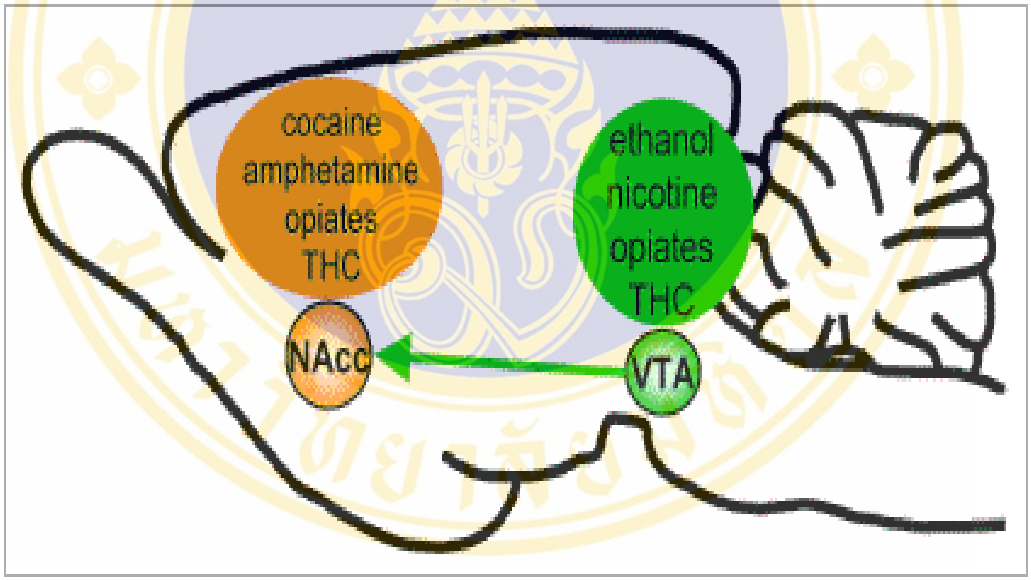

Figure 2-4: The mesolimbic pathway. Sagittal rat brain section showing the dopaminergic projections from the ventral tegmental area (VTA) to the nucleus accumbens (NAcc) that play a central role in the rewarding effects of drugs. Of the major drugs of abuse, cocaine and amphetamine act at the nucleus accumbens. Nicotine and ethanol increase the firing rate of VTA neurones. Opiates and THC act primarily at the VTA but also have some effects at the NAcc.

Source: Bailey, C. (2006). PA2 online: VOLUME 3 - ISSUE 3 - NEURONAL PATHWAYS INVOLVED IN REWARD AND ADDICTION [Online]. Available: http://www.pa2online.org/articles/article.jsp?volume=3&issue=11&article=43 [2006, December 20].

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For example, the stimulant-reward system directly influences the neurons using dopamine that connect from the ventral tegmental area (VTA) to the nucleus accumbens (NA) and thereafter to the frontal cortex. Alcohol and other sedative-hypnotics also indirectly affect the VTA-NA reward system. This effect is mediated by GABA receptors, which are distributed widely and which influence the central dopaminergic reward system through mechanisms that include opioid pathways. (NIDA, 2005: Diagnosis & Treatment of Drug Abuse in Family Practice: Pathophysiology [online]).

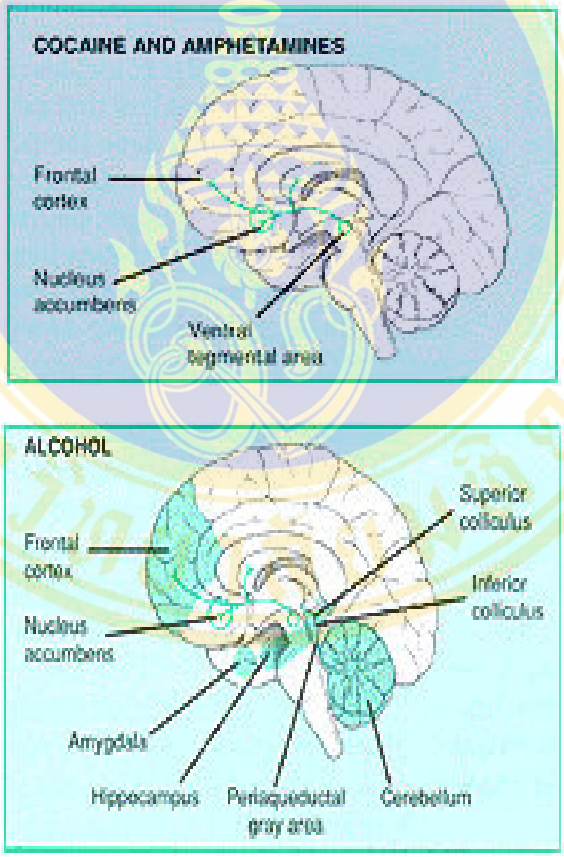

Figure 2-5: Reward pathways in the brain: Cocaine and amphetamine, and Alcohol.

Source: NIDA. (2005). Diagnosis & Treatment of Drug Abuse in Family Practice: Pathophysiology [Online]. Available: http://www.drugabuse.gov/Diagnosis-Treatment/diagnosis4.html [2006, October 20].

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Olds and Milner (1954) (referred in Bailey, C., 2006) found that stimulation of the medial forebrain bundle consists of a population of myelinated fibres that project to the ventral tegmental area (VTA). A significant proportion of VTA neurones are dopaminergic and project to the nucleus accumbens, known as the mesolimbic pathway. Further work showed that for stimulation of the medial forebrain bundle to be rewarding, the mesolimbic pathway had to be intact, and dopamine release in the accumbens had to occur. (Bailey C., 2006)

Di Chiara & Imperato (1988 referred in Bailey, C., 2006) elegantly showed that administration of a range of abused drugs (nicotine, ethanol, amphetamine, cocaine, opiates) all resulted in an increase in dopamine release in the nucleus accumbens. (Bailey C., 2006)

Phillips et al. (1992) found that DA is released from the nucleus accumbens when a rat presses a lever that delivers reinforcing brain stimulation to its ventral tegmental area (VTA). (Kenyon P., 2006)

Leshner AI., NIDA Director, (1997) discussed that NIDA s' data suggest that, independent of a drug's initial site of action, every drug--be it nicotine, heroin, cocaine, or amphetamine--appears to increase the levels of the neurotransmitter dopamine in the brain pathways that control pleasure. (Leshner AI, 1997)

Dingfelder S. F. (2004) discussed new that published in the APA journal Experimental and Clinical Psychopharmacology (Vol. 12, No. 2) suggested that the rush of craving may occur at least in part because the body can learn to anticipate and compensate for a drug's effects--a mechanism that also accounts for the often-observed phenomenon of drug tolerance. Research suggested that there are both external, such as the color or smells, and internal cues, a slight temperature rise or sluggishness, associated with a drug-administration environment, had been found to trigger the body's anticipatory response.

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ScienceDailyLLC. (2006) reported a new study from the University of Michigan adds a new twist to dopamine's fun-loving reputation: pain. The researchers showed that the brain's dopamine system is highly active while someone experiences pain. It's the first time that dopamine has been linked to pain response in humans. The finding may help explain why people are more likely to acquire a drug addiction during times of intense stress in their lives. It may also yield clues to why some, but not other chronic pain patients may be prone to developing addictions to certain pain medications. And, it gives further evidence that vulnerability to drug addiction is a very individual phenomenon -- and one that can't be predicted by current knowledge of genetics and physiology.

The first time someone uses a drug of abuse, she experiences unnaturally intense feelings of pleasure. The limbic system is flooded with dopamine. Of course, drugs have other effects, too; a first-time smoker may also cough and feel nauseous from toxic chemicals in a tobacco or marijuana cigarette. But the brain starts changing right away as a result of the unnatural flood of neurotransmitters. Because they sense more than enough dopamine, for example, neurons begin to reduce the number of dopamine receptors. Neurons may also make less dopamine. The result is less dopamine in the brain. No one knows how many times a person can use a drug without changing his or her brain and becoming addicted. But after enough doses, an addicted teen's limbic system craves the drug as it craves food, water, or friends. Without a dose of the drug, dopamine levels in the drug abuser's brain are low. The abuser feels flat, lifeless, depressed. Without drugs, an abuser's life seems joyless. Now the abuser needs drugs just to bring dopamine levels up to normal levels. Larger amounts of the drug are needed to create a dopamine flood or high, an effect known as tolerance. By abusing drugs, the addicted teen has changed the way her brain works. Drug abuse and addiction lead to long-term changes in the brain. These changes cause addicted drug users to lose the ability to control their drug use. (NIDA for Teens, 2005: The brain & addiction [Online])

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1.1.3.2 Learning Theory

Basic principles of learning have been studied for decades, and have been applied to the field of drug dependence. Two major theories of learning and behavior are relevant: (a) classical or Pavloian conditioning and (b) instrumental or operant conditioning. (WHO, 2004:44)

a) Classical or Pavlovian conditioning

Classical or Pavlovian conditioning is based on simple stimulus-response relationships as illustrated in Figure2.6

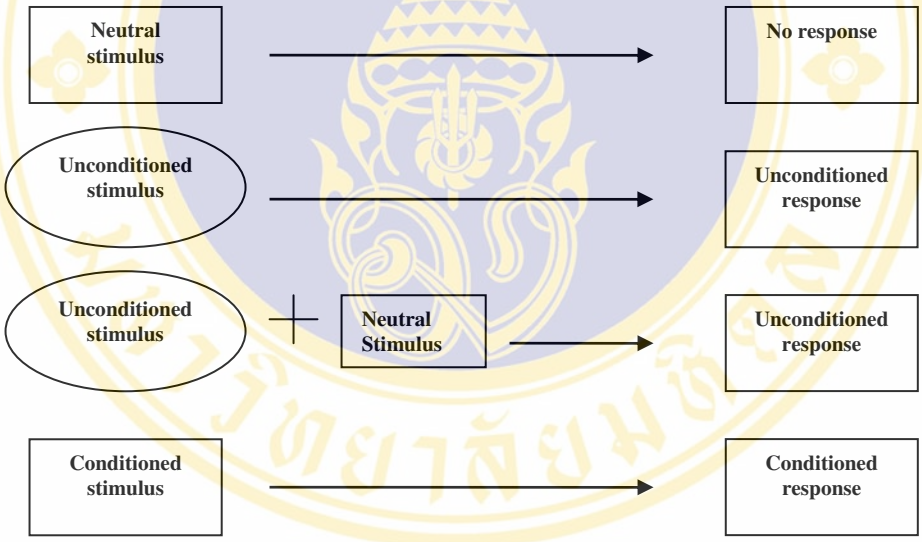

Figure 2-6: Classical or Pavlovian conditioning

(a) A stimulus, such as the appearance of a light, normally elicits no particular response, i.e. it is a neutral stimulus.

(b) When a puff of sir is blown into the eye, it reliably elicits a response: the eye blinks. The puff of air is the unconditioned stimulus and the eye blink is the unconditioned response. The unconditioned response occurs in response to the unconditioned stimulus.

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(c)The unconditioned stimulus (puff of air) is repeatedly paired with the neutral stimulus (light).

(d) Eventually the light alone is able to elicit the same response (eye blink) as the puff of air on the assumption that a puff of air will follow. The light is now known as a conditioned stimulus and the response to is the conditioned response.

This type of conditioning can occur for even complex behaviors such as emotion responses and drug craving. Advertisements for alcohol and tobacco products generally try to pair their products with images that create a positive emotion response. This leads to an association being formed in the brain between the product and the emotional response evoked by the advertisement. To an individual with drug dependence, the sight of drug paraphernalia (e.g. syringes, smoking devices) or exposure to environments in which drugs have previously been used can induce craving for drugs and relapse to drug use through classical conditioning processes. The neurobiological basis of these associations with respect to drug dependence appears to be dopamine signals in the nucleus accumbens. (WHO, 2004:45)

b) Instrumental or operant conditioning

Instrumental or operant conditioning is different from classical or Pavlovian conditioning in that in the latter the organism has no control over the presentation of the stimulus. For example, when the conditioned stimulus (light) appears, the conditioned response (eye blink) occurs. In contrast, in instrumental conditioning, the organism's behavior produces the stimulus. That is, the behavior occurs because of the consequences that it produces; it is instrumental in producing the consequences. This is often referred to as "goal-directed behavior".

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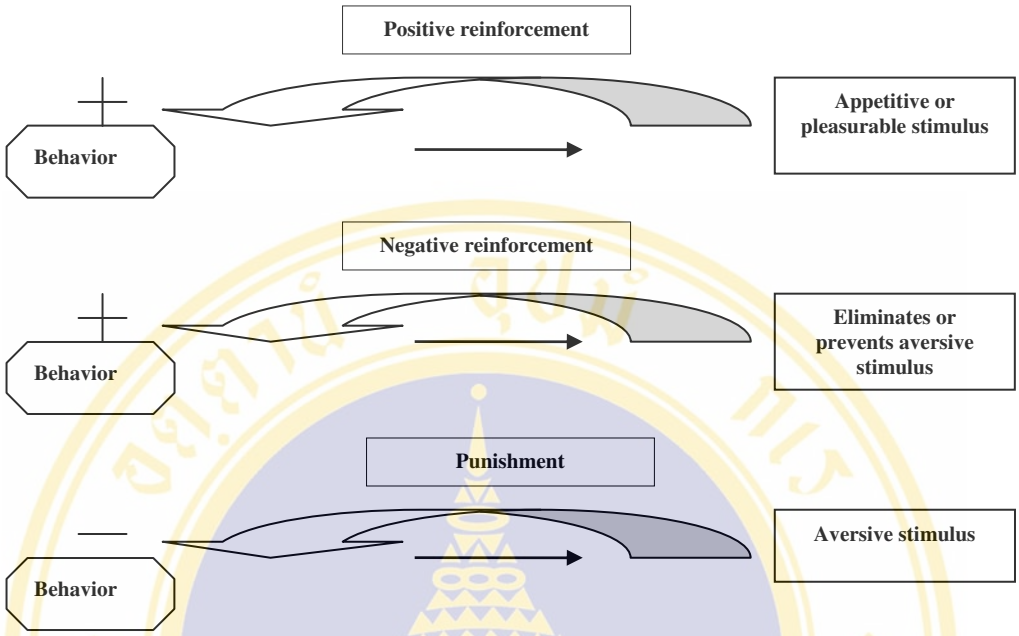

Figure 2-7: Examples of instrumental conditioning

There are three main categories of instrumental conditioning as illustrated in Figure 2.7: positive reinforcement, negative reinforcement and punishment. In positive reinforcement, behavior brings about a pleasurable stimulus, which reinforces the repetition of the behavior. For example, animals can be trained to press a lever to obtain a food pellet. Thus, the behaviour produces the food, which is the stimulus. If the animal wants food, it learns to press the lever to obtain it. In negative reinforcement, behavior eliminates or prevents an aversive stimulus, which again reinforces the behavior, or increases the likelihood of that behavior occurring again. In punishment, the behavior elicits an aversive stimulus. In this case, the behavior is less likely to occur again. Instrumental conditioning is important in drug use and dependence, since a person performs an operant response when choosing to acquire and use drug to experience its effects. Mesolimbic dopamine systems are also thought to be important in instrumental learning about the effects of drugs. (WHO, 2004:46-7)

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1.1.3.3 Disease Model

"Drug addiction is a brain disease." (Volkow, N., NIDA Director, 2004: NIDA News Release: Addiction Is a 'Brain Disease': Addiction Disrupts Brain Circuitry [Online]) Leshner, A. I. (2001) discussed that since he approached the disease of drug abuse primarily from a public health perspective, he found the traditional public health model a useful way to conceptualize an appropriate strategy. In public health, we looked at disease as a process involving a host (a vulnerable individual), an agent (what causes the disease), a vector (what brings the agent into contact with the host), and an environment (where the process occurs). In drug abuse, the host is a vulnerable drug-abusing or addicted individual; the agent is the drug; the vector is the drug producer, dealer, or enticement to use drugs; and the environment is the physical and social setting where the drug is used. The environment is critically important because re-exposure to environmental cues can elicit tremendous craving and relapse long after the individual stops using drugs. This public health framework makes clear that to deal comprehensively with drug abuse and addiction, we must simultaneously lower people's vulnerability, prevent initial use, prevent voluntary users from progressing to addiction, treat addicts, and reduce access to drugs and the drug marketing and distribution system. (Leshner, A.I., 2001: When the Question Is Drug Abuse and Addiction, the Answer Is 'All of the Above' [Online])

1.1.3.4 Social Learning Theory

Social learning theory suggests that individuals learn through a vicarious process of observing the behaviors of role models, particularly high-status role models. The consequences of behavior, especially the reinforcements that role models receive for behavior, are rewarded are much more likely to be learned. Role models for the adolescent include parents, siblings, peers, and media figures, with older peers having especially high status as role models. Role models who smoke, drink, or use other drugs, and who appear to be socially accepted or exalted, may suggest that these behaviors are not only acceptable, but necessary for social success. Expectancies regarding drug use are learned and appear more powerful than actual experience. (Pumariega, A. J., Kilgus, M. D., & Rodriguez, L., 2005: 1025-6)

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1.1.3.5 Problem Behavior Theory

Problem behavior theory, derived from the work of Jessor and Jessor, is base on an empirical integration of psychological, social, and biochemical factors that contribute to adolescent problem behaviors. “Problems behaviors” are those behaviors that are socially defined and recognized as “problems” by a group or culture, or viewed as acceptable for one age group but problematic in another age group (such as age drinking alcohol). According to problem behavior theory, drug use is functional for the adolescent and may even be instrument in achieving personal goals, such as acceptance by peers, coping with anxiety (particular social anxiety), failure (real or anticipated), hopelessness, or boredom. When behavior is effective at achieving a desired objective, it will be difficult to extinguish without alternate ways of achieving the same outcomes. Moreover, objectives such as coping with anxiety, gaining entry into a peer group, and demonstrating independence from parents are normal and healthy, so that behaviors used to achieve these objectives are difficult to modify. Unless adolescents learn other way of achieving their personal goals, drug use may be impossible to modify or extinguish. Jessor’s work on perceived life choices is particularly important in conceptualizing this issue. He found that adolescents who believed they had positive life choices were more likely to engage in health promoting behavior, and adolescents who believed their life choices to be limited were more likely to engage in risky behaviors. Adolescents with limited life choices and options (such as poor or minority youth, or youth with emotional/behavioral problems) are the ones at greatest risk for drug abuse, so social context has a critical role in the development of adolescent drug use disorder. The youth development and empowerment paradigm has extended some of Jessor’s conceptualization toward a paradigm that integrates the youth as an asset and resource into community. (Pumariega, A. J., Kilgus, M. D., & Rodriguez, L. In Lowinson, J. H., Ruiz, P., Millman, R. B. & Langrod, J. G.(ed)., 2005:1025-6)

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1.2 Concepts of preventing drug abuse

1.2.1 Concepts of Life skill

Life Skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. (WHO, 1993 : 1)

The World Health Organization promotes Life Skills school-based programs as a means to develop skills among young people that lead to healthy lifestyle choices and optimum physical, social, and psychological wellbeing. Depending on the culture, different specific abilities are emphasized. WHO considers the following Life Skills to be the most essential (WHO, 1993):

The ability to make decisions helps students assess their options and carefully consider the different consequences that can result from their choices.

The ability to solve problems helps students find constructive solutions to their problems. This skill can significantly reduce anxiety.

The capacity to think creatively is essential to decision making and problem solving. It enables students to explore all possible alternatives together with their consequences. It helps students look beyond their personal experience.

The capacity to think critically helps students objectively analyze available information along with their own experiences. It is this ability that helps students recognize the factors that influence their behavior, such as societal values, peer influence, and influence of the mass media.

The ability to communicate effectively helps students to express their feelings, needs, and ideas to others verbally or otherwise.

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The ability to establish and maintain interpersonal relations helps students to interact positively with people whom they encounter daily, especially family members.

Knowledge of self is the capacity of students to know who they are, what they want and do not want, and what does and does not please them. It also helps students recognize stressful situations.

The capacity to feel empathy is the ability to imagine what life is like for another person in a very different situation. It helps students to understand and accept diversity, and it improves interpersonal relations between diverse individuals.

The ability to handle emotions enables students to recognize their emotions and how they influence their behavior. It is especially important to learn how to handle difficult emotions such as violence and anger, which can negatively influence health.

The ability to handle tension and stress is a simple recognition by students of the things in life causing them stress.

1.2.1.1 Core life skills

World Health Organization mentions about core life skills consisting of 10 skills and they are classified into 5 pairs. Department of Health also classified it based on a learning behavior in 3 categories as follows.

1. Cognitive: creative thinking-Critical thinking
2. Affective: Self awareness and Empathy
3. Psychomotor: Interpersonal and Communicational skill, Decision making and Problem solving, Coping with emotion-Coping with stressors.

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Naturally, life skills are distinctive in cultures. Thailand, as a result, adapts more towards creative thinking and critical thinking into a component of the others and adds one more pair of attitude, Self-esteem and social responsibility. (Department of Health and members, 1996:1) which consisting of 12 components illustrated as follows;

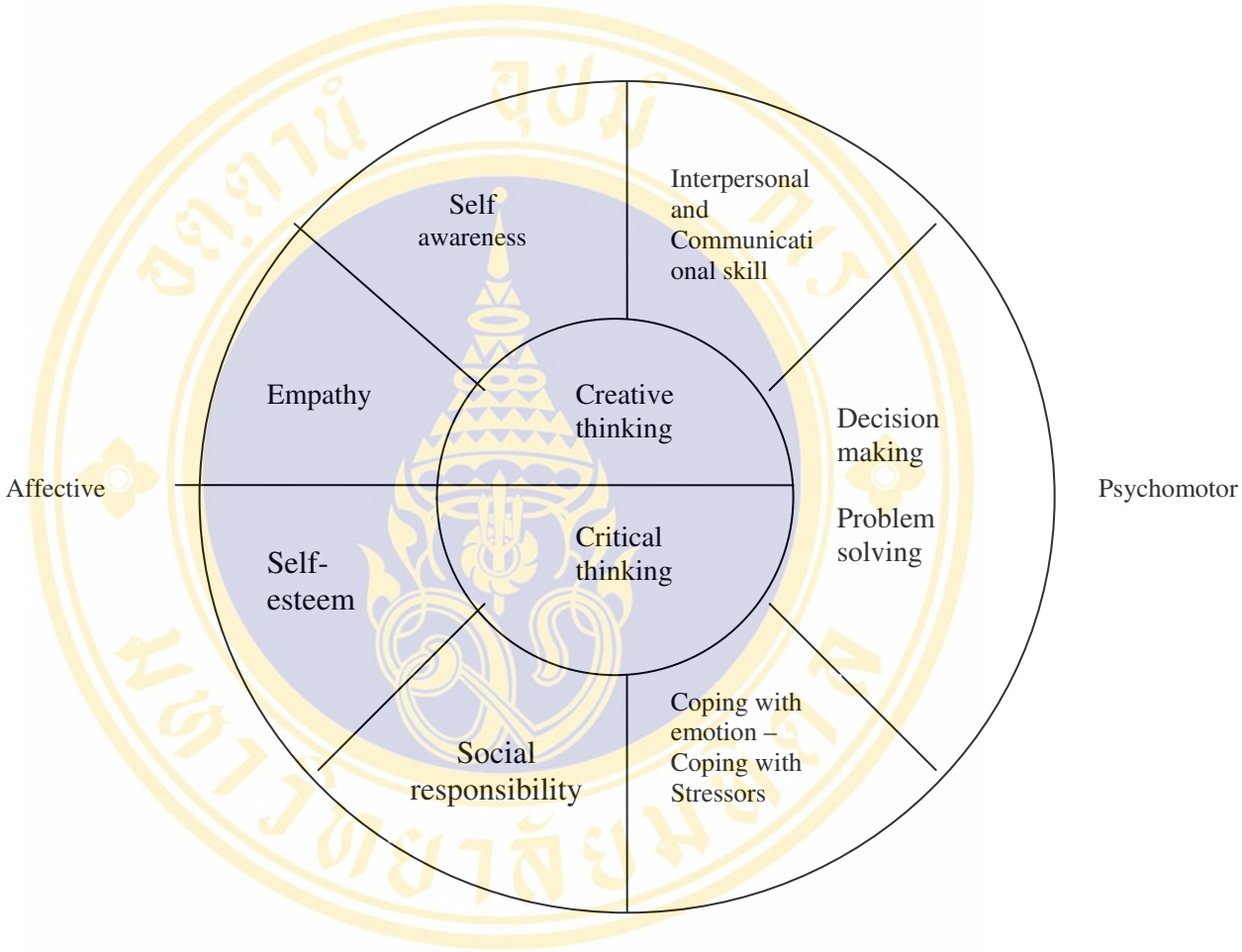

Figure 2-8: Core life skills

1. Critical thinking

Definition

Gunya Suwanasang (1989) gives a definition of critical thinking as an analysis in finding a reason based on fact reflected in data and circumstances: right from wrong, good from bad, the reason behind it and then evaluate and make decision with a good consideration upon the fact. In the other words, it is to consider what could be an actual result and then evaluate it into an answer than assumption, for

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example, a mathematics solving, logic learning. The important thing for critical thinking is an opinion made upon a understanding.

Hilgard (1962) mentioned that critical thinking refers to ability in identifying an actual problem and rationality.

Hudgins (1977) mentioned that critical thinking refers to an attitude in seeking an analytical evidence and evaluation a debate as well as an attitude in classifying data and investigating an assumption for a reasonable conclusion.

Beyer (1985) mentioned that critical thinking refers to an identical ability due to a careful understanding, data evaluation, knowledge or objective that lead to a fair conclusion and data quality.

In summary, critical thinking refers to a personal ability in analyzing data knowledge and objective in order to solve the problem, belief and rationality.

Components

Feely (1976) classified a critical thinking component into 10

1. Distinguishing between fact and opinion concealed with value.
2. Credibility or data source.
3. Accuracy of data.
4. Difference in data, opinion and relevant/irrelevant reason.
5. Bias consideration.
6. Identify an in specified assumption.
7. Identify a obscures opinion or claims.
8. Aware of uncertainty and irrationality.
9. Distinguishing an opinion that can and can not be correctly proved.
10. Consider a steadiness of opinion and claims.

Ennis and other (1982) classified a critical thinking component into 10 as;

1. A proof in accuracy of claims.

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2. Consideration in assumptions.
3. Observation in data's credibility.
4. Observation in credibility of person informing data.
5. Proof in accuracy of conclusions.
6. Proof in accuracy of assumptions.
7. Proof in accuracy of theories.
8. Proof in accuracy of claims.
9. Consideration in obscures data or too specified data.
10. Consideration in reason actually relevant to circumstance.

Characteristics of critical thinking

Ennis (1962) refers to its characteristics as

1. A good understanding in proof factors which is a clear understanding in fundamental knowledge related to that subject together with an evaluating skill and principle. An instrument to guarantee true fact would reflect a good critical thinker.

2. Seeking evidence that proves a conclusion to get a accurate conclusion. A good analyst must investigate the evidence by

1.1 Having a correct fact, news and observation or conclusion.

1.2 A rational research with out any bias thinking.

3. A decision made up on insufficient data is considered harmful. Moreover, analyzed skills and sufficient relevant information coming up with an effective conclusion is a good qualification of a critical thinker.

4. A steadiness in connecting in specified subject in conclusion to be considered logically and rationally.

2. Creative thinking

Definition

Somsak Phuvidavuth (2535) stated that creative thinking has two definitions. Firstly, creative thinking is complicated that clear definition is hardly defined. Secondly, creative thinking can be categorized into three aspects;

1. Product

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The product must be initiative, valuable and publicly acceptable.

2. Process

The process must combine different thought or object together to create different its own original result or outcome.

3. Originality

The creative thinker must possess the thought which contains fluency, flexibility and ability of elaboration.

Aree Punmanee (2540) stated that creative thinking is an intellectual process of divergent thinking which refers to the ability to think in various point of views and being far-sighted that leads to invention and problem solving.

Guliford (1959) stated that divergent thinking consists of originality, fluency, flexibility and elaboration. Its purpose is to achieve various outcomes qualitatively and quantitatively contrast to convergent thinking that leads to on right answer. It's believed that divergent thinker would lead to effective and practical thought.

Torrance (1962) stated that creative thinking is the ability of a person to create original idea. The outcome or thought may be in different forms; e.g. , art, science, literature or merely the process of thinking which is the combination of old experience and new experience.

In conclusion, creative thinking is the ability of a person to create initiative thought by adapting and combining the existing thought. The creative person possesses originality, fluency, flexibility and elaboration.

Components

Creative thinking originated from Guildford's theory of structure. It explained that creative thinking is the divergent thinking which is the intellectual ability to think in a flexible way. This consists of many elements which are as following;

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1. Originality means new idea which is different from ordinary existing thought. Originality or wild idea is beneficial to the thinker and society comes from the combination and adaptation of old idea to create new idea.

2. Fluency means the ability to generate various thoughts within the area of the same subject. It can be divided into many aspects which can be shown as following;

2.1 Word Fluency which is the ability to use the word fluently.

2.2 Associational Fluency which is the ability to state the synonym of a particular word as much as possible within the limited time.

2.3 Expressional Fluency which is the ability to use the phrase or sentence. It means the ability to rearrange the words quickly as possible to get the objective sentence. Research result has stated that a person who possesses high expressional fluency has creative thinking.

2.4 Ideational fluency which is the ability to achieve the specific thought within the limited time. For an example, a thinker has to state the usefulness of a stone as much as possible within 5 or ten minutes.

3. Flexibility means types of thought which are divided as following;

3.1 Spontaneous Flexibility is the ability to think and achieve various outcomes; e.g. the flexible thinker can state the various usefulness of a stone, while the inflexible thinker can't.

3.2 Spontaneous Flexibility which is advantageous for problem solving. The flexible thinker can produce various thoughts.

4. Elaboration: Although creative thinking consists of various forms of thought, originality, flexibility, fluency are crucial elements for creative thinking. Elaboration can't be separated from these three aspects. It is important for creative thinking as well. Development of elaboration depends on age. Older child would possess this ability more than younger child. A girl would possess this ability more than a boy.

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Finally, a child who possesses high ability of elaboration has greater ability of observation.

3. Self awareness

Definition

Goldman (1996) has stated that self awareness means the ability to perceive and understand one owns feeling, thought and emotion as it actually is and control these by his own self.

Components

Veeravat Punnitamai (2522) has concluded Goldman's conceptual framework on self awareness into 5 aspects which are shown as following;

1. Self awareness in one's owns emotion as well as its cause and effect.
2. Ability to assess one's own self as it is as well as his own weak points and strong points.
3. Self confident as well as believing in his own ability and maintaining self esteem.
4. Ability to mange his own internal feeling in a moderate condition.
5. Self control for managing his own emotion.

4. Empathy

Definition

Goldman (1996) has stated that empathy means the ability to perceive and understand other people's emotion and need as well as encouraging, having consideration and appropriate manner towards other people.

Components

Veeravat Punnitamai (2542) has concluded Goldman's conceptual framework on empathy in 5 aspects which are shown as following;

1. Understanding and realizing other people's thought point of view and need.

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2. Having service minded, perceiving, assessing and responding to other people's need.
3. Encouraging other people as well as supporting them to develop.
4. Being generous to give opportunity to other people according to their ability.
5. Realizing collective view and group opinion as well as being able to assess the internal relationship among team members.

5. Self Esteem

Definition

Bass (1960) has stated that self esteem means feeling and discovering of self value, ability and being proud of them without referring to physical appearance or sex appeal.

Mussen and others (1981) mentioned that it is mean good feeling to one, has value, quality, and reliable to one, in order to adapt those things to become mutual benefits for both yourself and others.

Pradtana Chonkeaw (1998) indicated that it is the judging one's value process depending on feeling, attitude of oneself towards successful, failure, and social acceptance. Thus, it would lead to one's value's evaluation, acceptance, reliable, and satisfied with it.

In conclusion, self esteem means oneself value judging depending on feeling and attitude of others towards ones. It is including in positive term for valuable life, proud to be me, and one's capability.

Components

Bass (1960) and Mussen, et al. (1981) stated that components of self esteem as follow;

1) Discovering of self value.

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2) Perception of self value on trust.
3) Behavior expresses to be appropriate.
4) Enthusiastic and diligence.
5) Ability to success work.
6) Not fear and enterprising to creative thinking.
7) Not anxious allowing that something unsuccessful.
8) Leadership and self-express.
9) Not fear for comment.
10) Creative thinking.
11) To look at something from an optimistic point of view.
12) Ability to problem solving.
13) Reliable.
14) Low anxious.
15) Brave to work is ability challenge.

Niti Jangeim (1976: 32-33) has concluded one's self esteem behavior as follow.

1. Achieved core value term which are achievement, leadership, self-reliance, being good student, creativity, responsible in work, satisfy with current circumstance, follow parent's wills, patient, honor and has self-ego, has capability in study.

2. Emotional terms which are cheerful, sense of humor, determine, stability in emotion, capability in decision making.

3. Social adaptations which are justice, kindness, and scarifies for social benefits.

6. Social responsibility.

Definition

Chairat Pranee (1988) argued that personal responsibility always related to social well being.

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Ministry of education (1981) stated that realization for any works you got; it must to be done on time. Then, one must realize both positive and negative effects of it.

Kumneoung Ulerd (1981) also mentioned that it is a process which concentrating on works and own responsibility with full heart and hard work so as to complete it.

In conclusion, social responsibility means the feeling of being a part of society, also responsible for social improvement or social ruin.

Components

Chairat Pranee (1988) categorized social responsibility as follows;

1. Responsible for citizen's duty which are strict with legal, maintain public belongings, be helpful to others, and corporate to others.

2. Responsible for family which are parents respectful, household's works, and maintain family's reputation.

3. Responsible for schools which are focusing on studying, listening to teachers, follows school regulation, and maintains school belongings.

4. Responsible for friends which are advice friends when they do things wrong, be helpful, forgiveness to friends, not taking advantage of them, respects each other rights. To summarized, there are mainly three parts of social responsibilities

4.1 give and take

4.2 guilty and forgiveness

4.33 Aimed for publicity.

7-8. Interpersonal and Communication

Definition

Goldman (1996) argued that interpersonal and communication building is flexible for exchange meaningful data from one to another and suitable for further development from others corporation.

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Components

1. Capability to convince others with effective skills.
2. Clear, soft, accurate, and reliable communication skills.
3. Leadership skills to convince or supports other in the right way.
4. Able to encourage others to be managing change.
5. Conflict management skills, appropriate negotiation skills.
6. Create corporation in achieving goals.
7. Teamwork skills.
8. Create colleague's skills and build up cooperation.

9-10. Decision making and problem solving

Definition

Prasat Esarapreda (1980) stated problem solving is the process needs conscious and wise including complex behaviors which caused by conscious and wise development. Problem solving needs ration thinking and intellectual.

Kamolrat Lasuwong (1985) said problem solving is the accumulated experiences in both direct and indirect way so as to solve the new problem.

Piaget (1962) explained the capability in problem solving in term of third development problem solving skills called stage of concrete operation. Children age at 7-8 years old would initially able to solve easy problem. In the fourth stage called stage of formal operation in 11-12 years old children, they would become more rational thinking, more complex problems can be solved.

Gagne (1970) indicated that problem solving is the form of adaptation and also needs related principal theory from 2 types or above, to be compounded as the capability of problem solving. Moreover, it is based on visible skills and arouses controlling.

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In conclusion, problem solving means the process which needs intellectual, wise, thought, and accumulated experiences to solve debut problems and it start developing from 7-8 years old children.

Components

Grossinickle and Brueckner (1959) stated 8 components of problem solving as follow;

1. Problem related to children.
2. It is solvable problem.
3. Clear cut bound of problem which each child can perceive.
4. Children would present the possible problem solving ways.
5. Children are advised by teachers for planning, collecting, processing, and evaluating data.
6. Use all techniques as a way of collecting data.
7. Children would use the finished planning as the initial problems solving.
8. Summarize the problem solving.
9.

Johnson and Rising (1969) perceive the problem-solving process to be a complex neurological activity which consists of visualizing, imagining, manipulation, analysis, abstracting, and associating ideas.

11-12. Emotions and Stress Management

Definitions of Emotion and Stress

Likit Karnjanaporn has given “stress” the definition of the state of emotion or feeling that occurs when confronted with disturbing problems or pressures, leading to sadness, anger or sorrow.

For Suppachai Yawaprapat (1982), “stress” means various kinds of pain that disturb the normal cycle of body and mind functioning, causing both to be thrown off

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balance. Its meaning also stretch further to include the pressures we have physically, mentally, and emotionally.

Fishbein (1975) refers to stress as the level of nervousness that a person experiences as a result of certain situations. A specific situation may cause different levels of stress for different people. Stress can be divided into two types. One is the positive stress; its positive effect can lead a person to success. The second type is the negative stress; its effects are tiredness, desperation and loss of hope.

To conclude, stress means a human's behavior that occurs when his mind is stimulated with a stimulus to create excitement, nervousness, or pressures. Therefore, emotion and stress management means the ability to appropriately manage different emotions that occur.

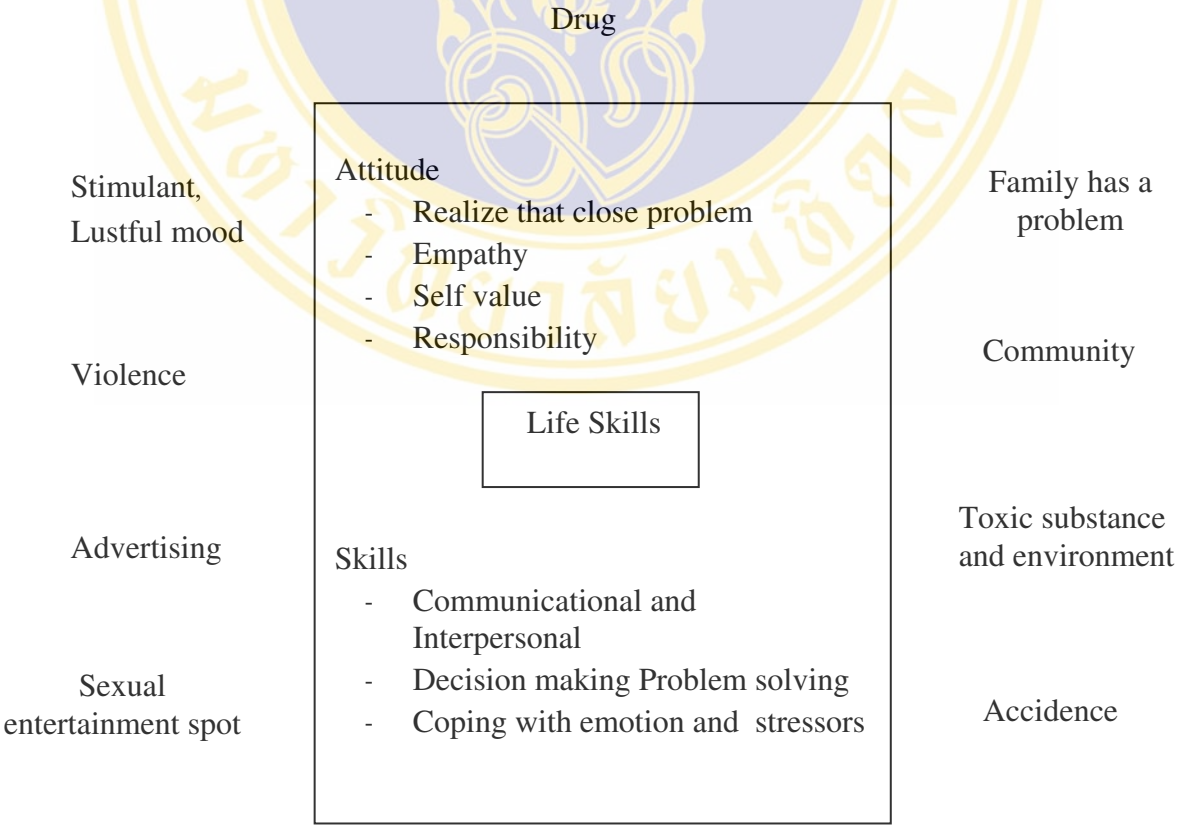

Figure 2-9: Family problem and youths' life skills

Source: Youths' life skills (Prasert Tunsakul, Veerasit sitthichai, et al. 1995: 7)

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Ability is a life skill that humans develop from past experiences as well as practice and training, all of which normally occur in the everyday life cycle through interactions with family, friends, and seniors in a particular community.

1.2.1.2 The Relationship between Life Skills and Prevention for Problematic Behaviors

The following framework and thinking shows that life skills serve as the connection between knowledge/attitude/value factors and healthy behaviors. In this context, understanding such connection is a supportive way toward the prevention of primary health problems (WHO 1994: 4)

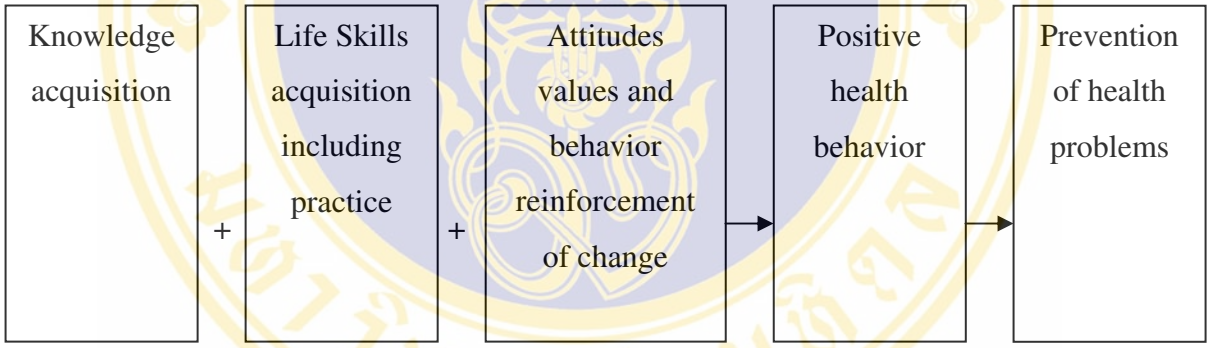

Figure 2-10: Relationship between life skills and prevention for problematic behaviors

Life skills tie knowledge, attitude and value together, leading to the actual ability to perform, i.e. what to do and how to do it. Having life skills means having the ability to achieve a desired state of health possible. There are also cultural and family factors to consider when carrying out the life skills. Those factors can surely affect healthy behaviors.

Successful application of life skills will help the person to realize and understand his true self, and also understand the others. Life skills will support the achievement of self-efficacy, self-confidence, and self-esteem, which are crucial for good mental health. Good mental health will then lead to

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the incentive to look after one's self and others, as well as prevent mental problems and other problems concerning one's overall health. Hence, life skills have been widely and effectively practiced in certain education systems such as;

- Prevention for drug abuse program (Botvin, et al. and Pentz, published in WHO 1994: 3)

- Prevention for pregnant in young (Zabin, et al. and Schink, published in WHO 1994: 3)

- Cognitive supporting (Gonzalez, published in WHO 1994: 3)

- Prevention for AIDS (WHO/GPA and Scripture Union, published in WHO 1994: 3)

- Violence decreasing (Prutzman, et al. published in WHO 1994: 3-4)

- Self-esteem (TACADE, published in WHO 1994: 4)

Life skills have been widely and effectively practiced in promotional and prevention programs that emphasize the values and benefits of health promotion that are different from the programs currently being used.

1.2.1.3 Life Skills Education (WHO 1994: 5-6)

In the promotion of health and sanitation, life skills play a crucial role. Therefore, the teaching of daily life skills should also incorporate healthy information. For instance, the life skill training program can be designed to properly adjust to changing social and environmental factors that can have effect on health and youth development.

The method used in life skill training focuses on letting the students learn from people around them, from observation of those people's practice and from expressed behaviors that can be explained by Social

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Learning Theory, (developed by Bandura 1997) the direct learning from direct experience.

Life skill training is an interactive learning and teaching system. Students will get to participate in the teaching. Appropriate methods for such interaction can be breaking up into small groups, brain storming, role playing, games, debate, opinions sharing, or the teacher sharing his life experience. A point can be raised and then let the students debate about details within their own groups, or else let the students perform their role plays in the given situation. At the end of the training, the teacher will emphasizes on concept application.

1.2.2 Concepts and Theories of Risk Factors and Protective Factors

The most important risk factors for harmful use of substances are age of Risk factors in drug abuse

Table 2-2: Risk and protective factors within major life domains

Major life domains	Risk factors	Protective factors
Individual	• social skill deficits • genetic predisposition • positive attitude about use • impulsivity • hostility and aggression • alienation • rebelliousness • learning difficulties • behavioral problems • temperament • physical trauma	• social skills and responsiveness • emotional stability • positive sense of self • problem solving skills • flexibility • resilience

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	• early age of onset	
Family	• parental abuse of alcohol, drugs, and/or gambling • remaining in an abusive or conflict ridden family • low parental monitoring • poor family management, discipline, and problem solving • favorable attitudes toward teen alcohol, other drug use and gambling • parents' mental illness • ineffective parenting skills, especially for children with learning disabilities or behavioral problems	• positive bonding • emotional support and absence of severe criticism • a sense of basic trust • high parental expectations • clear rules and expectations • parental monitoring
School	• academic failure • negative, disorderly, and unsafe school climate • low teacher expectations • lack of clear school policies regarding drug use • lack of commitment school • withdrawn/aggressive classroom behavior	• caring and supportive school environment • high expectations • clear standards and rules for appropriate behavior • youth participation, involvement, and responsibility in school tasks and decisions
Peers	• involvement with peers who use and have favorable attitudes towards alcohol, other drugs, and gamble	• involvement with positive peer group activities and norms • social competencies such

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	• involvement with peers who engage in other problem behaviors • peer rejections • poor social skills • poor social skills	as decision making skills, assertiveness, and interpersonal communication
Community	• community norm that promote or permit substance use and gambling • living in impoverished neighborhoods characterized by high crime rates and alienation • high rates of transition/mobility • cultural disenfranchisement	• caring and supportive community • high expectation of youth • being media literate • counter-advertising messages (youth educated about advertising) • religious based activities • community sponsored activities

(http://www.nida.nih.gov/NIDA_Notes/NNVol16N6/Risk.html)

- chaotic home environments, particularly in which parents abuse substances or suffer from mental illnesses;
- ineffective parenting, especially with children with difficult temperaments or conduct disorders;
- lack of parent-child attachments and nurturing;
- inappropriately shy or aggressive behavior in the classroom;
- failure in school performance;
- poor social coping skills;
- affiliations with peers displaying deviant behaviors; and perceptions of approval of drug-using behaviors in family, work, school, peer, and community environments.

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Protective factors:

- strong and positive family bonds;
- parental monitoring of children's activities and peers;
- clear rules of conduct that are consistently enforced within the family;
- involvement of parents in the lives of their children;

success in school performance; strong bonds with institutions, such as school and religious organizations; and adoption of conventional norms about drug use.

1.2.2.1 Risk Factors of Drug Abuse

Research over the past two decades has tried to determine how drug abuse begins and how it progresses. Many factors can add to a person's risk for drug abuse. Risk factors can increase a person's chances for drug abuse. Most individuals at risk for drug abuse do not start using drugs or become addicted. Also, a risk factor for one person may not be for another. (NIDA, 2005: Preventing Drug Abuse among Children and Adolescents: Risk Factors and Protective Factors [online]) Risks factors are life events or experiences that are associated with an increase in problematic behaviors. (AADAC Profile, 2003: Youth risk and protective factors [online]).

Risk factors can affect children at different stages of their lives. At each stage, risks occur that can be changed through prevention intervention. Early childhood risks, such as aggressive behavior, can be changed or prevented with family, school, and community interventions that focus on helping children develop appropriate, positive behaviors. If not addressed, negative behaviors can lead to more risks, such as academic failure and social difficulties, which put children at further risk for later drug abuse.(NIDA, 2005: Preventing Drug Abuse among Children and Adolescents: Risk Factors and Protective Factors [online])(49) Risk factors are those that make drug use more likely. Research has shown that many of the same factors apply to other behaviors such as youth violence, delinquency, school dropout, risky sexual behaviors, and teen pregnancy. (NIDA, 2005: Drug Abuse Prevention

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Research Update: Risk and Protective Factors in Drug Abuse Prevention [online])(50)

This research follows risk factors of Alberta Alcohol and Drug Abuse Commission that has prepared several papers on risk factors associated with adolescent substance use. Risk factors focus on five major life domains: individual, family, peer, school and community (AADAC Profile, 2003: Youth risk and protective factors [online]) (52)

1.3 Concepts of Buddhist model

1.3.1 The Law of Karma

According to Buddhist beliefs, Karma means action, which is performed either with an intention. or volitionally. Karma can be performed through three channels including bodily, verbal, and mental action. Karma is related to a natural process of causes and effects influencing everything. An action is either good or bad; however, the good actions are believed to gain merits or Boon, within this life or next rebirth (Payomyong. 2000; Payutto, 1995a, 1998; Sutthiyano, 1999). The law of Karma means that good acts will bring good consequences and vice versa. Rebirth is the result of one's own Karma. Meritorious Karma leads to a good rebirth and demeritorious Karma leads to a bed rebirth (Payomyong, 2000, p. 2)

1.3.1.1 The working of karma

So whenever we act, the world reacts, responding in equal measure to the change we impose upon it. A big, sudden action makes a big, sudden change to the world. A slow steady action makes a slow and steady change. All these changes sooner or later feed back to us.

If our actions make changes to the world that are gentle, comfortable and smooth, the world will respond to us in the same gentle manner. Conversely, if our actions are aggressive, hostile and rough, we will receive aggression, hostility and roughness from the world. In a world of instant karma

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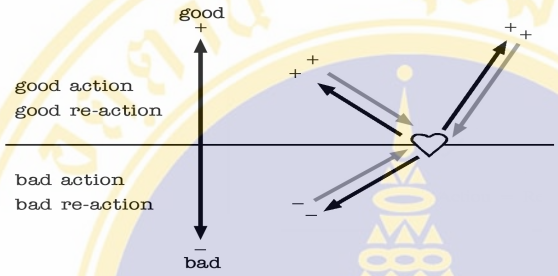
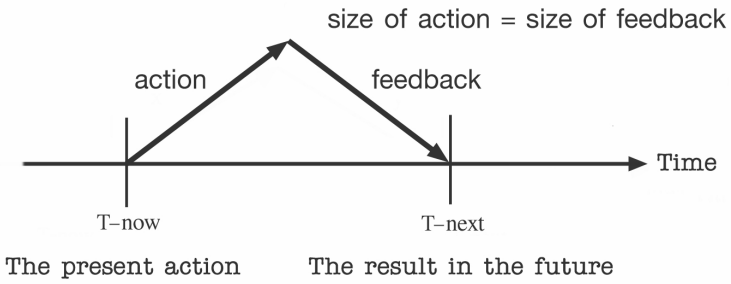
we could illustrate this type of feedback with the diagram below. (I represent mind and body together with a heart-point. For Thais the heart and mind are one, not separated. A Thai person may say 'my mind is calm' and tap his or her chest. So I will continue in the Thai way, with the heart and mind as one.)

Figure 2-11: An instant karma world



In our instant karma world good begets good and bad begets bad; what comes around goes around; as you sow so shall you reap. Life is a journey through time. From moment to moment time is moving on and our life moves along with time. When we act, it will take some period of time to affect the world. Change requires time. The effect takes time to manifest and the result that feeds back to us will not be instantaneous, but will be experienced in a future moment, when the conditions are right.

Figure 2-12: Karma takes time



To illustrate the principles of karma I have shown our action and the returning feedback as single arrows. In fact, the reality is more complex a

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continuous interaction of many waves but the principle is the same: All that we send out, will in some way, shape or form, return. And this process takes some interval of time.

1.3.2 Boon and Babb. Boon (Merit) and Babb (Demerit) are verbal categories frequently used by Buddhists. The word Tham Boon (to make merit) refers to the giving of gifts to the Buddhist monks and to the Buddhist Wat (temple). As a lay Buddhist, his or her meritorious action is acquired by the ten bases of actions including giving, observing the precepts or moral behavior, training mental behavior, reverence, rendering services, sharing out merit, rejoicing in others' merits, listening to the right teaching, and straightening one's views or forming correct views (Payutto, 1998). The value of merit-making lies in two aspects: first, it is said that one's fund of merit accumulated in this life will ensure a rebirth blessed with happiness, prosperity, and wealth. Second, while merit-making has ideological direction in terms of minimizing the consequences of death and ensuring a prosperous rebirth, the giving of gifts to monks also produces a happy and virtuous state of mind (Payutto, 1995a).

1.3.3 Sīla (the precepts) is rule of morality; moral conduct.

Sīla five is The Buddha taught that the basis of human morality lies in five precepts:

1. Refrain from killing
2. Refrain from stealing
3. Refrain from sexual misconduct
4. Refrain from lying
5. Refrain from using intoxicants

By keeping these five precepts one lives in a way that no intentional harm is done either to us or to the world; no hostile, aggressive waves are generated in our sea of world equilibrium. And when no harm is done to the world, the world will have no new harmful feedback for us.

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So now let's look at the law of cause and effect and see why we have to observe the five precepts.

The 1st precept: Harmonious conduct regarding Life if we harm other life, we will be harmed in the same degree. All beings love their lives and want to live. So just as we would like to live unmolested, we should refrain from injuring others or taking life, any life. One who keeps the first precept will not swat a mosquito he or she would literally not hurt a fly.

The 2nd precept: Harmonious conduct regarding Property if we do not steal or damage others' property then we will never have to compensate for it. People who have things stolen from them are being paid back in kind from past action against the property of others.

The 3rd precept: Harmonious conduct regarding Sexual Conduct this deals with socially accepted norms and respect for one another. We must remember that we are all someone's son or daughter, someone's loved one, brother or sister. Our behavior, especially regarding sexual conduct, must be respectful, honorable and careful not to disturb the web of social relations. If criticism about sexual misconduct arises, it will spread quickly disturbing the social equilibrium.

The 4th precept: Harmonious conduct regarding Verbal Action we should speak only what is true. This will make our world cleaner and more stable. Truthfulness also involves two other important matters: trustworthiness and power. A person who has good verbal behavior keeps his or her word and can be trusted. A promise from such a person is reliable. Truthfulness is an important source of personal power and has many good effects. Most Buddhist chants originated from stories as told by Arahants, Bodhisatvas (Buddhas-to-be), or the Buddha himself. The chants are effective and have power because they are true.

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The 5th precept: Harmonious conduct regarding Mindfulness simply put, intoxicants decrease mindfulness. If someone is drunk they can break other precepts, doing things that they would never do while sober. Therefore, according to Buddhist doctrine, drugs and alcohol should be avoided. The question is often raised: "Is it wrong to drink a little if one does not get drunk?" In fact, one who keeps the five precepts will try not to drink at all, because drinking reduces mindfulness, and as mindfulness decreases, destruction increases.

If someone establishes themselves firmly in the five precepts it is very unlikely that they will cause harm to their world equilibrium or themselves. They will act with respect towards life, property, social norms regarding sexuality, truth and mindfulness.

1.3.4 Yonisomanasikāra

Yonisomanasikāra was reasoned attention; systematic attention; analytical thinking; critical reflection; thinking in term of specific conditionality; thinking by way of problem solving. (P.A. Payutto, Dictionary of Buddhism 2005: 57)

We can apply them for their life and used for developments

1. Morality development by **Sīla** (the precepts), it is to keep one's manners speech and thoughts under controls.

2. Wisdom development by **Yonisomanasikāra**, it is always to collect new knowledge.

In wisdom development, it needs proper attention and analytical reflection. They are divided into ten kinds of thinking.

1. **Thinking in the Dependent Origination** mean everything is composed of others, by this way of thought, we can find out original point of it. Like someone always get the first of class. What is the factor? Maybe, he pays attention to study in his class or he is genius. (The Pali Canon)

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2. **Analytical thinking** mean thinking is pressed at categorizing for knowing and understanding reality. Like human body, it is formed of organs as bones, muscles, tissues, and cells etc. (The Pali Canon)

3. **Thinking by way to be aware of state of conflict and non-self** mean thinking is stressed at understanding and knows the reality of life that they are unsteady and changeable. For example, we know that a boy completely become young man, old man and eventually dies, nobody can stop the real. (The Pali Canon)

4. **Thinking by way in problem - solving** mean thinking is to investigate from result to source and solve the problems. (It like the solution of science - determining problem, defining thesis, solving problem, and conclusion) for example, we have bad grade in examination. What is cause of it? When we know it and then solve the problem. (The Pali Canon)

5. **Thinking by way of involving with principle and aim** mean thinking is to consider to principle and destination, and then continue the solution. For example, some students take a special English course, because she plans to be air hostess. (The Pali Canon)

6. **Thinking by compare to advantage and loss** mean thinking is to be in sight for both good and bad aspect of things. For example, electricity is useful for people, but sometime, it becomes a cause of being on fire. (The Pali Canon)

7. **Thinking by authentic value and unauthentic** mean thinking is to distinguish real advantage and artificial advantage. For example, real benefit of food is healthy, but artificial benefit of that is delicious. So, real benefit is useful to life. (The Pali Canon)

8. **Thinking by encouraging in virtue** mean thinking is to cultivate the virtue or to be optimistic. For example, you fail to success your work and you are so sad. Instead of being loss heart, you fix your error and try to complete your work. (The Pali Canon)

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9. **Thinking by staying present to the now** mean thinking is to be mindful to your job. You do not worry about the past or future. Stay your mind at present, For example, in diary life you are attentive to your job or your study, not be distracted, and then, you can bring of the success. (The Pali Canon)

10. **Thinking by distinguishing aspect** mean thinking is to explicate problems. For example, the news reported "a thief pilfers and kills owner". We distinguish the news that the thief need money because of greed, and kill the owner because of anger. (The Pali Canon)

If persons usually practice ten ways of thinking, they are useful for study, work, or other activities in their life. Eventually, the success is final goal of them.

1.3.5 The Relationships of Karma, Sīla, Yonisomanasikāra

As belief in karma is the basis of being Buddhist, good acts will bring good consequences. In order to have a rebirth blessed with happiness, prosperity and wealth, one would have to do meritorious actions composing of giving [dana], observing the moral precepts [Sīla], and training the mind [samadhi]. Giving is the basic practice of meritorious actions. Before being able to give heart fully, one has to feel the love [metta] for the receiver. At this point, the observing precepts alone is not enough, the act must be accompanied by the empathetic feeling [metta] for the others.

The five precepts for ordinary people are 1. Do not kill 2. Do not steal 3. Do not commit adultery 4. Do not tell lie 5. Do not take alcoholic drinks. These precepts are not enough to inspire good actions from the inside, the five dharma are what help the Sīla to be perfect. For example a Buddhist knows that one must not kill, a mosquito bites him, and he was angry and wants to kill it but does not dare to because of the Sīla. But with the five dharma coming in pair of not killing that is metta , the Buddhist will feel pity for that mosquito to be killed just for a drop of blood from our

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body. the five dharma is composing of 1. Love [metta] 2. Having correct occupation [samma ajiva] 3. Being constraint in sexual relationship [kamasamvara] 4. holding the truth [sacca] 5. Being conscious [Sati sampajhanna].

Thus the five precepts, the five dharma, the meritorious actions and the karma are intertwined. But all these meritorious actions could not happen without yonisomanasikāra. In order to see the importance of good karma, good actions, one must have yonisomanasikāra meaning reasoned attention, analytical thinking. yonisomanasikāra helps people to think correctly, if one wants to be happy, rich etc. yonisomanasikāra or analytical thinking will tell him the cause of boon or good consequences. If one wants a lover to live with him forever, the yonisomanasikāra or awareness of non self will tell him of the impermanence of all things. If one wants to buy a very expensive watch such as the Rolex watch to be very chic, the yonisomanasikāra or reasoned thinking will distinguish the unauthentic value of that act and shows the authentic value of a watch of reasonable price. In conclusion, the yonisomanasikāra is involved in all decisions to do meritorious actions, to observe the precepts [Sīla] and to practice the dharma. This is called 'faith with wisdom' [satthadhannasampayutta].

1.3.6 Related between concepts of preventing drug abuse and Buddhist Model

It has been found that the information in the Buddhist model is relevant to life skill. The conclusion is that students in tested group illustrate an improvement after the usage of Buddhist model. This result coincides with the research paper on life skill and the tendency on using addictive substances in the age of 12-17 years old teenagers. Non-formal education system in Bangkok by Kritsada Chonwiriyakul and Noppacha Singveeratham at medical centre number 13 of Public Health, Ministry of Public Health at the year of 2003 concludes that skills of self-awareness, self-esteem, social responsibility, emotional and stress control, decision making and problem-solving, creativity, and analysis have an impact on the use of addictive substances. Students

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with low level of these skills tend to involve with addictive substances more than those with normal and high level of such skills.

This research supported by Somchai Meepoo (2001) in the topic of the study of effectiveness in using life skill to protect students in grade 5-6 from involving in addictive substances. This study is partially an experiment at Ban Tang Na School, Muang district in the province of Nakornradchasrima. This school is an experimental school and 44 students participate in the research. School of Nong Kra Tum, Muang district in the province of Nakornradchasrima is the controlling school. There are 43 students join the research from this school. Data collection is done thru the test. The outcome is shown as follow; from tested group before the experiment, knowledge on addictive substances and use of skills to protect from addictive substances is low. However after the experiment, the score is higher and quite well at the significant level of difference at 0.05. Comparing with controlled group, most students in this group score quite low both pre-experiment and post-experiment. Only small changes occur with no level of significant. The attitude of tested group on addictive substances and use of life skill in preventing from addictive substances shows higher standard of score after the experiment at the confidence level of 0.05. In case of controlled group, the changing is rather small and it's insignificant by statistics.

In which the detail of the Buddhist model is about Yonisomanasikāra and law of karma and the five precepts. This model uses these three main concepts and applies against drug abuse. The model emphasizes on understanding Yonisomanasikāra and the law of karma and the use of the five Sīla (the precepts) against drug abuse. In which the information of the Yonisomanasikāra is about wisdom development, it needs proper attention and analytical reflection. They are divided into ten kinds of thinking. (Yonisomanasikāra was reasoned attention; systematic attention; analytical thinking; critical reflection; thinking in term of specific conditionality; thinking by way of problem solving. (P.A. Payutto, Dictionary of Buddhism 2005: 57))

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1. Thinking in the Dependent Origination mean everything is composed of others, by this way of thought, we can find out original point of it.

2. Analytical thinking mean thinking is pressed at categorizing for knowing and understanding reality.

3. Thinking by way to be ware of state of conflict and non-self mean thinking is stressed at understanding and knows the reality of life that they are unsteady and changeable.

4. Thinking by way in problem - solving mean thinking is to investigate from result to source and solve the problems. (It like the solution of science - determining problem, defining thesis, solving problem, and conclusion)

5. Thinking by way of involving with principle and aim mean thinking is to consider to principle and destination, and then continue the solution.

6. Thinking by compare to advantage and loss mean thinking is to be in sight for both good and bad aspect of things.

7. Thinking by authentic value and unauthentic mean thinking is to distinguish real advantage and artificial advantage.

8. Thinking by encouraging in virtue mean thinking is to cultivate the virtue or to be optimistic.

9. Thinking by staying present to the now mean thinking is to be mindful to your job. You do not worry about the past or future. Stay your mind at present.

10. Thinking by distinguishing aspect mean thinking is to explicate problems.

This is logical and relevant to the life skill of decision making and problem-solving, creativity, and analysis which has the meaning according to the definition.

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Definition of creative thinking: Hilgard (1962) mentioned that critical thinking refers to ability in identifying an actual problem and rationality. Hudgins (1977) mentioned that critical thinking refers to an attitude in seeking an analytical evidence and evaluation a debate as well as an attitude in classifying data and investigating an assumption for a reasonable conclusion.

Definition of critical thinking: Aree Punmanee (1995) stated that creative thinking is an intellectual process of divergent thinking which refers to the ability to think in various point of views and being far-sighted that leads to invention and problem solving.

Definition of Decision making and problem solving: Prasat Esarapreda (1980) stated problem solving is the process needs conscious and wise including complex behaviors which caused by conscious and wise development. Problem solving needs ration thinking and intellectual. Kamolrat Lasuwong (1985) said problem solving is the accumulated experiences in both direct and indirect way so as to solve the new problem.

The law of karma states that “As you make your bed, so you must lie on it. As ye sow, so ye shall reap”. This statement means that we have to take responsibility for our own actions (karma). No one or no thing has the authority to destine. This is logical and relevant to the life skill. Concern on law of karma will restrain people from doing wrongful acts. This motivates people to behave within moral standard. Consequently, society will be in peace. As the lord Buddha stated that “We are the owner of our karma (unjust deed). We are the one who face with karma (consequences). Karma is the source of birth and is our lineage. We rely on the karma. What karma (deed) we do, either good or bad; we shall accept the karma (outcome).”

The content of applying the five Sīla (the precepts) to prevent the use of addictive substances is by accepting the fact that precepts are common agreement of people in the society. This benefits the society because everyone can live together peacefully. By this way the precepts (Sīla) are common agreement among people in the society to live together peacefully. The Lord Buddha stated that Sīla are from the

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past but still usable till nowadays. He also suggested that people should remind oneself of 3 principal issues which are

1. Always keep your words
2. Concentrate by using your heart (Think positively)
3. Not pursuing sinful act physically.

It's because doing so either by physically or mentally will incur consequences either sooner or later by the law of karma. Believing in Sīla means that one must not engage in sinful act physically and mentally. This encourages the youth to meditate/think before doing any act. As a consequence, pattern of behavior will change (conform to The Buddhist 12 steps: Lieutenant Colonel, M.D. Pichai Sangchanchai; Psychiatric Department at Pra Mongkutklao Hospital).

Moreover, the authority of precepts will perform as a tool to remind oneself before doing any actions. This includes childish-act and helps reducing risks by allowing oneself to be able to distinguish good action from bad (from the study of Rung-Arun school: 2005). This is relevant to study of restraining or contributing factors of Hawkins et al., in the year 1992. Individual-peer protective factors in engaging in religious activities contribute a lot to the secure development. Teenagers who are constantly engage in religious' activity are less likely to commit wrongful acts. From the teenagers' health research by Resnick (refers in Wanpen Boonprakorb, 2544), it states that at the same economic background, children who visit temple will commit less crime. They will also reject the use of addictive substances. The outcome corresponds to the study of restraining and contributing factors found in 1976-1997 by Brown, Schulenberg, Bachman, O'Malley & Johnston (Brown, Schulenberg, Bachman, O'Malley & Johnston, 2001) that says involving in religious activities or rightful action is a restraining factor while skip classes and going out during evening regularly is a contributing factor in using addictive substances in students.

Keeping the precepts is meaning that one must exclude from practicing bad karma either physically or mentally. This process will restrain us from doing bad

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things. Also, it teaches us to think before doing something. This connects to the life skill of self-awareness. Goldman (1996) has stated that self awareness means the ability to perceive and understand one own feeling, thought and emotion as it actually is and control these by his own self.

Moreover, the context of law of karma and the five precepts (Sīla) support life skill of management in the area of emotion and stress which are composed of the following components:

1. Ability of self-control: able to cope with emotions and frustration.
2. Trust Worthiness: have an honesty, reliable
3. Have virtue
4. Adaptability: able to adapt
5. Self-conscious
6. Imperturbation: peaceful in mind

This also includes strengthening skill of social responsibility. From the definition Chairat Pranee (1988) argued that personal responsibility always related to social well being which have components according to categorized social responsibility as follows;

1. Responsible for citizen's duty which are strict with legal, maintain public belongings, be helpful to others, and corporate to others.

2. Responsible for family which are parents respectful, household's works, and maintain family's reputation.

3. Responsible for schools which are focusing on studying, listening to teachers, follows school regulation, and maintains school belongings.

4. Responsible for friends which are advice friends when they do things wrong, be helpful, forgiveness to friends, not taking advantage of them, respects each other rights.

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To summarized, there are mainly three parts of social responsibilities

1. Give and take
2. Guilty and forgiveness
3. Aimed for publicity.

This includes life skill on self-esteem by definition. Bass (1960) has stated that self esteem means feeling and discovering of self value, ability and being proud of them without referring to physical appearance or sex appeal. Mussen and others (1981) mentioned that it is mean good feeling to one, has value, quality, and reliable to one, in order to adapt those things to become mutual benefits for both yourself and others.

Holding on to the five Sīla (the precepts) enables your mind to rest in peacefulness and keep away the madness. These will lead to the birth of concentration which results in brilliance according to the time of keeping the precepts. Moreover, you will be able to live happily which arises from the power of good merits. Once one regularly hold onto the precepts and it becomes one's innate character; then, one will gain respect from others and said to be a type of person who live cautiously both mentally and physically. This type of person will gain respect from surrounding people as well as the society. In addition, good people are admired by others.

1.4 Related Researches

Srisombat Boonmeung (1990) studied about how the perceiving of drug information will affect the drug addiction in teenager. It reveals that the teenagers, who are addicted to heroin, began this damaging habit since they were 12-19. Most of them are single labor guys, who have the primary education and can earn only small amount of income. For their family backgrounds, most of their fathers are also the wage-earners, while the mothers have no job. In addition, those teenagers are not well-educated by their parents. They all used to receive the information about heroin from families, relatives, neighbors, schools, and mass media.

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Wannapa Suksatien (2000) did a research about the causes that contribute people to be addicted to drugs, and the remedy at the Northern Drug Dependence Treatment Center (NTDC) Chiang Mai. Populations selected in this research are opium, amphetamine, heroin addicts, who were received the treatment from 15 July to 16 August 1999, no matter of which gender they are. The research reveals that the factors cause people to become addicted to drugs are;

1.) Individual factor; most drug addicts have high self-confidence. They have smoked and drunken before using drugs. The first drug used is amphetamine, and the first time to use is around 16-20 years old. The most dominant reason to take drugs is the want to try.

2.) Leading factor; it seems that all drug addicts have the low or medium education level.

3.) Supported factor; in the community addicts stay, there are also a lot of drug addicts.

4.) Favorable factor; Drug addicts can always buy drugs easily.

For the reason encouraging people to get the remedy consist of;

4.1 Individual factor; People who got the treatment, most of them did so by their own decision.

4.2 Leading factor; many of those people have the positive thinking to the drug dependence treatment

4.3 Supported factor; Society esteem the people who are far from the drug using.

4.4 Favorable factor; Drug using is illegal.

Intanee Mung-Nguen (2000) did a study of the results from using the life skill activity set to prevent AIDS infection in 30 students, who were studying at grade 5 at Luan Por Upatam 7 School, in the first semester of academic year 1999. The research show that this life skill activity set is made from the studying of many documents, texts, and reports giving information about AIDS. In addition, It is also from the interviewing of students, the consultancy with the experts. When all those

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processes were completed, the life skill activity set is made to be a teaching instrument consisting of 12 activities. In each activity, they will encourage students to participate and use the group process. It includes a lot of teaching plans and devices. It takes 28 hours to complete all activities. After they applied those activities for 12, 24 and 48 weeks, they found that students had higher score in the knowledge of AIDS, AIDS awareness, emotional management skill, decision making skill, and problem solving skill. Last but not least, those students have more tendencies to prevent AIDS infection just by using this life skill activity set.

Somchai Meepoo (2001) studied in the effectiveness and efficiency of using life skill to prevent dugs taking in grade5 and 6 students at Ban Tang Ta School, Nong Ja Bok Sub district, Meung District, Nakorn Ratchaseema. This school studied action of 44 students. Another group of students is in Nong Kratoom School, the same provine as before. We can see from the study that in the trial group, student's knowledge about drugs and the application of living skill to prevent drug addiction is very low. However; after the test, the score is increasing, and there is the important difference in statistics at the confidence level of 0.05 in controlled group. On the other hands, the score in knowledge knowing is only a little higher and have no important difference at the statistical confidence level of 0.05, same as the score in general knowledge of drugs, avoiding and preventing from drug skill. After doing applying the test, the score between the trial and controlled group have the important difference at the confidence level of 0.05. Attitude in taking drugs and ability to prevent themselves from drugs in trial group are higher with important difference at the confidence level of 0.05. The experiment on assumption in controlled group shows that the score after the trial have only little difference with confidence level at 0.05.

Sungwarn Sakawrat (1998) conducted a research on the form of confidence in taking drugs, self-valuation, relationship in family, and drug taking behavior of grade 7-12 students. He suggested that the related executives and administrators need to use the urgent methods in order to establish preventing people from drugs strategies. He also said that we can do that by keeping an eye on the students, who have high

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potentiality to be addicted to drugs. The good example on that is the students, who's the friends or some family members take dugs every day. All those mention strategies is the way, Sungwarn believed that it's good to prevent drug taking in students.

Padung Sangsai, and Pis Sangsak (1997) studied the characteristics of high school drug addicted students in government school, Mahasarakam. The research disclosed that most of those students are guys, at the age of 17-18, have 3-4 brother or sister. 61 percent of them have score around 2-2.999. Most of their mother and father stay together, and the children still stay with the parents, who mostly do agricultural job with average monthly income is 8,034 baht. Concerning students' income by average, it's approximately 1,014 baht a month. Take the freedom to go elsewhere except school into consideration, nearly half of the students can go, but the chance to sleep at other places out of the house is another story. In the point of student's problems, the majority is about study and insufficient income. Considering the drug and medicine taking record, all of sample group have taken the pills before. Among many kinds of pills, analgesic is the most popular, used by half of sample group. People who are closed to the addicts are friends, parents, and relatives. Drugs addicts may take only amphetamine or may use it with heroin, marijuana, and so on. Moreover the 78 percent of sample group has smoked 1-5 rolls a day, while 88 percent of them have drunken alcohol before. Nonetheless, 78 percent of sample group, the same percentage of people who has smoked, deny using tranquilizers. In addition, most drugs addicts have taken only amphetamine or taken with heroin, by the percentage of 35 and 32 respectively. Still there are 29 percent of them have used marijuana with amphetamine, and 100 percent of sample group, or everyone, know the drugs sellers and other drug addicts in their community. In order to afford the drug, the drugs addict will ask someone to buy or buy it by themselves. Nevertheless, there are still 52 percent of people agreeing that the price of drugs is too high, while 42 percent said that it's expensive but affordable, and 6 percent of people think it's inexpensive at all. The factors encouraging sample group to take drugs are from the curiosity (agreed by 58 percent approval), the problems in mind (agreed by 25 percent), and the need to cure pain (by 2 percent agreed). Ultimately, the way that students addicted to drugs get

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the information about amphetamine are by teaching in school, radio, television, and leaflets respectively.

Wassana Pattanakamjorn (1998) conducted a study on the factors related to the drug addiction behavior of students. This study revealed that from 100 addicted people, 95 percent is guy while the remaining is girl. Their ages of life are among 14-23 years old (averagely 17 years old). 64 percent of this group of population studied in vocational training institutes, while 35 percent took courses in secondary school. They came to see the doctors since their urine are found to have amphetamine (66%), and since they themselves want them to come. Most of fathers of this sample group are government officials (27%), agriculturalists (22%), merchants, and employees. On the other sides, their mothers do her job in commercial or agricultural fields. Income in the family is around 10,000-50,000. Drugs taking behavior was started since the age of 17, and the dose of taking drug is from ½ pill to 15 pills day (average rate is 2 pills a day). The method of taking drugs was disclosed that 93 percent of the addicts scent the drug odor. Concerning the reasons to take drug at the first time, the most importance is the want try and curiosity (49%). The second is the inducement by friends (37%). The second time to use drugs is from the satisfaction in smell and effect from it (30%) and from the inducement from friends again (24%). The activities done when the students took drugs are escape from studying in school (38%), and nightlife spending (15%). Most of these students bought drugs from friends in the rate of 80-100 baht a pill, and took it in school toilets. Students, who always take drugs, can be accounted for 34 percent, who sometimes take, are around 35 percent, and who hardly take are 32 percent respectively. Other kinds of drugs have been used with amphetamine are cigarette (87%), liquor, marijuana, heroin, and so on. Wassana found that there are 76 percent of drug addicted group who has stopped taking drug before. Most of them stopped by themselves, while 18 percent had to gat the drug dependence treatment at hospitals.

The incentive to discontinue using the drugs anymore was mainly from the need of the addicted person himself. The time spending is 2 months approximately.

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With family status, parents stayed together can be accounted for 82%, divorce or stay apart 8%. Moreover person whom is taken care by both of father and mother is 67%, by one of them 20%, and by relatives 12%. The students who feel that his/her family is nice and warm can be calculated to be 58%, fair for 20%, not good for 11%. The family condition caused the students to have the problems are about 27% in the eye of sample group. This group of sample would consult their friend when the problem occurred can be accounted for 39 percent, would tell their families or teachers for 51 percent. Take the environment into account; the surrounding areas affect the addicts by 35%.

The important adverse effects from taking drugs are the below-2 average grade (54%), the worse educational results (37%), the escape from studying in school (66%), stealing family's properties (6%), being drug dealer (13%), house escaping (3%), receiving the probation in school (20%), imprisonment (13%), and distress (17%). The attitude of this group of students toward the amphetamine is bad for 88 percent and impartial for 12 percent. The relationship between the drug taking and drug addicted people (from the analysis of DSM IV) are dose of drug using, studying results, drug dealer behavior, distress, and some psychological disorders.

For the factors caused by family, the reason to take drugs, school escaping, and the addiction of drugs in some members in family have no clear relation in statistical method. However; the bad situation in the family or the poor relationship among members in family can force children to avoid from family and to be close with friends instead, in case there are enough other supported factors. This study let us know the drugs taking habits in drug addicts and the factors cause children to take drugs. Except the family, influence from friends, social values, the need to have experience, the need to be accepted in group, the misunderstanding about drugs, all can bring children to be addicted to drugs.

However; this study failed to tell us about the clear factor causing students to take drugs. Except that drawback, there is one point propose that people who take the

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drugs for second time have high satisfaction in the dosage, rather than that in the drug addicted group. Moreover amphetamine can affect the quality of working in Mesolimbic Depamine System, by stimulating people to continue using drugs other times. If there is other people study on this point, we then may have the new statistical information from it, as the foreigners studied that the shortcoming of gene controlling working system of Dopamine can cause people to addict to drugs.

Rungroj Worachompoo (2001) studied and conducted a research about attitude of students toward the application of living skill as a prevention of drug consuming in secondary 1-3 students at Pontong Wittaya Schoolm, Pontong Subdistrict, Seeda District, Nakorn Ratchaseema. The research is done by having 30 students as a trial group and another 30 for controlled group. Rungroj processed this research by applying the documents from The Department of Mental Health. Then he analyzed the each living skill of students and can get the results as follow:

From the 14 skills in trial group, after the experiment, students in this group had higher knowledge and attitude in some skills with the important meaning at the confidence level of 95%. Those skills are

1.) The skill of sympathy with the people getting the adverse effect from drugs

2.) The skill of responsibility to society

3.) The skill of self-awareness (Problem Solving)

4.) The skill of analysis and criticism

5.) The skill of emotional management and controlling

6.) The skill of sympathy with people who stop taking drugs

7.) The skill of avoiding from all kinds of drugs

After getting the results from trial group, then he compared that of controlled group and found that before experiment, there is no important difference at the statistical confidence level of 95 percent. Even so, after the test, the trial group had higher scores in living skill than controlled group have, at the 95 percent confidence level, in mentioned skills.

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CHAPTER III
RESEARCH METHODOLOGY

Studying of "Development of life skill and morality with Buddhist model applied to prevention of drug abuse: A case study in secondary level schools in Nakhon Pathom province" is the quantitative research, focusing on the efficiency of using the Buddhist model toward the attitude against drug abuse in secondary school students. The information is collected from the pre Buddhist model application questionnaire and post Buddhist model application questionnaire. These questionnaires include general information, life skill test, Buddhist model understanding questionnaire, and attitude against drug abuse that related to Buddhist model questionnaire. The measurement is individual measurement. Analyzing static are percentage value (%), mean value ($\overline{X}$), standard deviation value (S.D.), coefficient of point dispersion, and T- test value. The researching process is as the following.

1.1 Population and Sample

The populations in this research are the students in secondary school in the Buddhamonthon district, Nakhon Patom province, three schools in this district had secondary education, the third key stage (grade 7^{th}, 8^{th} and 9^{th}), Kanjanapisek Wittayalai Nakornphatom School (Pra Tumnak Suan Kularb), Rattanakosin Sompoch Bawornniwech Salaya Under the Pontiff Patronization School, and Wat Majal School (Kanjanaluk wittaya).

The sample groups in this research are the students in secondary school from Wat Majal School (Kanjanaluk wittaya), Buddhamonthon district. The methods of sampling used are random sampling. That school accommodates a grade 7^{th}, 8^{th} and 9^{th} at the total amount of 203 students; the samples were divided into two groups:

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the control group and the experimental group. The experimental group would endure the Buddhist model while the control group would not. After the experiment the post-test of both groups would be compare.

1.2 Research Instrument

The research instruments were composed of two sets of instruments as follows:

1. Data collection instruments
2. Experimental instruments

1.2.1 The instrument for data collection

This studying uses the related-research questionnaire which includes the content and the objective of the research. The questionnaire can be divided into 4 parts.

Part I: General information of the people who answer the questionnaire, gender, age, religion, living status, and amount of relatives. It's a check list.

Part II: Life skill estimation for teenager at the age of 12-17 years old (Department of Mental Health, Ministry of Public Health). It has 120 questions which include

A. The capacity to think critically
Question 1-10 Amount 10 questions
B. The capacity to think creativity
Question 11-20 Amount 10 questions
C. The capacity to Self Awareness
Question 21-32 Amount 12 questions
D. The capacity to feel empathy
Question 33-46 Amount 14 questions

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E. The capacity of Self Esteem

Question 47-60 Amount 14 questions

F. The capacity of Social Responsibility

Question 61-74 Amount 14 questions

G. The ability to communicate effectively and maintain interpersonal relations

Question 75-91 Amount 17 questions

H. The ability to make decisions and solve problems

Question 92-108 Amount 17 questions

I. The ability to handle emotions and stress

Question 109-120 Amount 12 questions

This is the life skill estimation form for teenager at the age of 12-17 years old. This form uses ordinal scale and there are only 3 answers, true, quite true, and not true. The passages that have positive meaning are the passage number 1,2,3,4,7,9,11,12,14,16,18,18,20,21,22,23,24,26,27,28,29,30,31,32,33,34,35,37,38,39 ,40,44,45,48,50,52,53,54,55,56,57,58,61,62,63,66,67,68,69,70,71,72,75,76,77,78,79, 80,83,85,88,90,91,92,93,96,98,101,102,103,105,107,108,109,110,111,112,113,115,1 16, 117,118,119 and the passages that have negative meaning are the passage number 5,6,10,13,15,17,25,36,41,43,46,47,49,51,59,60,64,65,73,74,81,82,84,86,87,89,94,95, 97,99,100,104,106,114,117,120 The point for each answer is given according to the following standard.

Level of agreed	Point for the positive passage	Point for the negative passage
Agree with the passage (true)	3	1
Agree with some part of the passage (quite true)	2	2
Not agree with the passage (not true)	1	3

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The interpretation of outcome

The calculation for the life skill estimation form which uses the ordinal scale, 1-3 points, has the standard value as following.

Living Skill Component	Below Standard	Standard	Above Standard
The capacity to think critically	< 21	21-25	> 25
The capacity to think creativity	< 16	16-50	> 20
The capacity to Self Awareness	< 25	25-30	> 30
The capacity to feel empathy	< 33	33-39	> 39
The capacity of Self Esteem	< 30	30-35	> 35
The capacity of Social Responsibility	< 34	34-39	> 39
The ability to communicate effectively and maintain interpersonal relations	< 34	34-41	> 41
The ability to make decisions and solve problems	< 35	35-42	> 42
The ability to handle emotions and stress	< 22	22-28	> 28
Total	< 269	269-314	> 314

Source: Report of the Research "Life skill Estimation Form Creating and Result of Life skill Promotion on the School Base", Department of Mental Health, Ministry of Public Health 1999:97

Note: The estimation result that is below standard doesn't imply that the person who is estimated is disorder on that side since the every component of living skill develops and changes all the time. Therefore, scoring the point below the standard should be considered to seek the way to improve the living skill on that side.

Part III: The questionnaire for checking the understanding of Buddhist model.

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The researcher had constructed tools (the questionnaire) used in research to cover the content with reviewed related researches and literatures. It is a checklist which is created to check the understanding of the law of karma, the thinking of Yonisomanasilara way and Sīla (the five precepts). It includes 20 likert scale close questions with 10 positive questions and 10 negative questions. The answer is in the likert scale which can be scaled in 3 levels. There are 3 answers. The answer will be scored according to the following standard.

Level of agreed	Point for the positive question	Point for the negative question
Agree with the passage (true)	3	1
Agree with some part of the passage (quite true)	2	2
Not agree with the passage (not true)	1	3

The interpretation of outcome

The cut-point will be set from the mean value to divide the secondary school students in to 2 groups, the group that understand and not understand the Buddhist model. The group that has the point above the cut-point is the group that understands the Buddhist model. If the point is below the cut-point, it implies that the person doesn't understand the Buddhist model.

Instrument Quality Checking

Content Validity

The researcher than made the necessary changes and improvement accrding the advice of the experts (5 qualified persons, 2 monks, 1 professor, and 2 doctor professors). To assure that the content is correct, clear, appropriate, and includes all necessary contents, and use language appropriate for the participants, the instrument was re-submitted to experts to examine the

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content validity again before using. The content validity index is 0.86 as the result. (Davis, 1992)

Reliability

The researcher used the Buddhist model understanding questionnaire for secondary school student on the 30 secondary school students that have the quality close to the sample group at a secondary school in Buddhamonton district, Nakhon Patom. The reliability level of the questionnaire was examined by analyzing for internal consistency by the use of Cronbach's alpha coefficient. The Cronbach's alpha coefficient formula as following.

$$\alpha = \frac{n}{n-1}\left[\frac{1-\sum s_i^2}{s_t^2}\right]$$

α = The reliability value
n = Total frequency
s_i^2 = Variance of Single Item
s_t^2 = Variance of Total Item

The reliability of the Buddhist model understanding questionnaire for secondary school student is 0.89 which means that the instrument or the questionnaire is reliable enough to be used as a researching instrument for gathering information

Part IV: Attitude against drug abuse questionnaire was created to measure the attitude toward against drug abuse that is related to Buddhist model.

It includes 20 likert scale close questions which are used for measuring the attitude toward against drug abuse by using the Buddhist model. There are 10 positive questions and 10 negative questions. The answer is likert scale of 3 levels. There are 3 answers and the scoring standard is as the following.

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Level of agreed	Point for the positive question	Point for the negative question
Agree with the passage (true)	3	1
Agree with some part of the passage (quite true)	2	2
Not agree with the passage (not true)	1	3

The interpretation of outcome

The cut-point will be set from the mean value to divide the secondary school students in to 2 groups, the group with the attitude that the Buddhist model is related to against drug abuse and the group with the attitude that the Buddhist model is not related to against drug abuse. The group that has the point above the cut-point is the group with the attitude that the Buddhist model is related to against drug abuse. If the point is below the cut-point, that group has the attitude that the Buddhist model is not related to against drug abuse.

Instrument Quality Checking

Content Validity

For content validity checking, the researcher sent the attitude against drug abuse questionnaire for secondary school student to 5 qualified persons, 1 monk, 2 professor, and 2 doctor professors, to check the content validity. The content validity index is 0.85 as the result. (Davis, 1992)

Reliability

The researcher used the attitude against drug abuse questionnaire for secondary school student on the 30 secondary school students that have the quality close to the sample group at a secondary school in Buddhamonton

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district, Nakhon Patom, and used the result to calculate the reliability value by using the Cronbach's alpha coefficient formula.

$$\alpha = \frac{n}{n-1}\left[\frac{1-\sum s_i^2}{s_t^2}\right]$$

α = The reliability value
n = Total frequency
s_i^2 = Variance of Single Item
s_t^2 = Variance of Total Item

The reliability of the attitude against drug abuse questionnaire for secondary school student is 0.83 which means that the instrument or the questionnaire is reliable enough to be used as a researching instrument for gathering information.

1.2.2 The instrument for the intervention

In the study of development of life skill and morality with Buddhist model applied to prevention of drug abuse in secondary school. The researcher had divided samples into two groups, the control group and the experimental group, was selected by simple-random sampling. The experimental group would endure the Buddhist model while the control group would not. After the experiment the post-test of both groups would be compared. The program was composed of:

1. Plan of teaching the Buddhist model.

2. Power-point slide for Buddhist model.

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1.4 Data collection

Research procedure and data collection. Bring all the secondary students (7^{th}-9^{th} graders) in the randomly selected the secondary school to do the following process.

Steps

1) Samples with matching backgrounds and life skills.
2) Samples are divided into one control group and one experimental group.
3) Pretest was conducted with both groups.

Pre-test step

Steps of the pre-test are as of follow:

3.1 The researcher distributed the questionnaires to the both sample groups.

3.2 Obtain the information from the both sample groups.

3.3 The researcher explains and clarifies to the both sample groups about the questionnaire. The researcher indicates that the questionnaire is based on individual given information and does not effect the study's grade.

3.4 The questionnaire lasts for 25 minutes.

4) Stimulus was applied to only experimental group.

Experiment step

The experimental group is taught the Buddhist model for 3 hours long by the prepared teacher. While the control group is controlled by not providing the Buddhist model teaching.

5) Post-test was conducted with both groups.

Post-test step

Steps of the post-test are as of follow:

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5.1 The researcher distributes the questionnaires to the both sample groups.

5.2 Obtain the information from the both sample groups.

5.3 The researcher explains and clarifies to the both sample groups about the questionnaire. The researcher indicates that the this questionnaire is based on individual given information and does not effect the study's grade.

5.4 The questionnaire lasts for 25 minutes

1.5 Data Analysis and Statistical Application

In this analysis, the contents and statistic shall be divided as follows.

Part I: Descriptive Statistics are used by personal data by frequency (N), Percentage (%), Standard Deviation (S.D.) and Mean ($\overline{X}$)

Part II: Calculate the standard of the life skill estimation form which is the ordinal scale questionnaire from the report of research "Life skill Estimation Form Creating and Result of Life skill Promotion on the School Base", Department of Mental Health, Ministry of Public Health (1999:97)

Part III: The cut-point will be set from the mean value to divide the secondary school students in to two groups, the group that understand and not understand the Buddhist model. The group that has the point above the cut-point is the group that understands the Buddhist model. If the point is below the cut-point, it implies that the person doesn't understand the Buddhist model. Then analyze the result by using SPSS program as following.

1) Compare the mean value of the experimental group pre-test and post-test by finding T- test value. Case two samples; the sample group has relationship (T-test Dependent) by using the paired difference tests.

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2) Compare the mean value of the controlled group pre-test and post-test by finding T-test value. Case two samples; the sample group has relationship (T-test Dependent) by using the paired difference tests.

3) Compare the pre-test mean value of the experimental group and the controlled group by finding T-test value. Case two samples; the sample group is independent (T-test Independent).

4) Compare the post-test mean value of the experimental group and the controlled group by finding T-test value. Case two samples; the sample group is independent (T-test Independent).

Part IV: The cut-point will be set from the mean value to divide the secondary school students in to two groups, the group with the attitude that the Buddhist model is related to against drug abuse and the group with the attitude that the Buddhist model is not related to against drug abuse. The group that has the point above the cut-point is the group with the attitude that the Buddhist model is related to against drug abuse. If the point is below the cut-point, that group has the attitude that the Buddhist model is not related to against drug abuse. Then analyze the result by using SPSS program as following.

1) Compare the mean value of the experimental group pre-test and post-test by finding T- test value. Case two samples; the sample group has relationship (T-test Dependent) by using the paired difference tests.

2) Compare the mean value of the controlled group pre-test and post-test by finding T-test value. Case two samples; the sample group has relationship (T-test Dependent) by using the paired difference tests.

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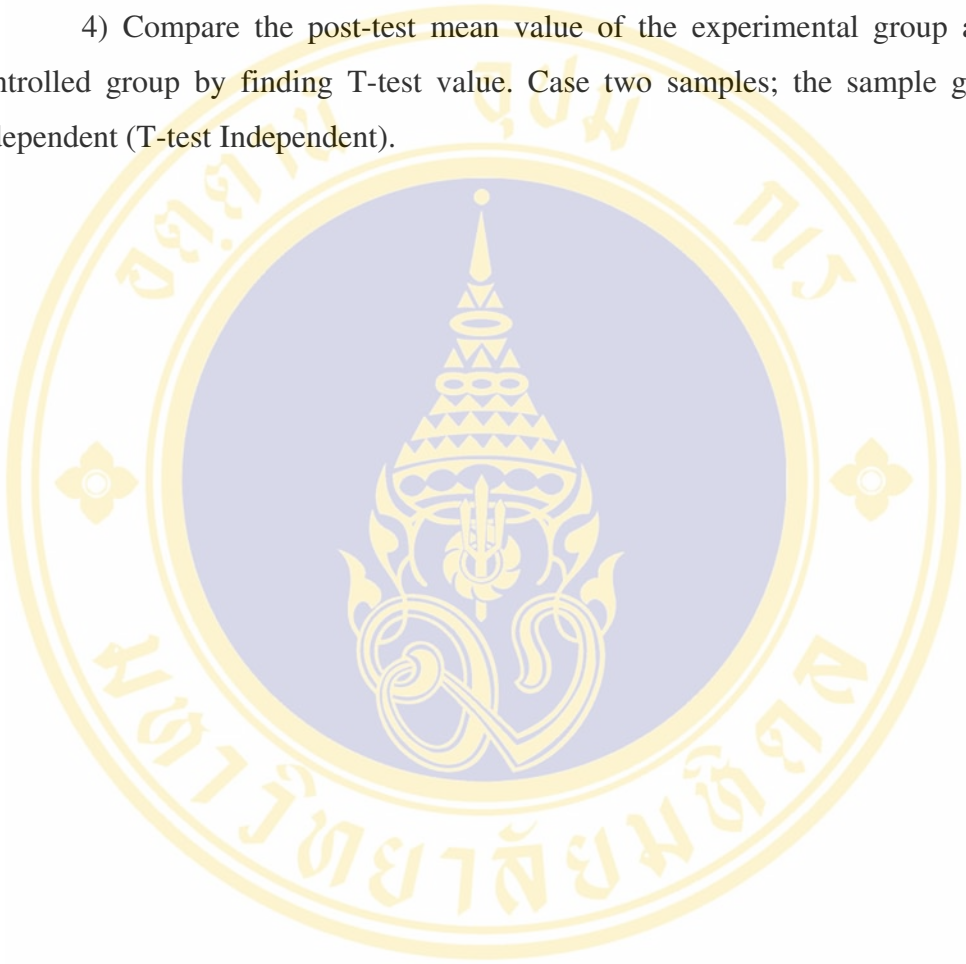
3) Compare the pre-test mean value of the experimental group and the controlled group by finding T-test value. Case two samples; the sample group is independent (T-test Independent).

4) Compare the post-test mean value of the experimental group and the controlled group by finding T-test value. Case two samples; the sample group is independent (T-test Independent).



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CHAPTER IV
RESULT

An experiment of "Development of life skill and morality with Buddhist model applied to prevention of drug abuse: A case study in secondary level schools in Nakhon Pathom province" has an objective of measuring efficiency the Buddhist model can be used to increasing the attitude against drug abuse. A sample group which was randomly picked is a school in Buddhamonton district in Nakhon Patom province named Wat Majal School (Kanjanaluk wittaya). The school accommodates a grade 7^{th}, 8^{th} and 9^{th} at the total amount of 203 students. Data is gathered through a questionnaire enquiring of general information, life skill evaluation for 12 to 17 years adult, understanding of Buddhist model, and attitude against drug abuse, before and after use Buddhist model application. Data result is classified into 4 categories as follows:

Section 1: General information of sample group
Section 2: Life skill evaluation for adult at age 12 to 17 years
Section 3: Understanding of Buddhist model
Section 4: Attitude against drug abuse

1.1 Section 1: General information of sample group

According to a general data collected, a researcher analyzed from a fundamental statistic value such as a percentage number (%), an average value ($\overline{X}$) and standard deviation (S.D.) A sample group is secondary school students (7^{th} to 9^{th} grade) studying at Wat Majal School (Kanjanaluk wittaya) of 203 students. From this experiment, total students are randomly divided into an experimental group and control group at the amount of 149 students in experimental group and 54 students in the other illustrated in Table 4-1.

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Table 4-1: Numbers and percentage number classified by education and gender in experimental group and control group

Group	Secondary education grade			Total	Sex	
	7th	8th	9th		Male	Female
Experiment Group	50 (33.6%)	52 (34.9%)	47 (31.5%)	149 (100%)	84 (56.4%)	65 (43.6%)
Control Group	16 (29.6%)	22 (40.7%)	16 (29.6%)	54 (100%)	29 (53.7%)	25 (46.3%)

According to the research, all students are Buddhist (100%). 56.4% of students in experimental group are males which is greater than females of 43.6%. An average age is at 14 years old. ($\overline{X}$=14, S.D. =0.92) Majority of students stay with their father/mother (83.2%) and more than half of students have one sibling (51.7%).

53.7% of control group are males which is greater than female of 46.3%. An average age is at 14 years old. ($\overline{X}$=14.09, S.D. = 0.91) majority of students stay with their father/mother (88.9%) and majority of students have one sibling illustrated in Table 4-2**.**

Table 4-2: Numbers and percentage number classified by general information in experimental group and control group

Personal Information		Experimental Group N=149	Control Group N=54
Age (years)	12	1 (0.7%)	0 (0%)
	13	39 (26.2%)	16 (29.6%)
	14	57 (38.3%)	21 (38.9%)
	15	46 (30.9%)	13 (24.1%)
	16	3 (2.0%)	4 (7.4%)
	17	3 (2.0%)	0 (0%)
		$\overline{X}$=14.13, S.D.=0.92	$\overline{X}$=14.09, S.D.=0.91
Stay with	Father/Mother	124 (83.2%)	48 (88.9%)
	Father	3 (2.0%)	1 (1.9%)
	Mother	7 (4.7%)	1 (1.9%)
	Ruler	15 (10%)	4 (7.4%)

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Amount of relatives	None 1 person 2 persons 3 persons 4 persons	21 (14.1%) 77 (51.7%) 42 (28.2%) 8 (5.4%) 1 (0.7%)	5 (9.3%) 33 (61.1%) 13 (24.1%) 2 (3.7%) 1 (1.9%)

1.2 Section 2: Life skill level

1.2.1 Control group

As a result of an experiment relating to life skill of control group, we found that a student in sample group overall has a normal level of life skill at 50.7%, below the level 41.0% and above the level 8.3%. The average is at 275.50 and S.D. is at 25.45. These are categorized into different skills.

1) The capacity to think critically: majority of students has a normal level at 58.8%, below the level at 20.0 % and above the level at 21.2% given 23.90 average value and 2.90 S.D.

2) The capacity to think creatively: majority of students has a normal level at 33.2%, below the level at 1.0 % and above the level at 65.8% given 21.2 average value and 2.64 S.D.

3) Knowledge of self awareness: majority of students has a normal level at 49.9%, below the level at 20.6 % and above the level at 29.5% given 28.98 average value and 3.91 S.D.

4) The capacity to feel empathy: majority of students has a normal level at 55.0%, below the level at 35.7 % and above the level at 9.3% given 36.85 average value and 4.35 S.D.

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5) The capacity of self esteem: majority of students has a normal level at 46.7%, below the level at 30.3 % and above the level at 23.0% given 32.05 average value and 4.07 S.D.

6) The capacity to social responsibility: majority of students has a normal level at 38.5%, below the level at 46.5 % and above the level at 15.0% given 34.13 average value and 4.93 S.D.

7) The ability to communicate effectively and maintain interpersonal relations: majority of students has a normal level at 65.9%, below the level at 12.1 % and above the level at 22.0% given 37.90 average value and 4.73 S.D.

8) The ability to make decisions and solve problems: majority of students has a normal level at 62.3%, below the level at 20.8 % and above the level at 16.9% given 38.86 average value and 4.66 S.D.

9) The ability to handle emotions and stress: majority of students has a normal level at 66.0%, below the level at 18.1 % and above the level at 25.9% given 26.08 average value and 3.96 S.D., Illustrated in Table 4-3.

Table 4-3: Numbers, mean value, percentage number, S.D., normal indicator, and life skill of control group.

Life Skill	Low	Usually	High	Mean	S.D.	Standard Scale
1. The capacity to think critically	11 (20.0%)	32 (58.8%)	11 (21.2%)	23.90	2.90	21-25
2. The capacity to think creativity	1 (1.0%)	18 (33.2%)	35 (65.8%)	21.20	2.64	16-20
3. The capacity to Self Awareness	11 (20.6%)	27 (49.9%)	16 (29.5%)	28.98	3.91	25-30
4. The capacity to feel empathy	76 (37.7%)	108 (53.3%)	19 (09.4%)	36.05	4.25	33-39

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5. The capacity of Self Esteem	17 (30.3%)	25 (46.7%)	12 (23.0%)	32.05	4.07	30-35
6. The capacity of Social Responsibility	25 (46.6%)	21 (38.9%)	8 (14.5%)	34.13	4.93	34-39
7. The ability to communicate effectively and maintain interpersonal relations	6 (12.1%)	36 (65.9%)	12 (22.0%)	37.90	4.73	34-41
8. The ability to make decisions and solve problems	11 (20.8%)	34 (62.3%)	9 (16.9%)	38.86	4.66	35-42
9. The ability to handle emotions and stress	4 (18.1%)	36 (66.0%)	14 (25.9%)	26.08	3.96	22-28
Total	20 (37.2%)	28 (52.0%)	6 (10.8%)	277.72	26.2	269-314

(n = 54)

1.2.2 Experimental group

As a result of an experiment relating to life skill of experimental group, we found that a student in sample group overall has a normal level of life skill at 50.7%, below the level 41.0% and above the level 8.3%. The average is at 275.50 and S.D. is at 25.45. These are categorized into different skills.

1) The capacity to think critically: majority of students has a normal level at 56.8%, below the level at 22.0 % and above the level at 21.2% given 22.96 average value and 2.84 S.D.

2) The capacity to think creatively: majority of students has a normal level at 28.1%, below the level at 1.1 % and above the level at 70.8% given 22.41 average value and 2.94 S.D.

3) Knowledge of self awareness: majority of students has a normal level at 49.9%, below the level at 22.5 % and above the level at 27.5% given 27.98 average value and 3.87 S.D.

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4) The capacity to feel empathy: majority of students has a normal level at 53.3%, below the level at 37.7 % and above the level at 9.4% given 36.05 average value and 4.25 S.D.

5) The capacity of self esteem: majority of students has a normal level at 45.6%, below the level at 30.3 % and above the level at 24.1% given 32.25 average value and 4.17 S.D.

6) The capacity to social responsibility: majority of students has a normal level at 38.9%, below the level at 46.6 % and above the level at 14.5% given 34.03 average value and 4.83 S.D.

7) The ability to communicate effectively and maintain interpersonal relations: majority of students has a normal level at 67.9%, below the level at 13.1 % and above the level at 19.0% given 37.60 average value and 4.32 S.D.

8) The ability to make decisions and solve problems: majority of students has a normal level at 60.3%, below the level at 22.8 % and above the level at 16.9% given 38.38 average value and 4.36 S.D.

9) The ability to handle emotions and stress: majority of students has a normal level at 63.0%, below the level at 12.1% and above the level at 24.9% given 25.84 average value and 3.76 S.D., Illustrated in Table 4-3.

Table 4-4: Numbers, mean value, percentage number, S.D., normal indicator, and life skill of experimental group.

Life Skill	Low	Usually	High	Mean	S.D.	Standard Scale
1. The capacity to think critically	33 (22.0%)	85 (56.8%)	31 (21.2%)	22.96	2.84	21-25
2. The capacity to think creativity	2 (1.1%)	42 (28.1%)	105 (70.8%)	22.41	2.94	16-20

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3. The capacity to Self Awareness	34 (22.5%)	74 (49.9%)	41 (27.5%)	27.98	3.87	25-30
4. The capacity to feel empathy	56 (37.7%)	79 (53.3%)	14 (9.4%)	36.05	4.25	33-39
5. The capacity of Self Esteem	45 (30.3%)	68 (45.6%)	36 (24.1%)	32.25	4.17	30-35
6. The capacity of Social Responsibility	69 (46.6%)	58 (38.9%)	22 (14.5%)	34.03	4.83	34-39
7. The ability to communicate effectively and maintain interpersonal relations	20 (13.1%)	101 (67.9%)	28 (19.0%)	37.60	4.32	34-41
8. The ability to make decisions and solve problems	34 (22.8%)	90 (60.3%)	25 (16.9%)	38.38	4.36	35-42
9. The ability to handle emotions and stress	18 (12.1%)	94 (63.0%)	37 (24.9%)	25.84	3.76	22-28
Total	61 (41.0%)	76 (50.7%)	12 (8.3%)	275.50	25.4	269-314

(n = 149)

1.3 Section 3: Understanding of Buddhist model

A cut-point derived from pre-test of control group equals 34.72 while a cut-point derived from post-test of the same group equals 34.78.

Cut-point derived from pre-test of experimental group equals 34.80 while a cut-point derived from post-test of the same group equals 38.53, illustrated in Table 4-5.

Table 4-5: Numbers, mean comparing pre-test and post-test regarding to understanding of Buddhist model of experimental group and control group

	Experimental group		**Control group**	
	N	**Mean**	**N**	**Mean**
Pre-test	149	34.80	54	34.72
Post-test	149	38.53	54	34.78

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A pre-test cut-point of control group is 34.72, it is at the score range of 34-35, which is cumulative percent 46.3%-50.0%. And a post-test cut-point of same group is 34.78, it is at the score range of 34-35, which is cumulative percent 44.4%-50.0%, illustrated in Table 4-6.

Table 4-6: Score result shown by frequency, percentage number, accumulated percentage comparing pre-test and post-test regarding to understanding of Buddhist model of control group

Score	Frequency		Percent		Cumulative Percent	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
22	2		3.7		3.7	
23	1	3	1.9	5.6	5.6	5.6
24	1	1	1.9	1.9	7.4	7.4
25	2	1	3.7	1.9	11.1	9.3
26	1	1	1.9	1.9	13.0	11.1
27	3	4	5.6	7.4	18.5	18.5
28	3	4	5.6	7.4	24.1	25.9
29	2	2	3.7	3.7	27.8	29.6
30	1	1	1.9	1.9	29.6	31.5
31	1	1	1.9	1.9	31.5	33.3
32	2	1	3.7	1.9	35.2	35.2
33	3	2	5.6	3.7	40.7	38.9
34	3	3	5.6	5.6	46.3	44.4
35	2	3	3.7	5.6	50.0	50.0
36	8	7	14.8	13.0	64.8	63.0
37	3	4	5.6	7.4	70.4	70.4
38	1	1	1.9	1.9	72.2	72.2
39	1	1	1.9	1.9	74.1	74.1
40	2	2	3.7	3.7	77.8	77.8
41	1	1	1.9	1.9	79.6	79.6
42	3	2	5.6	3.7	85.2	83.3
43	1	2	1.9	3.7	87.0	87.0
44	2	2	3.7	3.7	90.7	90.7
45	1	2	1.9	3.7	92.6	94.4
46	1		1.9		94.4	
47	1	1	1.9	1.9	96.3	96.3
48	1	1	1.9	1.9	98.1	98.1
49	1	1	1.9	1.9	100.0	100.0
Total	54	54	100.0	100.0		

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A pre-test cut-point of experimental group is 34.80, it is at the score range of 34-35, which is cumulative percent 50.0%-53.0%. And a post-test cut-point of same group is 38.53, it is at the score range of 38-39, which is cumulative percent 47.7%-55.0%, illustrated in Table 4-7.

Table 4-7: Score result shown by frequency, percentage number, accumulated percentage comparing pre-test and post-test regarding to understanding of Buddhist model of experimental group

Score	Frequency		Percent		Cumulative Percent	
	pre-test	post-test	pre-test	post-test	pre-test	post-test
22	1		.7		.7	
23	4	3	2.7	2.0	3.4	2.0
24	1	1	.7	.7	4.0	2.7
25	3	1	2.0	.7	6.0	3.4
26	1	3	.7	2.0	6.7	5.4
27	4	4	2.7	2.7	9.4	8.1
28	9	6	6.0	4.0	15.4	12.1
29	13	6	8.7	4.0	24.2	16.1
30	16	9	10.7	6.0	34.9	22.1
31	6	7	4.0	4.7	38.9	26.8
32	2	3	1.3	2.0	40.3	28.9
33	5	1	3.4	.7	43.6	29.5
34	10	3	6.7	2.0	50.3	31.5
35	4	3	2.7	2.0	53.0	33.6
36	14	6	9.4	4.0	62.4	37.6
37	5	5	3.4	3.4	65.8	40.9
38	4	10	2.7	6.7	68.5	47.7
39	3	11	2.0	7.4	70.5	55.0
40	10	8	6.7	5.4	77.2	60.4
41	4	5	2.7	3.4	79.9	63.8
42	6	6	4.0	4.0	83.9	67.8
43	5	2	3.4	1.3	87.2	69.1
44	11	5	7.4	3.4	94.6	72.5
45	7	6	4.7	4.0	99.3	76.5
46	1	5	.7	3.4	100.0	79.9
47		3		2.0		81.9
48		6		4.0		85.9
49		7		4.7		90.6
50		9		6.0		96.6
51		3		2.0		98.7
52		2		1.3		100.0
Total	149	149	100.0	100.0		

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T-test value of pre-test and post-test means of control group is -0.830 and from P-value of 0.410, pre-test and post-test means of the same group are indifferent, illustrated in Table 4-8.

Table 4-8: Mean, S.D., T-test value, P-Value comparing pre-test and post-test mean regarding to understanding Buddhist model of control group

Control Group	$\overline{X}$	S.D.	T-test	P-Value
Pre-test	34.72	7.00	-0.830	0.410
Post-test	34.78	6.93		

p < 0.05 Statistic significant

T-test value of pre-test and post-test means of experimental group is -22.828, and from P-value of 0.000, pre-test and post-test means in the same group are significantly different, illustrated in Table 4-9.

Table 4-9: Mean, S.D., T-test value, P-Value comparing pre-test and post-test mean regarding to understanding Buddhist model of experimental group

Experimental group	$\overline{X}$	S.D.	T-test	P-Value
Pre-test	34.80	6.25	-22.828	0.000
Post-test	38.53	7.82		

p < 0.05 Statistic significant

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T-test value of pre-test mean of control group and experimental group is 0.074 and from P-Value of 0.941, pre-test mean of both groups are indifferent.

T-test value of post-test mean of control group and experimental group is 3.108 and from P-Value of 0.002, post-test mean of both groups are significantly different and statistically at the level of 0.05, illustrated in Table 4-10.

Table 4-10: Mean, S.D., T-test value, P-Value comparing pre-test and post-test mean regarding to understanding Buddhist model of experimental group compared to control group

	$\overline{X}$		S.D.		T-test	P-Value
	Control group	Experimental group	Control group	Experimental group	Control group VS Experimental group	Control group VS Experimental group
Pre-test	34.72	34.80	7.002	6.254	0.074	0.941
Post-test	34.78	38.53	6.933	7.828	3.108	0.002

$p < 0.05$ Statistic significant

1.4 Section 4: Attitude against drug abuse

A cut-point derived from pre-test of control group equals 36.70 and cut-point derived from post-test of the same group equals 36.065.

Cut point derived from pre-test of experimental group equals 36.62 and cut-point derived from post-test of the same group equals 41.03, illustrated in Table 4-11.

Table 4-11: Numbers, mean comparing pre-test and post-test of the attitude against drug abuse of experimental group and control group.

	Experimental group		**Control group**	
	N	**Mean**	**N**	**Mean**
Pre-test	149	36.62	54	36.70
Post-test	149	41.03	54	36.65

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Pre-test cut-point of control group is 36.70, it is at the score range of 36-37, which is cumulative percent 42.6%-48.1%. And a post-test cut-point of the same group is 36.65, it is at the score range of 36-37, which is cumulative percent 42.6%-48.1%, illustrated in Table 4-12.

Table 4-12: Score result shown by frequency, percentage number, accumulated percent comparing Pre-test and Post-test of attitude against drug abuse of control group

Score	Frequency		Percent		Cumulative Percent	
	pre-test	post-test	pre-test	post-test	pre-test	post-test
22		1		1.9		1.9
23	2	1	3.7	1.9	3.7	3.7
24	1	1	1.9	1.9	5.6	5.6
25	1	1	1.9	1.9	7.4	7.4
26	1	1	1.9	1.9	9.3	9.3
27	1	1	1.9	1.9	11.1	11.1
28	1	1	1.9	1.9	13.0	13.0
29	1	2	1.9	3.7	14.8	16.7
30	4	3	7.4	5.6	22.2	22.2
31	3	3	5.6	5.6	27.8	27.8
32	1	1	1.9	1.9	29.6	29.6
33	2	2	3.7	3.7	33.3	33.3
34	1	2	1.9	3.7	35.2	37.0
35	2	1	3.7	1.9	38.9	38.9
36	2	2	3.7	3.7	42.6	42.6
37	3	3	5.6	5.6	48.1	48.1
38	4	4	7.4	7.4	55.6	55.6
39	6	6	11.1	11.1	66.7	66.7
40	6	6	11.1	11.1	77.8	77.8
41	1	1	1.9	1.9	79.6	79.6
42	1	1	1.9	1.9	81.5	81.5
43	1	1	1.9	1.9	83.3	83.3
44	1	1	1.9	1.9	85.2	85.2
45	1	1	1.9	1.9	87.0	87.0
46	1	1	1.9	1.9	88.9	88.9
47	1	1	1.9	1.9	90.7	90.7
48	1	1	1.9	1.9	92.6	92.6
49	3	3	5.6	5.6	98.1	98.1
50	1	1	1.9	1.9	100.0	100.0
Total	54	54	100.0	100.0		

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Pre-test cut-point of experimental group is 36.62, it is at the score range of 36-37, which is cumulative percent 50.3%-55.7%. And a post-test cut-point of the same group is 41.03, it is at the score range of 41-42, which is cumulative percent 47.7%-55.0%, illustrated in Table 4-13.

Table 4-13: Score result shown by frequency, percentage number, accumulated percent comparing Pre-test and Post-test of attitude against drug abuse of experimental group.

Score	Frequency		Percent		Cumulative Percent	
	pre-test	post-test	pre-test	post-test	pre-test	post-test
23	1		.7		.7	
24	2		1.3		2.0	
25	2	2	1.3	1.3	3.4	1.3
26	4	1	2.7	.7	6.0	2.0
27	4	1	2.7	.7	8.7	2.7
28	2	2	1.3	1.3	10.1	4.0
29	5	2	3.4	1.3	13.4	5.4
30	6	8	4.0	5.4	17.4	10.7
31	14	6	9.4	4.0	26.8	14.8
32	9	7	6.0	4.7	32.9	19.5
33	5	7	3.4	4.7	36.2	24.2
34	10	4	6.7	2.7	43.0	26.8
35	5	3	3.4	2.0	46.3	28.9
36	6	1	4.0	.7	50.3	29.5
37	8	5	5.4	3.4	55.7	32.9
38	7	1	4.7	.7	60.4	33.6
39	5	6	3.4	4.0	63.8	37.6
40	3	5	2.0	3.4	65.8	40.9
41	13	10	8.7	6.7	74.5	47.7
42	5	11	3.4	7.4	77.9	55.0
43	5	8	3.4	5.4	81.2	60.4
44	3	5	2.0	3.4	83.2	63.8
45	8	6	5.4	4.0	88.6	67.8
46	6	2	4.0	1.3	92.6	69.1
47	7	5	4.7	3.4	97.3	72.5
48	3	14	2.0	9.4	99.3	81.9
49	1	8	.7	5.4	100.0	87.2
50		4		2.7		89.9
51		2		1.3		91.3
52		7		4.7		96.0
53		5		3.4		99.3
54		1		.7		100.0
Total	149	149	100.0	100.0		

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T-test value of pre-test and post-test mean of control group is 1.766 and from P-Value of 0.083, pre-test and post-test means of the same group are indifferent, illustrated in Table 4-14.

Table 4-14: Mean, S.D., T-test value, P-value comparing pre-test and post-test mean of attitude against drug abuse of control group

Control Group	$\overline{X}$	S.D.	T-test	P-Value
Pre-test	36.70	7.033	1.766	0.083
Post-test	36.65	7.095		

p < 0.05 Statistic significant

T-test value of pre-test and post-test mean of experimental group is -32.337 and from P-Value of 0.000, pre-test and post-test means of the same group are significantly and statistically different at the level of 0.05, illustrated in Table 4-15**.**

Table 4-15: Mean, S.D., T-test value, P-value comparing pre-test and post-test mean of attitude against drug abuse of experimental group

Experimental group	$\overline{X}$	S.D.	T-test	P-Value
Pre-test	36.62	6.527	-32.337	0.000
Post-test	41.03	7.561		

p < 0.05 Statistic significant

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T-test value of pre-test mean of control group and experimental group is -0.075 and from P-Value of 0.940, Pre-test mean of both groups are indifferent.

T-test value of post-test mean of control group and experimental group is 3.710 and from P-Value of 0.000, Post-test mean of both groups are significantly and statistically different at the level of 0.05, illustrated in Table 4-16.

Table 4-16: Mean, S.D., T-test value, P-value comparing pre-test and post-test mean of attitude against drug abuse of experimental group compared to control group

	$\overline{X}$		S.D.		T-test	P-Value
	Control group	Experimental group	Control group	Experimental group	Control group VS Experimental group	Control group VS Experimental group
Pre-test	36.70	36.62	7.033	6.527	-0.075	0.940
Post-test	36.65	41.03	7.095	7.561	3.710	0.000

$p < 0.05$ Statistic significant

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CHAPTER V
DISCUSSION

From this research, it has been found that;

1. Altogether in experimental group, life skill of secondary school students in Buddhamonton district is considered to be normal. Skills of self-awareness, emotion and stress control are normal but rather high. Where as skills of analysis, sympathy, self-esteem, decision-making and problem-solving are a bit below but still normal. However for the creativity skill, students score above average. They obtain 70.8%.

And controlled group, life skill is considered to be normal. Skills of creativity, self-awareness, emotion and stress control are normal but rather high. Where as skills of analysis, sympathy, self-esteem, decision-making and problem-solving are a bit below but still normal.

2. From the comparison of the mean value ($\overline{X}$) from questionnaire understanding of Buddhist model between the controlled group and experimental group, both before (pre-test) and after (post-test) using the Buddhist model with T-test give the following result:

The result of mean ($\overline{X}$) comparison from the understanding of Buddhist model questionnaire, both before and after the usage of the model, on group of students who are controlled with T-test are in the case where the two groups (pre-test and post-test) are related (T-test dependent) and tested with paired difference tests. This give T-test equals to -0.830 and p-value at 0.410 which is more than sig. 0.05. This implies the acceptance Ho: $\sigma 1 = \sigma 2$. Thus, the result of mean comparison ($\overline{X}$) from the questionnaire understanding of Buddhist model both before and after the usage of the model

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in controlled group are not different at the level of significance at 0.05. That's, after using the Buddhist model; the score still remains the same for this group.

The result of mean ($\overline{X}$) comparison and the outcome from the understanding of Buddhist model questionnaire, both before and after of experimental group on using the Buddhist model. This give T-test at 22.828 and p-value equals to 0.000 which is less than sig. 0.05. This signals the rejection Ho: $\sigma 1 = \sigma 2$ accepts H1: $\sigma 1 \neq \sigma 2$. Hence, the result of mean comparison and the outcome of the understanding of Buddhist model questionnaire from using the Buddhist model in experimental group are different at the level of significance at 0.05 by statistics. That's to say, the score different after experimental group is exposed with the Buddhist model.

The result of mean comparison ($\overline{X}$) and the outcome from the understanding of Buddhist model questionnaire only for before the usage (pre-test) of the Buddhist model on the experimental group and the control group are the case where the two groups are not related (T-test independent). This means that it has to take into consideration Levene's Test for Equality of Variances value to observe the population's distribution. The value comes out to be 0.614 which is above Sig.0.05. This illustrates the fact that population's distribution of the two groups are not different. The T-test equals to 0.074 and p-value at 0.941 which is more than Sig.0.05. Therefore, this shows acceptance Ho: $\sigma 1 = \sigma 2$. We could conclude that; in the case of before the usage (pre-test) of the Buddhist model, the result of mean comparison and the outcome from the understanding of Buddhist model questionnaire of the experimental group and controlled group are similar at the level of significance at 0.05 by statistics.

The result of mean ($\overline{X}$) comparison and the outcome from the understanding of Buddhist model questionnaire, only for after (post-test) of

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the experimental group and the group of students who are controlled on using the Buddhist model. This means that it has to take into consideration Levene's Test for Equality of Variances value to observe the population's distribution. The value comes out to be 0.180 which is above Sig.0.05. This illustrates that population's distribution of the two groups are not different. The T-test equals to 3.108 and p-value is 0.002 which is less than Sig.0.05. Therefore, this shows rejection Ho: $\sigma 1 = \sigma 2$ accepts H1: $\sigma 1 \neq \sigma 2$. We could conclude that; after the usage (post-test) of the model, the result of mean comparison and the outcome from the understanding of Buddhist model questionnaire of the experimental group and controlled group are different at the level of significance at 0.05 by statistics. Additionally, the score differs from 1.371 to 6.133 at the confidence level of 95%.

Before (pre-test) and after (post-test) using Buddhist model in controlled group, the cut-points of the understanding in Buddhist model questionnaire are changing from 34.72 to 34.78, comparing with the cut-points of the understanding of Buddhist model questionnaire of experimental group both before and after the usage of the model are changing from 34.80 to 38.53, that the students in experimental group score better after receiving the Buddhist model.

From mean comparison between experimental and controlled group, the test score from the questionnaire with T-test for both before (pre-test) and after (post-test) the exposure of the model, students in experimental group show better understanding after (post-test) being exposed to the model at certain significant level by statistics, along with the cut-point comparison of test score in both pre-test and post-test, its can be concluded that students in experimental group have better understanding from the using of Buddhist model. It's because doing so either by physically or mentally will incur consequences either sooner or later by the law of karma. Believing in Sīla means that one must not engage in sinful act physically and mentally. This encourages the youth to meditate/think before doing any act. As a consequence, pattern of behavior will change (conform to The Buddhist 12 steps: Lieutenant

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Colonel, M.D. Pichai Sangchanchai; Psychiatric Department at Pra Mongkutklao Hospital). In which the detail of the Buddhist model is about three main concepts and applies against drug abuse. The model emphasizes on understanding Yonisomanasikāra and the law of karma and the use of the five Sīla (the precepts) against addictive substances. By this way the precepts (Sīla) are common agreement among people in the society to live together peacefully.

Moreover, the authority of precepts will perform as a tool to remind oneself before doing any actions. This includes childish-act and helps reducing risks by allowing oneself to be able to distinguish good action from bad (from the study of Rung-Arun school: 2005). This is relevant to study of restraining or contributing factors of Hawkins et al., in the year 1992. Individual-peer protective factors in engaging in religious activities contribute a lot to the secure development. Teenagers who are constantly engage in religious' activity are less likely to commit wrongful acts. From the teenagers' health research by Resnick (refers in Wanpen Boonprakorb, 2544), it states that at the same economic background, children who visit temple will commit less crime. They will also reject the use of addictive substances. The outcome corresponds to the study of restraining and contributing factors found in 1976-1997 by Brown, Schulenberg, Bachman, O'Malley & Johnston (Brown, Schulenberg, Bachman, O'Malley & Johnston, 2001) that says involving in religious activities or rightful action is a restraining factor while skip classes and going out during evening regularly is a contributing factor in using addictive substances in students.

3. From mean comparison in Attitude prevention drug abuse questionnaire both before and after using the Buddhist model, the experimental group and group that's controlled with T-test give the following results:

The result of mean comparison and score from Attitude prevention drug abuse survey, before (pre-test) and after (post-test) exposed to the Buddhist model, of group that is controlled with T-test in the case where the two sample groups (pre-test and post-test) are dependent (t-test dependent)

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with paired difference tests. This gives T-test equals to 1.766 and p-value at 0.083 which is greater than Sig. 0.05. This proves acceptance Ho: $\sigma 1 = \sigma 2$. Therefore, mean comparison and score test from Attitude prevention drug abuse from pre-test and post-test of controlled group are not different at the significance level of 0.05.

The result of mean comparison and score from Attitude prevention drug abuse survey, before (pre-test) and after (post-test) exposed to the Buddhist model, of experimental group that is tested with T-test. This gives T-test equals to -32.337 and p-value equals at 0.000 which is less than Sig. of 0.05. This proves rejection Ho: $\sigma 1 = \sigma 2$ and accepts H1: $\sigma 1 \neq \sigma 2$. Therefore, mean comparison and score test from Attitude prevention drug abuse from pre-test and post-test of experimental group are different at the significance level of 0.05.

The result of mean comparison and score from Attitude prevention drug abuse survey, only before (pre-test) exposed to the Buddhist model, of experimental group and the other group that is controlled with T-test where the two groups (experimental group and control group) are independent (t-test independent), it has to consider the value of Levene's Test for Equality of variance to observe population's distribution. This value turns out to be 0.904 which is more than 0.05; so, population's distribution of the two groups is not different. This gives T-test equals to -0.075 and p-value equals at 0.940 which is greater than Sig. 0.05. This illustrates acceptance of Ho: $\sigma 1 = \sigma 2$. Thus, mean comparison and pre-test score from Attitude prevention drug abuse test before using the Buddhist model of experimental and controlled group are not different at the significance level of 0.05.

The result of mean comparison and score from Attitude prevention drug abuse survey, only after (post-test) exposed to the Buddhist model, of experimental group and the control group with T-test where the two

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groups are independent, it has to consider the value of Levene's Test for Equality of variance to observe population's distribution. This value turns out to be 0.339 which is more than 0.05; so, population's distribution of the two groups is not different. This gives T-test equals at 3.710 and p-value equals to 0.000 which is less than Sig.0.05. This illustrates accepts H1: $\sigma 1 \neq \sigma 2$. Thus, mean comparison and post-test score from Attitude prevention drug abuse test after using the Buddhist model of experimental and controlled group are different at the significance level of 0.05. Furthermore, the score varies from 2.055 to 6.716 at the confidence level of 95%.

Before (pre-test) and after (post-test) using Buddhist model in controlled group, the cut-points of the Attitude prevention drug abuse questionnaire are changing from 36.70 to 36.65, comparing with the cut-points of the Attitude prevention drug abuse questionnaire of experimental group both before and after the usage of the model are changing from 36.62 to 41.03, that the students in experimental group score better after receiving the Buddhist model.

From mean comparison, the test score from the Attitude prevention drug abuse test with T-test for both before (pre-test) and after (post-test) the exposure of the Buddhist model, students in experimental group change significantly after being exposed to the Buddhist model. Along with the cut-point comparison of test score in both pre-test and post-test, its can be concluded that experimental group shows improvement from the usage of Buddhist model. This is consistent with the research of restraining or contributing factors of Hawkins et al., in the year 1992 which specifies that; in the issue of morality, teenagers, who are bonded with family, school and community that believe in good deed, will be in their good behavior. They will also help those that are in need which will decrease the risk of exposing to addictive substances. As can be seen from the study of relationship between fostering dharmic principle and prevention in the usage of addictive substances of teenagers in the Pathumtani province by Somporn Triamchaisri, Sangravee Theprod, and Thassanee Nonthasorn 2000 which states that by being fostered with dharmic principle mutually

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from parents and school can determine the act of not using addictive substances at the significant level of 0.001, and this research supported by Somchai Meepoo (2001) in the topic of the study of effectiveness in using life skill to protect students in grade 5-6 from involving in addictive substances. The outcome is shown as follow; from tested group before the experiment, knowledge on addictive substances and use of skills to protect from addictive substances is low. However after the experiment, the score is higher and quite well at the significant level of difference at 0.05. Comparing with controlled group, most students in this group score quite low both pre-experiment and post-experiment. Only small changes occur with no level of significant.

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CHAPTER VI
CONCLUSION AND RECOMMENDATION

The objective of this research is to study the efficiency of using the Buddhist model toward the attitude against drug abuse in secondary school students. In this research, population is secondary school students in Buddhamonton district, Nakhon Pathom Province. A sample group which was randomly picked is a school named Wat Majal School. In this study, sample group is 203 students, who study in secondary level, the students are divided into 2 groups, which are experimental group and controlled group. There are 149 students in experimental group, and 54 students in another.

Information is from making surveys and from the criteria of research related to the stuffs and objective of this study, which can be divided into 4 parts, General Information about the interviews, Life skill test, the test on understanding in Buddhist model, Attitude against drug abuse test, this research is done by the information accumulation before and after using that model.

1.1 The Conclusion of this research

1.1.1 General Information

The general characters of secondary school students in Buddhamonton district, we found that all students in those 2 groups are Buddhists. In both groups, more than half are male. Most of them stay with father and/or mother, with the average age 14 years old. More than half of those students have one brother or sister.

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1.1.2 Life skill

Life skill average value of secondary school students in Buddhamonton District is in normal level, we found all skill is in normal level, except creativeness that is higher than average.

1.1.3 The understanding in Buddhist model

We can conclude that students in experimental group have better understanding after using of Buddhist model.

By comparing the mean value (t=22.828, p=0.000) of the Buddhist model understanding score between before applying the test (pre-test) and after using it (post-test) from experimental group significantly lower than mean value (t=0.830, p=0.410) of score between before (pre-test) and after using it (post-test) from controlled group, and comparing the mean value (t=3.108, p=0.002) of the understanding score between the controlled and experimental groups from after using it (post-test), and comparing the changing in cut-points from the beginning to the new one after applying the Buddhist model between controlled (34.72 to 34.78) and experimental groups (34.80 to 38.53).

1.1.4 Attitude against drug abuse

We can summarize than students in experimental group have better attitude against drug abuse test after getting Buddhist model.

By comparing the mean value (t=32.337, p=0.000) of score on attitude against drug abuse between before applying the test (pre-test) and after using it (post-test) from experimental group significantly lower than mean value (t=1.766, p=0.083) of score between before (pre-test) and after using it (post-test) from controlled group, and comparing the mean value (t=3.710, p=0.000) of the understanding score between the controlled and experimental groups from after using it (post-test), and comparing the changing in cut-points from the beginning to the new one after

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applying the Buddhist model between controlled (36.70 to 36.65) and experimental groups (36.62 to 41.03).

1.2 Suggestions

1.2.1 The Buddhist model contains various details and progressive steps in practice, but the researcher applied to the experiment group in one time. The students should study little by little through the semester with practice. The evaluation should be done for every step.

1.2.3 The school should insert the Buddhist model to enhance morality among students in all activities.

1.2.3. The Buddhist model has been proved in this research to be effective in preventing drug abuse attitude. Thus, other schools should use this Buddhist model to create life skill as a buffer against drug abuse.

1.2.4. The quality of teaching the Buddhist model is most important in order to make the Buddhist model effective.

1.2.5. The Buddhist model used focused on the Sīla (the five precepts), it would be more effective if there is the teaching of the five dharma to bring students to a deeper humanitarian understanding.

1.3 Recommendation for further research

1.3.1 Use the Buddhist model in order to prevention of drug abuse must concern about time for implementation, time appropriateness, for example, should it be held on the beginning of semester or in the near period of final examination. For the near period of final examination, students might get worried about up coming exam and not corporate with an activity.

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1.3.2. Should study the Buddhist model in the whole content; the thinking of Yonisomanasikāra, believe in the law of Karma and Sīla (the five precepts) as basis in order to keep student away from bad cycle. Plus, there should be more supportive funds or course to take care of them.

1.3.3. Should extend this research, keep on improving the process, and also evaluate results so as to understand the secondary school student from 7^{th}-9^{th} graders in knowledge, values, and norm term. Then, extend it to be regional and national as possible.

1.3.4. Should imply Buddhist model to various kinds of activities, for example, helping others campaign, life skills improvement campaign, and drug's killer campaign.

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พระไตรปิฎกฉบับสยามรัฐ.พระสุตันปิฎกเล่ม 8 สังยุตตนิกาย นิทานวรรค สมณพรหมณสูตรที่1

พระไตรปิฎกฉบับสยามรัฐ.พระสุตันปิฎกเล่ม 15 อังคุตตรนิกาย สัตตก-อัฏฐก-นวกนิบาต อัคติขันธูปสูตร

พระไตรปิฎกฉบับสยามรัฐ. พระสุตันปิฎกเล่ม 14 อังคุตตรนิกาย ปัญจก-ฉักกนิบาต นารทสูตร

พระไตรปิฎกฉบับสยามรัฐ. พระสุตันปิฎกเล่ม 17 ขุททนิกาย ทัณฑวรรคที่10 คาถาธรรมบท

พระไตรปิฎกฉบับสยามรัฐ. พระสุตันปิฎกเล่ม 13 อังคุตตรนิกาย จตุกกนิบาต ปัญหาสูตร

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APPENDIX

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แบบสอบถามวิทยานิพนธ์

เรื่อง

DEVELOPMENT OF LIFE SKILL AND MORALITY WITH BUDDHIST MODEL APPLIED TO PREVENTION OF DRUG ABUSE: A CASE STUDY IN SECONDARY LEVEL SCHOOLS IN NAKHON PATHOM PROVINCE

ประกอบด้วย 4 ส่วน ดังนี้

ส่วนที่ 1 ปัจจัยภูมิหลังส่วนบุคคล

ส่วนที่ 2 แบบประเมินทักษะชีวิต สำหรับวัยรุ่นอายุ 12 – 17 ปี

ส่วนที่ 3 แบบสอบถามความเข้าใจตัวแบบเชิงพุทธ

ส่วนที่ 4 แบบสอบถามทัศนะคติการป้องกันสารเสพติด

หมายเหตุ โปรดใส่เครื่องหมาย / หรือ เติมข้อความลงในช่องที่คิดว่าตรงกับตัวเองมากที่สุด ในช่วง 6 เดือนที่ผ่านมา ให้ตอบได้ข้อละ 1 คำตอบให้ครบทุกข้อ

ส่วนที่ 1 ปัจจัยภูมิหลังส่วนบุคคล

1. เพศ : [ ] ชาย [ ] หญิง

2. อายุ : .....ปี

3. ศาสนา :.....

4. ปัจจุบันท่านอาศัยอยู่กับ :

[ ] บิดามารดา [ ] บิดา

[ ] มารดา [ ] ญาติ

[ ] ผู้ปกครอง [ ] อื่นๆ (ระบุ).....

5. มีพี่น้อง.....คน เป็นลูกลำดับที่.....

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ส่วนที่ 2 แบบประเมินทักษะชีวิต สำหรับวัยรุ่นอายุ 12 – 17 ปี

ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
1	ฉันมักจะมองอะไรหลายๆ แง่มุม			
2	ฉันบอกได้ว่าการกระทำของฉันดีหรือไม่ดี			
3	เมื่อพบปัญหาฉันพยายามคิดหาสาเหตุ			
4	ฉันเป็นคนไม่เชื่ออะไรง่ายๆ			
5	ถ้าเพื่อนบอกว่าดี ฉันก็เชื่อว่าดี			
6	ฉันเบื่อที่จะทำอะไรแล้วต้องมานั่งคิดวางแผน			
7	ฉันชอบคิดคาดการณ์สิ่งต่างๆ ล่วงหน้า			
8	ฉันคิดเลือกสิ่งที่เป็นประโยชน์มากกว่าสิ่งที่ชอบ			
9	ฉันคิดโดยใช้เหตุผลมากกว่าความเคยชิน			
10	ฉันมักสรุปสิ่งหนึ่งสิ่งใด โดยใช้เหตุผลส่วนตัว			
11	ฉันชอบเรียนรู้สิ่งใหม่ๆ			
12	ฉันชอบเสนอความคิดใหม่ๆ			
13	ฉันชอบทำตามสิ่งที่มีผู้ทำมาก่อน			
14	ฉันไม่กลัวความเปลี่ยนแปลง			
15	ฉันชอบสภาพแวดล้อมที่มีระเบียบแบบแผน			
16	ฉันสามารถขยายความคิดได้มากมาย			

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ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
17	ฉันไม่ชอบคิดต่อจากสิ่งที่คนอื่นคิดไว้			
18	ฉันชอบคิดค้นหาวิธีการใหม่ๆ			
19	ฉันชอบคิดแตกต่างจากคนอื่น			
20	ฉันคิดอย่างรอบคอบก่อนทำ			
21	ฉันบอกความรู้สึกที่แท้จริงได้ว่าชอบหรือไม่ชอบอะไร			
22	ฉันรู้ตัวเสมอว่ากำลังมีอารมณ์อย่างไร			
23	ฉันรู้สาเหตุที่ทำให้ฉันผิดหวังหรือเสียใจ			
24	ฉันปรับอารมณ์ให้เป็นปกติได้เร็ว			
25	หากมีคนโต้แย้งฉันมักแสดงอาการไม่พอใจ			
26	ฉันมีจุดเด่นในตัวเอง			
27	ฉันมีจุดที่ต้องปรับปรุงตัวเอง			
28	ฉันใส่ใจในการหาจุดบกพร่องและปรับปรุงตนเองเสมอ			
29	ฉันรู้ความสามารถของตัวเอง			
30	ฉันมักทำในสิ่งที่ตรงกับความสามารถ			
31	ฉันบอกได้ว่าสิ่งที่ฉันทำฉันทำได้ดีหรือไม่ดี			
32	ฉันยินดีที่จะรับฟังคำวิจารณ์จากคนอื่น			
33	ฉันยอมรับว่าคนเรามีความแตกต่างกัน			
34	ฉันยอมรับผู้อื่นที่มีความแตกต่างจากฉัน			
35	ฉันสามารถสังเกตอารมณ์ผู้อื่นจากสีหน้าและแววตา			

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ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
36	ฉันไม่ใส่ใจกับความต้องการของผู้อื่น			
37	ฉันยินดีรับฟังความทุกข์ร้อนของเพื่อน			
38	ฉันรู้สึกไม่สบายใจเมื่อเพื่อนประสบปัญหา			
39	ฉันรู้สึกเห็นใจผู้ที่กำลังเดือดร้อน			
40	ฉันชอบช่วยเหลือคนอื่นเมื่อมีโอกาส			
41	ฉันรู้สึกเป็นภาระเมื่อต้องรับผิดชอบงานของคนอื่น			
42	ฉันชื่นชมกับความสำเร็จของเพื่อน			
43	ฉันไม่สนใจกับความรู้สึกของคนรอบข้าง			
44	ฉันเป็นที่พึ่งของเพื่อนๆ ได้			
45	ฉันอยากเห็นผู้อื่นมีความสุข			
46	ฉันไม่อยากยุ่งกับเรื่องของคนอื่น			
47	เมื่อฉันทำผิดพลาดฉันจะขาดความมั่นใจ			
48	ฉันชื่นชมกับความสำเร็จของตัวเอง			
49	ฉันรู้สึกว่าตัวเองไร้ค่า			
50	ฉันพอใจในสิ่งที่ฉันมีอยู่			
51	ฉันรู้สึกไม่เป็นตัวของตัวเอง			
52	ฉันมีความรู้สึกที่ดีต่อตัวเอง			
53	ฉันรู้ว่าตัวเองมีคุณค่าไม่น้อยไปกว่าคนอื่น			

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ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
54	การได้รับคำวิจารณ์จากผู้อื่นเป็นโอกาสที่จะพัฒนาตัวเอง			
55	ฉันเชื่อว่าตัวเองมีความสามารถ			
56	ฉันรับผิดชอบต่อผลที่เกิดขึ้นจากการตัดสินใจของฉัน			
57	ฉันสามารถเอาชนะอุปสรรคในชีวิตได้			
58	ฉันกล้าแสดงความคิดเห็นในเรื่องต่างๆ			
59	ฉันมักจะคล้อยตามความคิดเห็นของคนอื่น			
60	ฉันจะทำสิ่งใดก็ต่อเมื่อคนอื่นยอมรับ			
61	ฉันเป็นคนมีวินัยในตนเอง			
62	ฉันเป็นคนตรงต่อเวลา			
63	ฉันรู้สึกผิดถ้าทิ้งขยะไม่เป็นที่เป็นทาง			
64	กฎระเบียบเป็นสิ่งที่ฝ่าฝืนได้			
65	การปฏิบัติตามกฎระเบียบเป็นสิ่งที่เสียเวลา			
66	ฉันยินดีเสียสละหากทำให้สังคมดีขึ้น			
67	ฉันยินดีให้ความร่วมมือกับส่วนรวม			
68	ฉันเต็มใจให้ความร่วมมือกับกลุ่มเพื่อให้งานสำเร็จ			
69	ฉันรู้สึกผิดเมื่อแสดงความเห็นแก่ตัว			
70	ฉันรู้สึกผิดเมื่องานส่วนรวมไม่สำเร็จ			
71	ฉันยินดีรับผิดชอบหากการกระทำของฉันมีผลกระทบต่อส่วนรวม			
72	ฉันรู้สึกไม่สบายใจหากคนอื่นเดือดร้อนจากการกระทำของฉัน			

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ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
73	ฉันคิดว่าการรับผิดชอบต่อสังคมเป็นเรื่องไกลตัว			
74	ฉันคิดว่าการรับผิดชอบต่อสังคมไม่ใช่เรื่องของเด็ก			
75	คนอื่นมักเห็นคล้อยตามในสิ่งที่ฉันพูด			
76	เวลาที่จะต้องติดต่อกับผู้อื่น เพื่อนๆ มักให้ฉันเป็นผู้นำ			
77	คนอื่นมักบอกว่าฉันพูดเข้าใจง่าย ชัดเจน			
78	ฉันสามารถฟังและจับใจความได้ดี			
79	ฉันชอบทำงานร่วมกับผู้อื่น			
80	หากทำงานร่วมกับผู้อื่น ฉันมักทำได้ดี			
81	ฉันไม่ค่อยอยากรู้จักคนอื่นมากนัก			
82	คนอื่นมักบอกว่าฉันเป็นคนหยิ่ง			
83	ฉันมีความเป็นกันเองกับทุกคน			
84	ฉันรู้สึกลำบากใจเมื่อต้องคุยกับคนไม่รู้จัก			
85	ฉันปฏิเสธคนอื่นไม่ค่อยเป็น			
86	เมื่อมีความขัดแย้ง ฉันมักหลบไปห่างๆ			
87	ฉันมักกังวลเมื่อต้องไปพบปะกับคนที่ไม่รู้จัก			
88	ฉันรู้สึกว่าเป็นที่ไว้วางใจของเพื่อนๆ			
89	ฉันชอบมองโลกในแง่ร้ายไว้ก่อน			
90	ฉันเป็นคนจริงกับคนอื่น			
91	เพื่อนส่วนมากชอบฉัน			

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ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
92	ก่อนตัดสินใจ ฉันมักจะคิดอย่างรอบคอบ			
93	ฉันชอบมองอะไรหลายๆ มุม			
94	ฉันชอบการตัดสินใจที่ฉับไว หากมีปัญหาค่อยแก้เอาข้างหน้า			
95	ฉันชอบตัดสินใจตามเพื่อนๆ หรือตามคนส่วนใหญ่			
96	ฉันสามารถแก้ปัญหาเฉพาะหน้าได้ดี			
97	ฉันชอบตัดสินใจเสี่ยงๆ เพื่อให้เกิดความตื่นเต้น			
98	เมื่อต้องทำสิ่งใด ฉันอยากรู้ที่มาที่ไปของสิ่งนั้นก่อน			
99	ฉันชอบทำงานตามคำสั่งมากกว่าให้ตัดสินใจเอง			
100	เมื่อทำสิ่งใดแล้วเกิดปัญหา ฉันจะเลิกทำสิ่งนั้น			
101	เมื่อทำสิ่งใดแล้วเกิดปัญหา ฉันจะค้นหาสาเหตุให้พบ			
102	เมื่อต้องแก้ไขปัญหา ฉันมักค้นหาทางเลือกหลายๆ ทาง			
103	ฉันเชื่อว่าทุกปัญหามีทางออกเสมอ			
104	ฉันชอบแก้ปัญหาด้วยตัวเองโดยไม่ต้องปรึกษาใคร			
105	หากไม่มั่นใจ ฉันมักปรึกษาคนอื่นก่อนตัดสินใจ			
106	เมื่อฉันตัดสินใจแล้ว ผลจะเกิดอย่างไรฉันไม่สนใจ			
107	ฉันชอบคาดการณ์ล่วงหน้าในสิ่งที่จะลงมือทำ			
108	ฉันชอบรับผลที่จะเกิดจากการตัดสินใจของฉัน			
109	ฉันเป็นคนใจเย็น ไม่ค่อยโกรธใครง่ายๆ			
110	ฉันแสดงออกอย่างเหมาะสมเมื่อมีอารมณ์โกรธ			

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ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
111	คนอื่นมักบอกว่าฉันเป็นคนเก็บอารมณ์ได้ดี			
112	ฉันเป็นคนไม่กลัวความผิดหวัง			
113	ฉันเป็นคนที่ไม่จมอยู่กับอดีต			
114	ฉันไม่กล้าเผชิญหน้ากับความผิดหวังหรือความเสียใจ			
115	เมื่ออยู่ในภาวะที่ตึงเครียดฉันมักหาทางออกได้			
116	เมื่อรู้สึกเครียดฉันมักหากิจกรรมอย่างอื่นทำ			
117	เมื่อมีเรื่องไม่สบายใจฉันมักอยู่คนเดียว			
118	ฉันเป็นคนอารมณ์มั่นคง ไม่เปลี่ยนแปลงง่าย			
119	คนอื่นมักบอกว่าฉันเป็นคนร่าเริง อารมณ์ดี			
120	ฉันเป็นคนเคร่งเครียดและจริงจังกับทุกเรื่อง			

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ส่วนที่ 3 แบบสอบถามความเข้าใจตัวแบบเชิงพุทธ

ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
1	ฉันคิดว่าทำบุญโดยใช้เงินมากจะได้บุญมากที่สุด			
2	ฉันเข้าใจว่ากฎแห่งกรรม คือ “ทำดีได้ดี ทำชั่วได้ชั่ว”			
3	ฉันคิดว่าศีลห้าเป็นเรื่องของพระเท่านั้น			
4	การสะเดาะเคราะห์เป็นเรื่องที่ถูกต้องตามหลักพุทธศาสนา			
5	ติดเหล้า ติดบุหรี่ ติดยาเสพติด เป็นเรื่องของเวรกรรมเก่า			
6	คนมีศีล แปลว่า คนมีความเป็นปกติ			
7	ฉันเข้าใจว่าการทำบุญ คือ การทำทานเท่านั้น			
8	อยากสวย อยากหล่อ หาหมอศัลยกรรมได้ ไม่ต้องรอชาติหน้า			
9	ผู้ที่นับถือพุทธศาสนาต้องเชื่อเรื่อง “กฎแห่งกรรม”			
10	ฉันคิดว่าคนเราทุกคนมี “กรรม” เป็นของตน			
11	ฉันเข้าใจเรื่องกฎแห่งกรรม			
12	ฉันมีความตั้งใจในการรักษาศีล			
13	ฉันเชื่อในเรื่องของการเวียนว่ายตายเกิด			
14	ฉันคิดว่าการรักษาศีล จะช่วยสนับสนุนหรือขัดขวางผลของกรรม			
15	ฉันไม่เชื่อในเรื่องกฎแห่งกรรม			
16	ฉันไม่เชื่อผลของการรักษาศีล			
17	ฉันไม่เชื่อในเรื่องโลกหน้า นรก สวรรค์ และภพภูมิต่างๆ			
18	ฉันคิดว่าคนสมัยนี้ไม่ใส่ใจในการรักษาศีล			
19	ฉันจะชักชวนครอบครัวและเพื่อนๆ ให้รักษาศีล			
20	ฉันคิดว่าสิ่งศักดิ์สิทธิ์จะช่วยได้ในทุกเรื่อง			

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ส่วนที่ 4 แบบสอบถามทัศนะคติการป้องกันสารเสพติด (Attitude against drug abuse)

ข้อ	ข้อความ	จริง	ค่อนข้างจริง	ไม่จริง
1	ดื่มสุราผิดศีล แต่ไม่ผิดกฎหมาย ดื่มได้ไม่ต้องกังวล			
2	“ทำดีได้ดี ทำชั่วได้ชั่ว” ไม่เกี่ยวกับการยาเสพติดเลย			
3	ดมกาวไม่ผิดศีล แต่ผิดกฎหมาย			
4	สูบบุหรี่ไม่ผิดกฎหมายแค่ห้ามสูบในโรงเรียน			
5	ติดเหล้า ติดบุหรี่ เป็นคนละเรื่องกับการติดยาเสพติด			
6	ที่บ้านฉันไม่มีใครดื่มเหล้าตอนเข้าพรรษาเพราะมันบาป			
7	ฉันเข้าใจว่าการไม่ดื่มเหล้าจะได้บุญ			
8	เมาไม่ขับ = ดื่มเหล้าอยู่บ้าน ไม่เสียหายอะไร ดื่มเท่าไรก็ได้			
9	ผู้นับถือพุทธศาสนาต้องไม่กินเหล้า สูบบุหรี่ ไม่ใช้ยาเสพติด			
10	ฉันคิดว่าจะเลิกกินเหล้าสูบบุหรี่เพราะผิดศีล			
11	ศีลห้าไม่สำคัญเพราะผู้ใหญ่ยังกินเหล้า สูบบุหรี่ได้เลย			
12	ฉันมีความตั้งใจไม่ยุ่งเกี่ยวกับยาเสพติด เพราะเชื่อกฎแห่งกรรม			
13	ฉันคิดว่าการรักษาศีล จะช่วยให้ไม่ติดเหล้า บุหรี่ ยาเสพติดได้			
14	ฉันคิดว่าศีลสำคัญน้อยกว่ากฎหมาย เพราะตำรวจไม่จับ			
15	สูบบุหรี่ไม่ผิดกฎหมาย ศีลก็ไม่ผิดเพราะพระยังสูบได้เลย			
16	เรียนจบ บวชพระแล้ว กินเหล้า สูบบุหรี่ได้ พ่อแม่ไม่ว่า			
17	ฉันจะบอกญาติให้เลิกสูบบุหรี่เพราะมันผิดศีล			
18	ฉันคิดว่าถ้าไม่ติดยาเสพติดจะได้บุญ			
19	ฉันจะชักชวนครอบครัวและเพื่อนๆ เลิกกินเหล้า เพราะผิดศีล			
20	ถ้าติดยาเสพติด จะได้รับผลกรรมไม่ดี(เรื่องร้าย)ต่างๆ			

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APPENDIX B.

รายนามผู้ทรงคุณวุฒิ

ผู้ทรงคุณวุฒิ	สังกัด
1. พระธรรมกิตติวงศ์ (ทองดี สุรเตโช) (ป.ธ. ๙, ราชบัณฑิต, Ph.D. (Pali))	เจ้าอาวาสวัดราชโอรสาราม
2. พระภาสกร ภูริวฑฺฒโน (ภาวิไล)	ผู้อำนวยการธรรมสถาน มหาวิทยาลัยเชียงใหม่
3. ผู้ช่วยศาสตราจารย์ ดร. สุมนา ตังคณะสิงห์	ภาควิชามนุษยศาสตร์ คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล
4. รองศาสตราจารย์ ดร. นพ. ธงธวัช อนุคระหานนท์	บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล
5. รองศาสตราจารย์ ดร. สุชีรา ภัทรายุตวรรตน์	ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล
6. อ. นพ. นันทวัช สิทธิรักษ์	ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

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APPENDIX C.

ตัวแบบเชิงพุทธ
เพื่อการป้องกันการใช้สารเสพติด

มีเนื้อหาประกอบด้วย

The law of Karma
กฎแห่งกรรม

Yonisomanasikāra
การคิดแบบโยนิโสมนสิการ

Sīla (the five precepts)
การรักษาศีลห้า

ความสุข คือ ความต้องการของมนุษย์

ญาณ	ความสุขอิสระ เกิดแต่ วิปัสสนา ปัญญารู้แจ้ง
ฌาน	ความสงบสุข เกิดแต่ สมาธิ ความแพ่ง
เกียรติ	ยศ และ สรรเสริญ
กาม	ลาภ การได้มา ซึ่ง รูป เสียง กลิ่น รส สัมผัส ที่ปรารถนา
กิน	ปัจจัย ๔ ที่จำเป็น ในการดำรงชีวิตรอด

Maslow's Theory

๕. ประสบความสำเร็จในชีวิต

๔. ความยกย่อง และชื่นชม

๓. ความรัก และเป็นเจ้าของ

๒. ความปลอดภัย และมั่นคง

๑. ความต้องการทางร่างกาย

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เราต้องการความสุข

เราคิด เพื่อ แสวงหาความสุข

๑. คิด ทำ

๒. คิด ไม่ทำ

- ในการพัฒนาปัญญา จำเป็นต้องมี *โยนิโสมนสิการ*
  คือการคิดอย่างเป็นระบบระเบียบ
- พิจารณาตามเหตุผล มองอย่างรอบคอบ และรอบด้าน

แบ่งเป็น ๑๐ วิธีคิด

- *โยนิโสมนสิการ* ๑๐ วิธีคิด

๑. คิดแบบ สืบสาวเหตุปัจจัย

การย้อนกลับไปสู่จุดเริ่มต้นของเรื่องนั้นๆ

๒. คิดแบบ แยกแยะองค์ประกอบ

แยกแยะออกเป็นส่วนต่างๆ ให้เข้าใจได้ชัดเจน

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๓. คิดแบบ รู้เท่าทัน

รู้เท่าทันทุกสิ่งในโลกนี้ว่าไม่เที่ยงแท้ ไม่ยั่งยืน เปลี่ยนแปลงตลอดเวลา

๔. คิดแบบ แก้ปัญหา

จากผลไปสู่เหตุ แล้วแก้ไขที่ต้นเหตุ มุ่งให้เกิดผล

- โยนิโสมนสิการ ๑๐ วิธีคิด

๕. คิดแบบ เชื่อมโยง

พิจารณาตามหลักการ และความมุ่งหมายที่กำหนดไว้

๖. คิดแบบ คุณโทษและทางออก

เห็นทั้งด้านดีและด้านเสีย ทั้งคุณและโทษอย่างรอบด้าน

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๗. คิดแบบ คุณค่าแท้ คุณค่าเทียม

ยึดประโยชน์แท้เป็นหลัก ไม่หลงติดกับประโยชน์เทียม

๘. คิดแบบ อุบายปลุกเร้าคุณธรรม

การมองโลกในแง่บวกอย่างสร้างสรรค์

- โยนิโสมนสิการ ๑๐ วิธีคิด

๙. คิดแบบ เป็นอยู่ในขณะปัจจุบัน

มีสติรู้อยู่กับสิ่งที่ทำ ณ ปัจจุบัน

ไม่ติดกับอดีต ไม่กังวลอนาคตที่ยังมาไม่ถึง

๑๐. คิดแบบ แยกแยะประเด็น

การจำแนก แจกแจงอย่างรอบด้าน

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เราคือใคร?

ร่างกายเป็นของๆ เราหรือ?

เราคือใคร?

เรา คือ จิต (ผู้รู้)

เรามีกายเป็นที่อาศัย

ร่างกายเป็นของๆ เราหรือ?

ไม่ใช่ ร่างกายไม่ใช่ของๆ เรา

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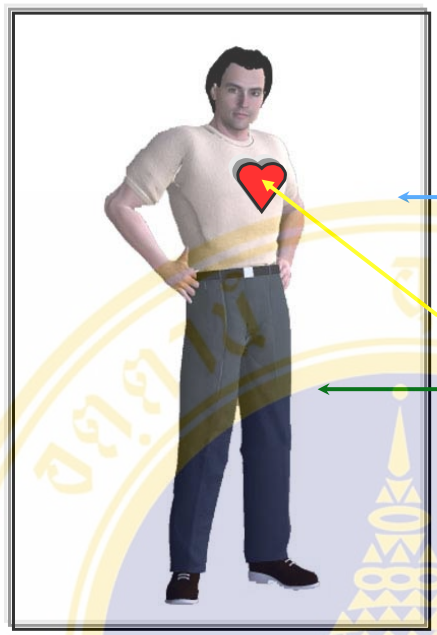

กฎแห่งกรรม

สมดุลโลก

- มีเสถียรภาพ หรือความสมดุล ระหว่างเรา กับโลกหรือสิ่งแวดล้อม
- เราทำความเปลี่ยนแปลง ให้เกิดขึ้นกับโลกมากเท่าใด ในทิศทางใด
- โลกก็จะคืนกลับแก่เรา ในทิศย้อนกลับ เท่ากับ ความเปลี่ยนแปลงที่โลกได้รับเสมอ

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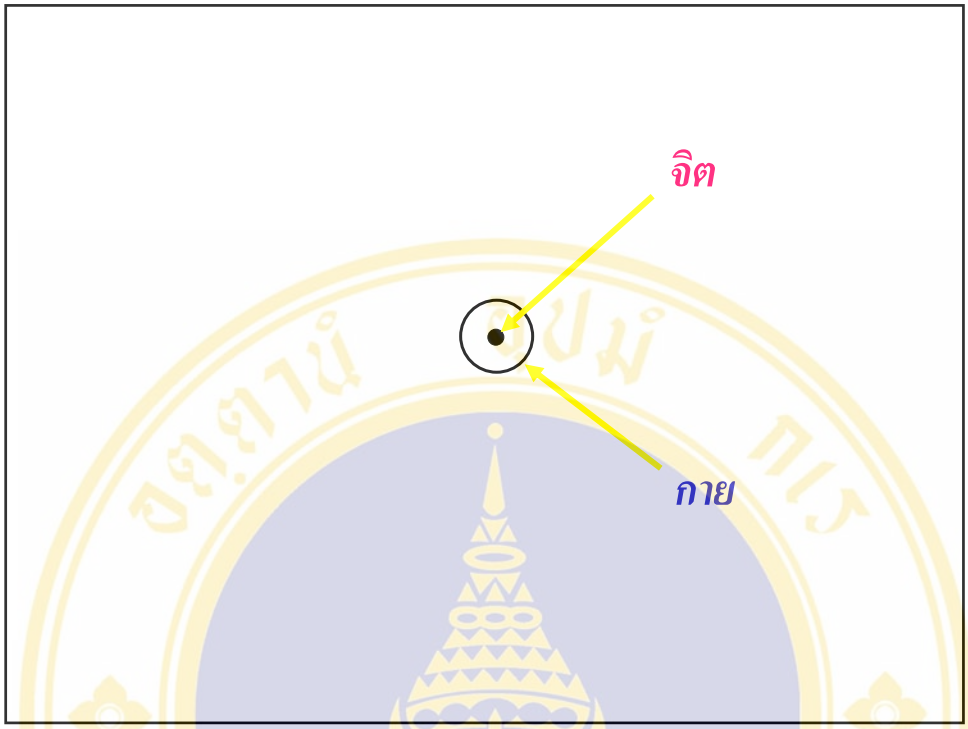

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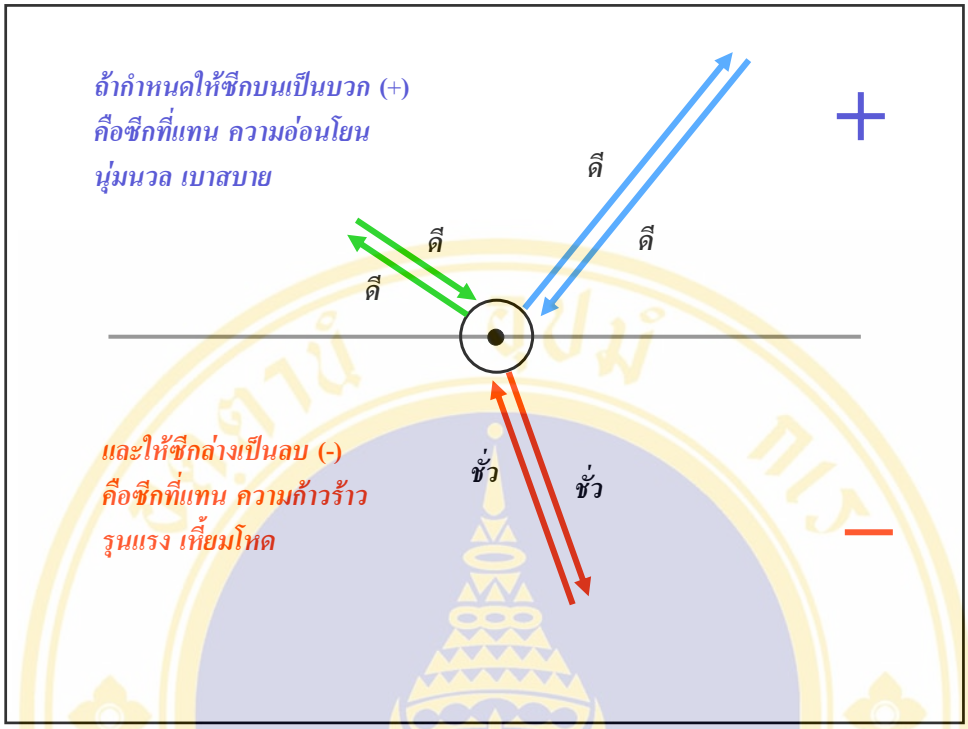

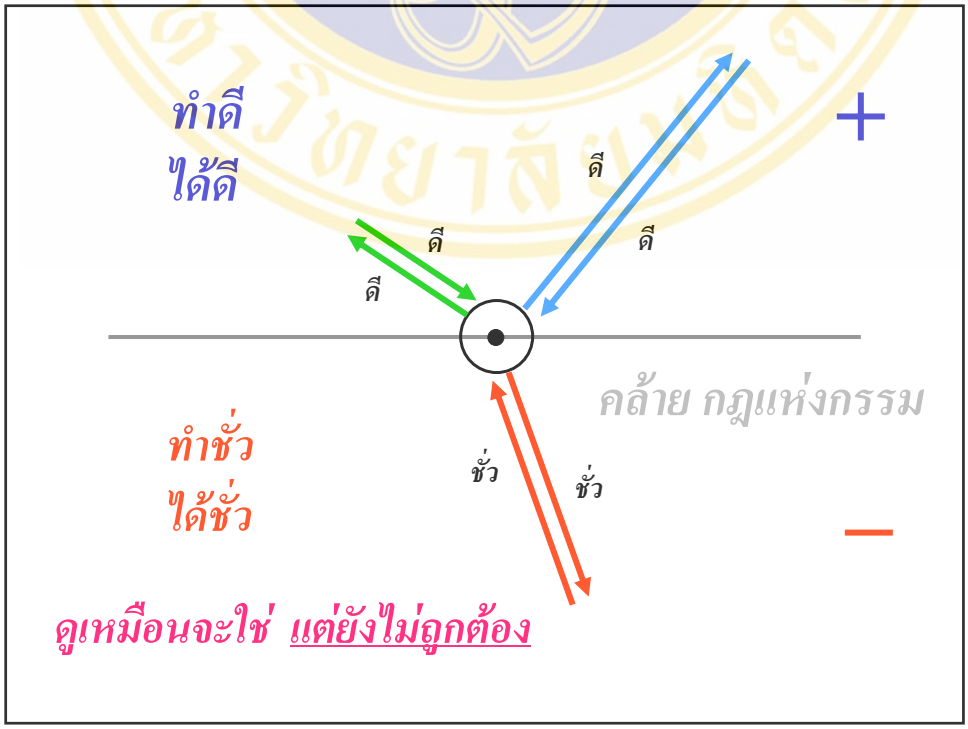

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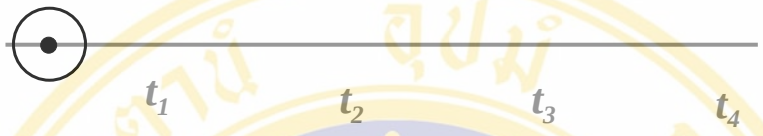
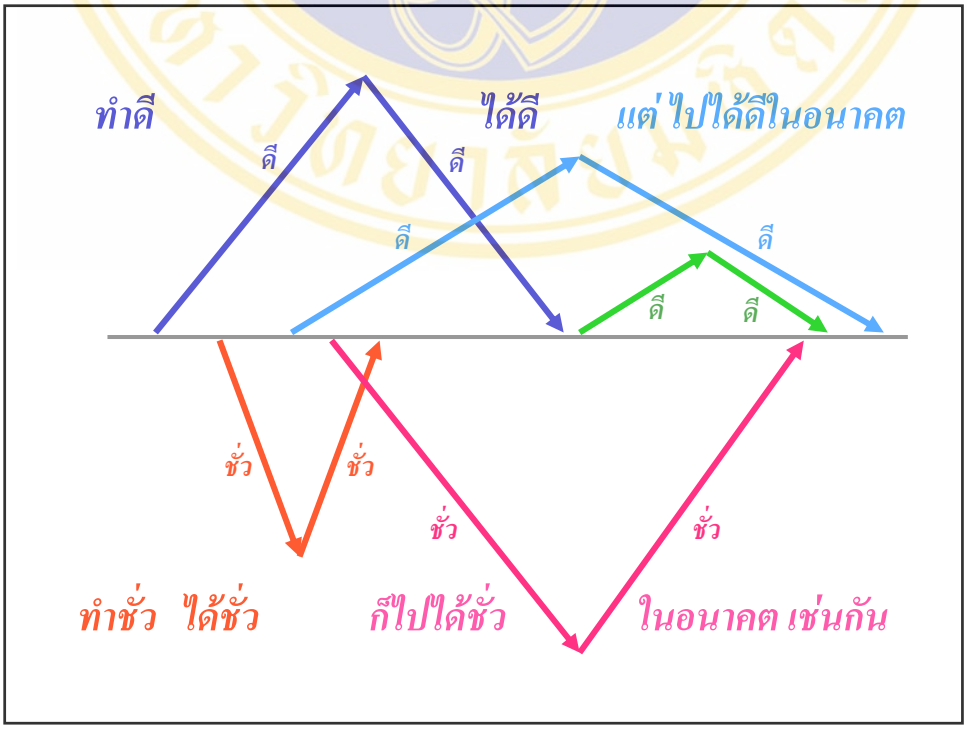
เพราะอะไร ?



เพราะชีวิตไม่ได้อยู่นิ่งๆ กับที่
แต่กำลังเคลื่อนที่ ไปตามกาลเวลา
จาก อดีต สู่ ปัจจุบัน และต่อไปยัง อนาคต



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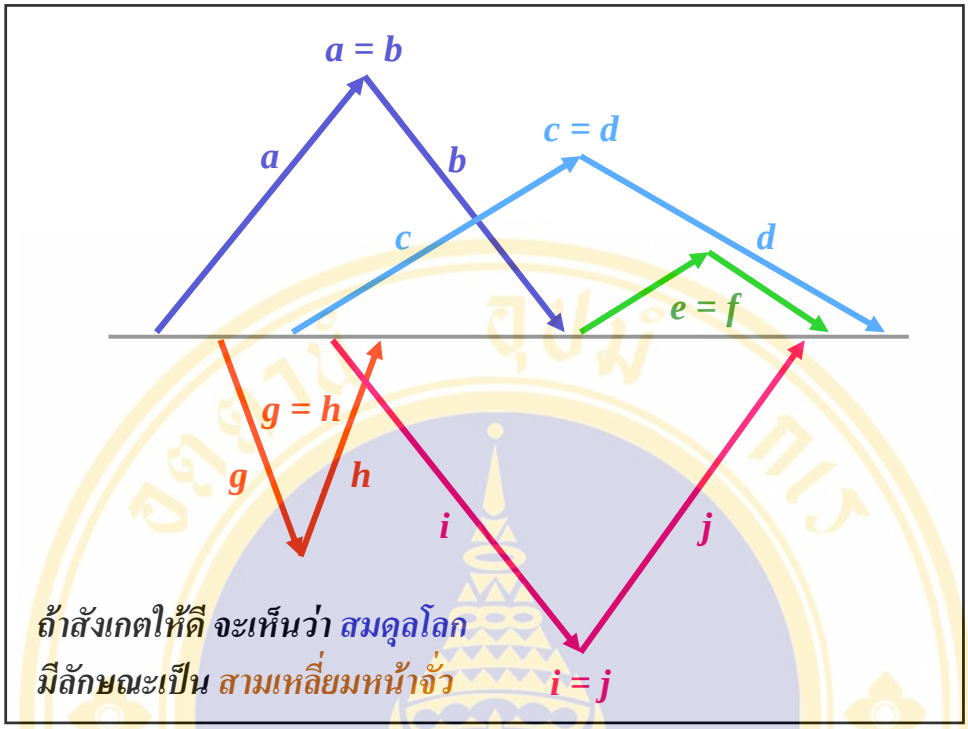

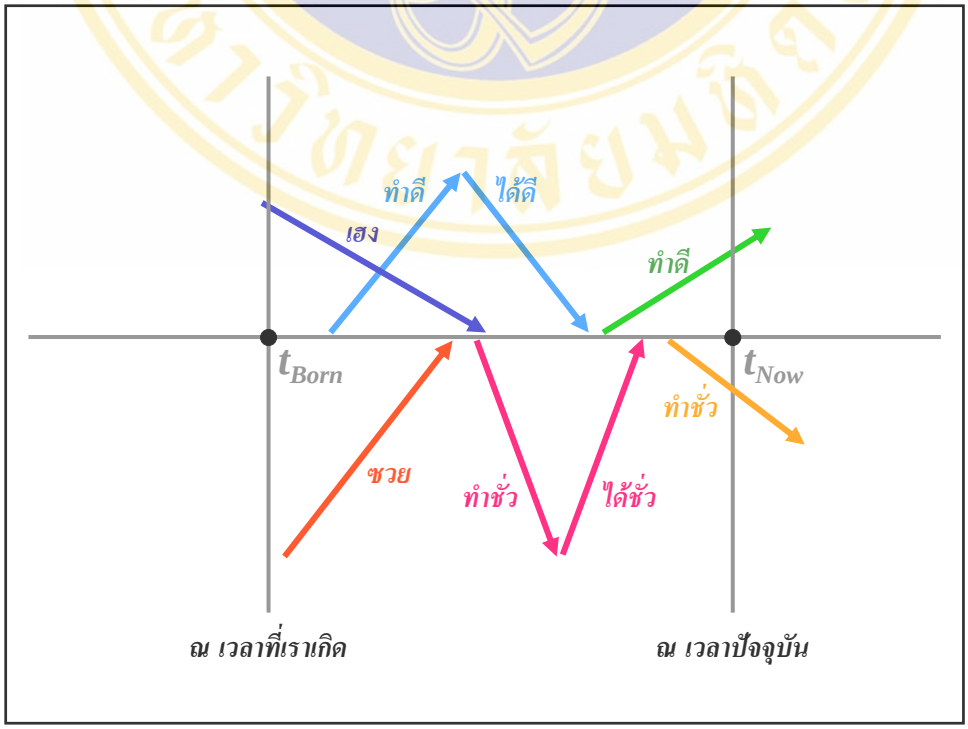

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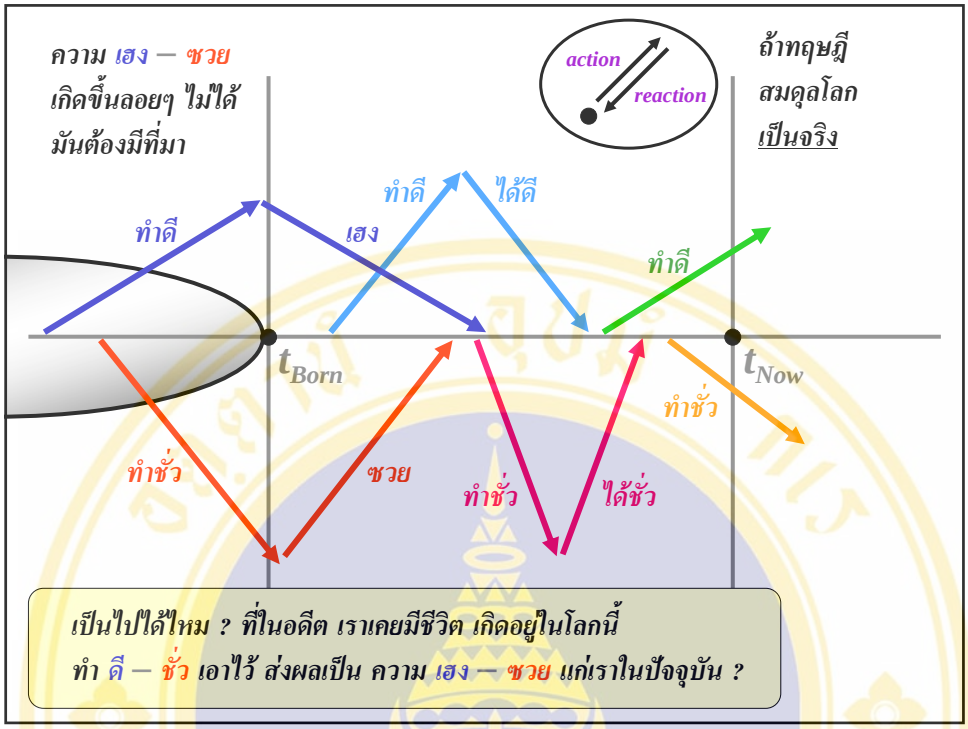

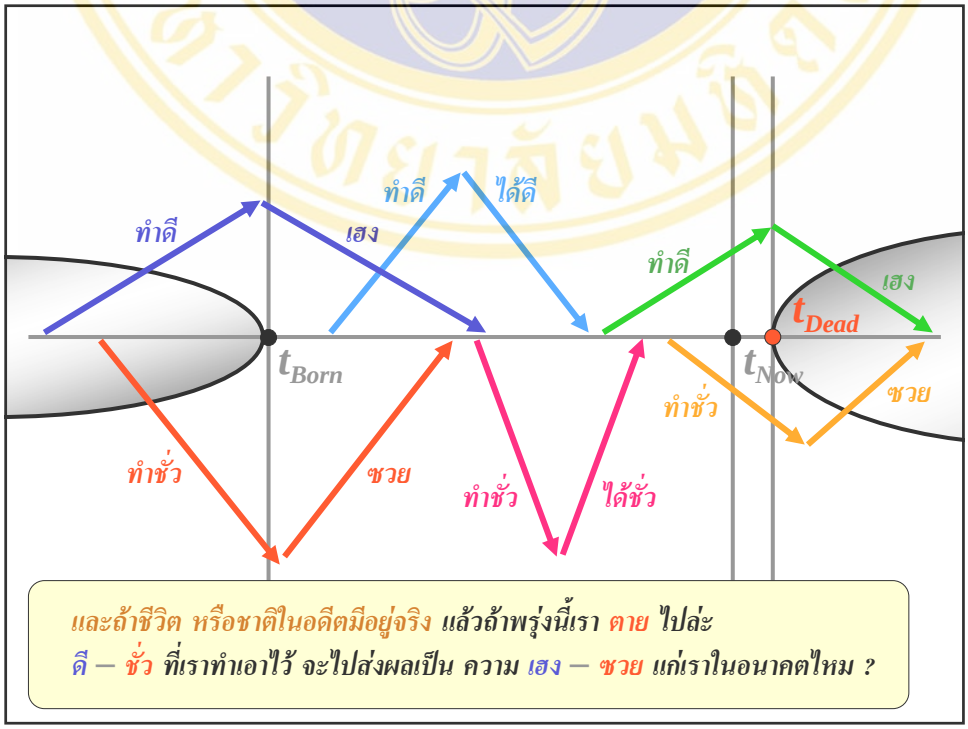

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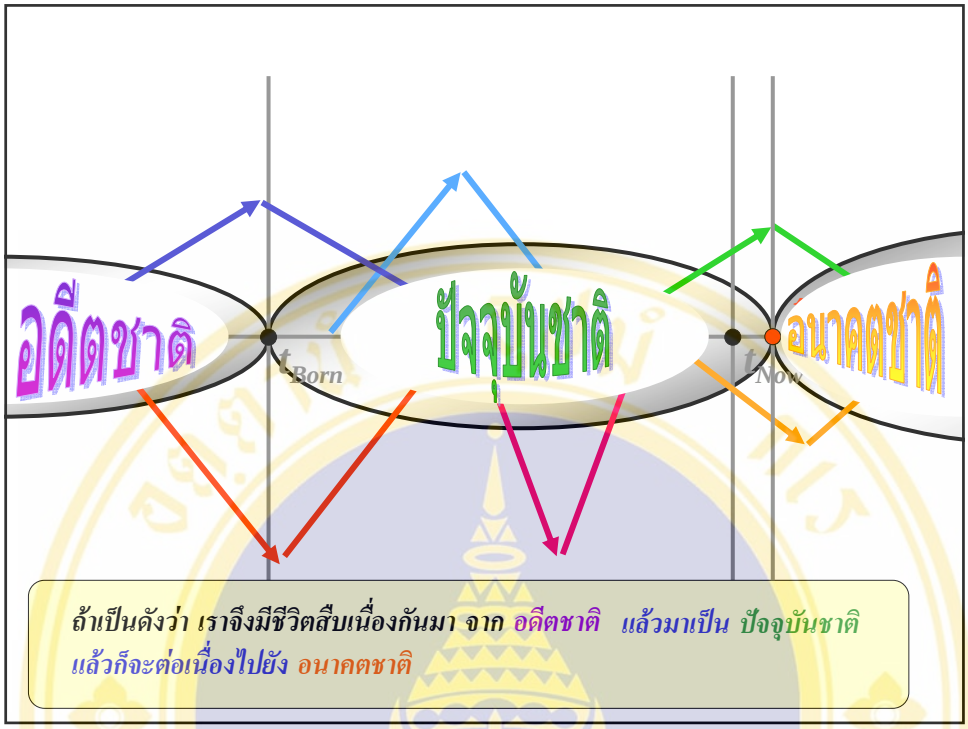

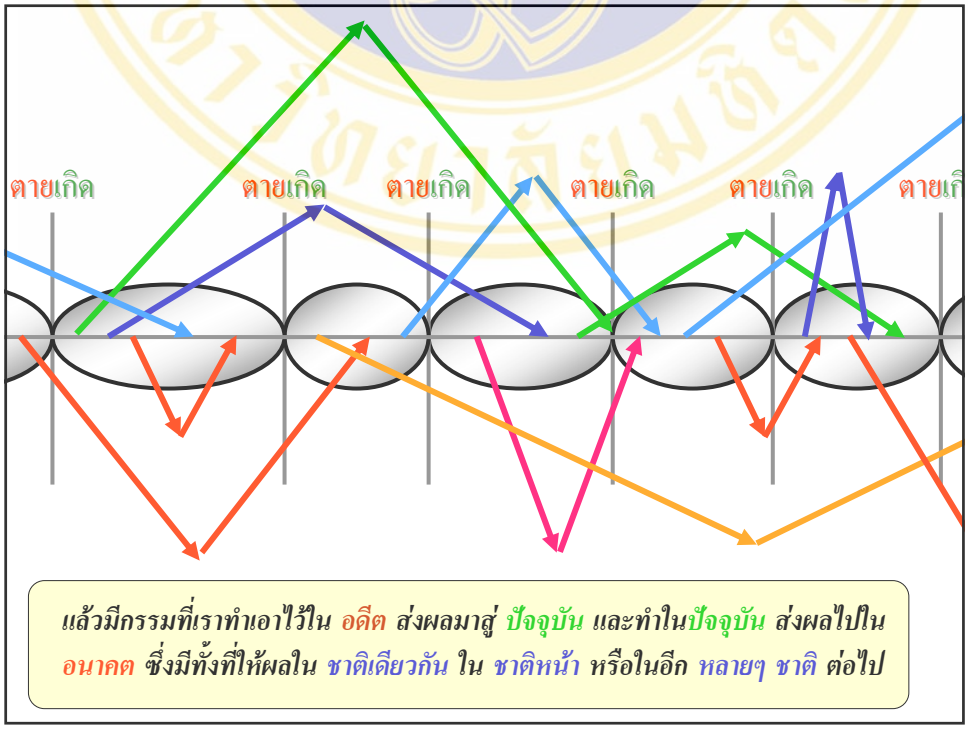

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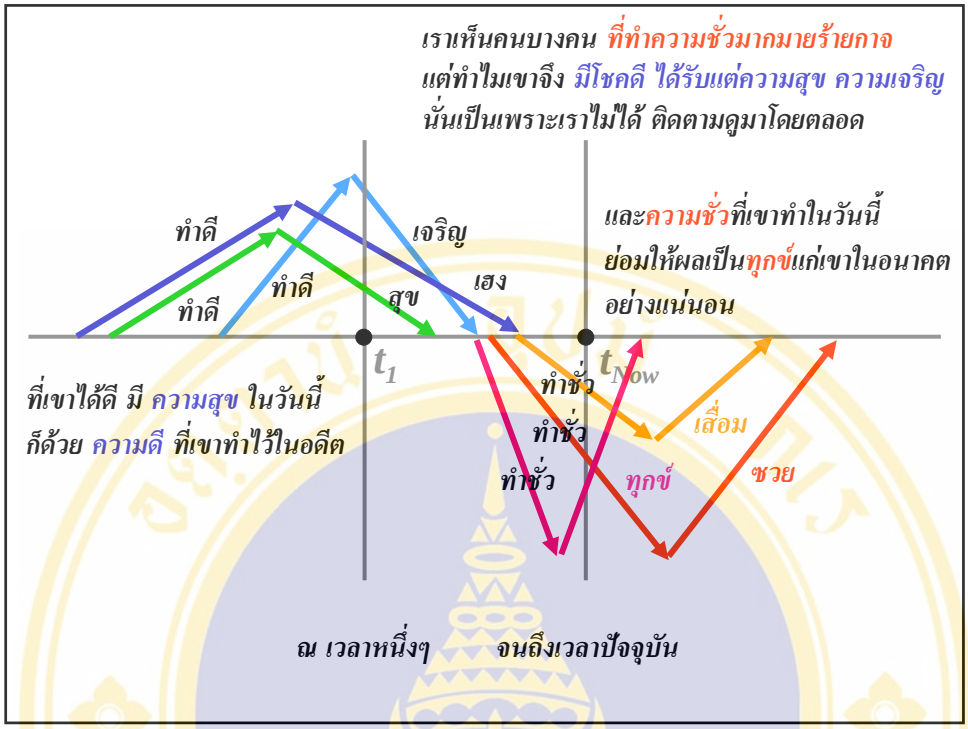

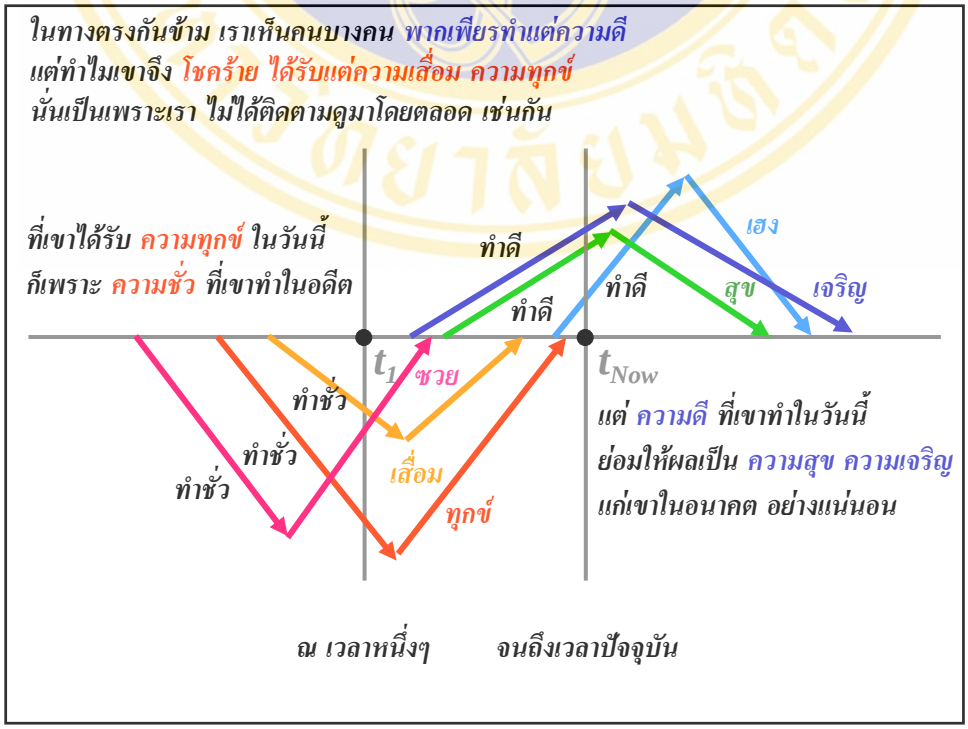

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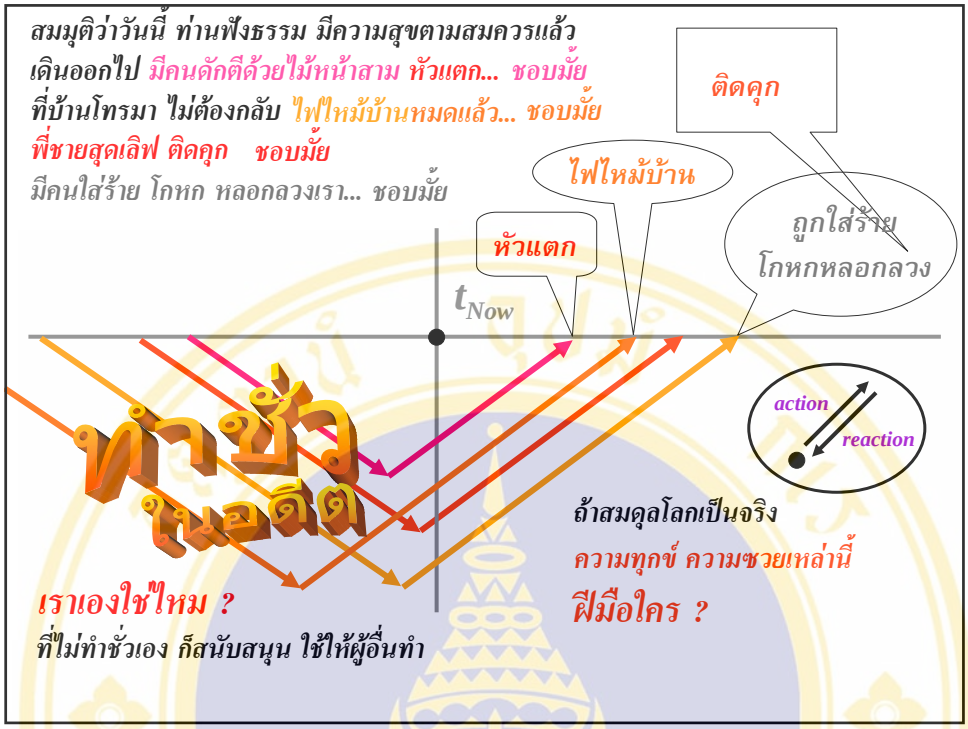

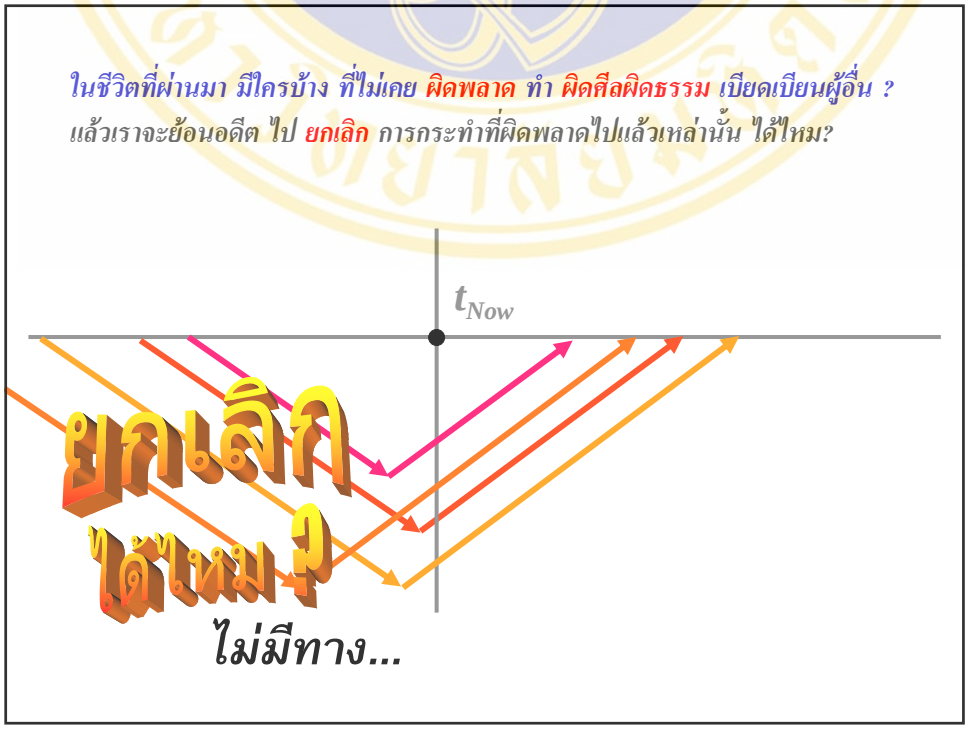

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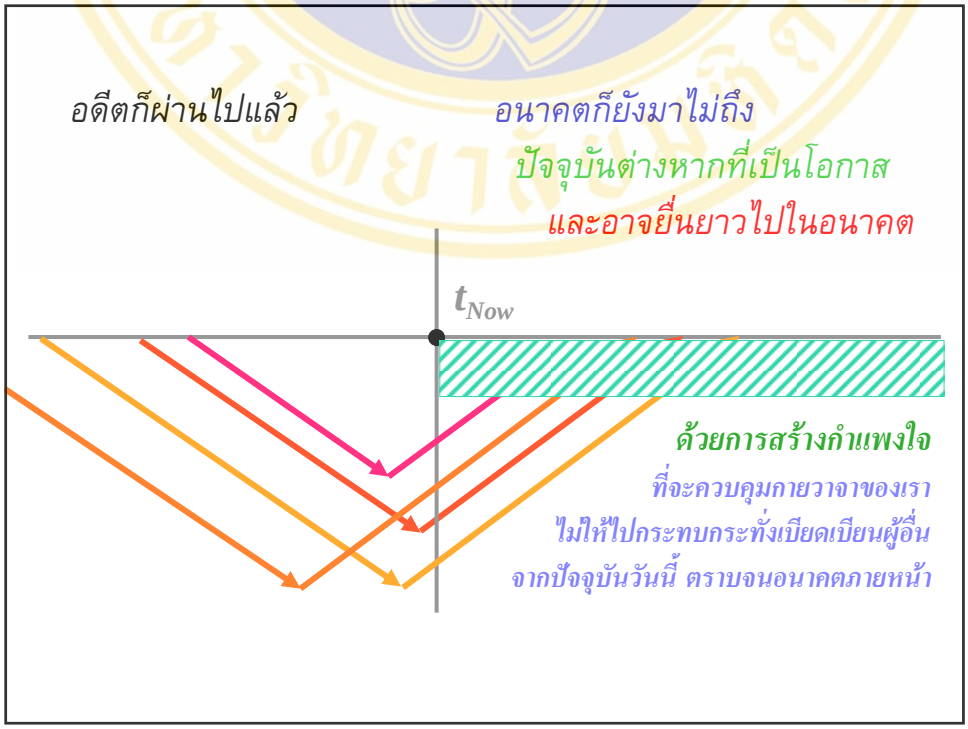

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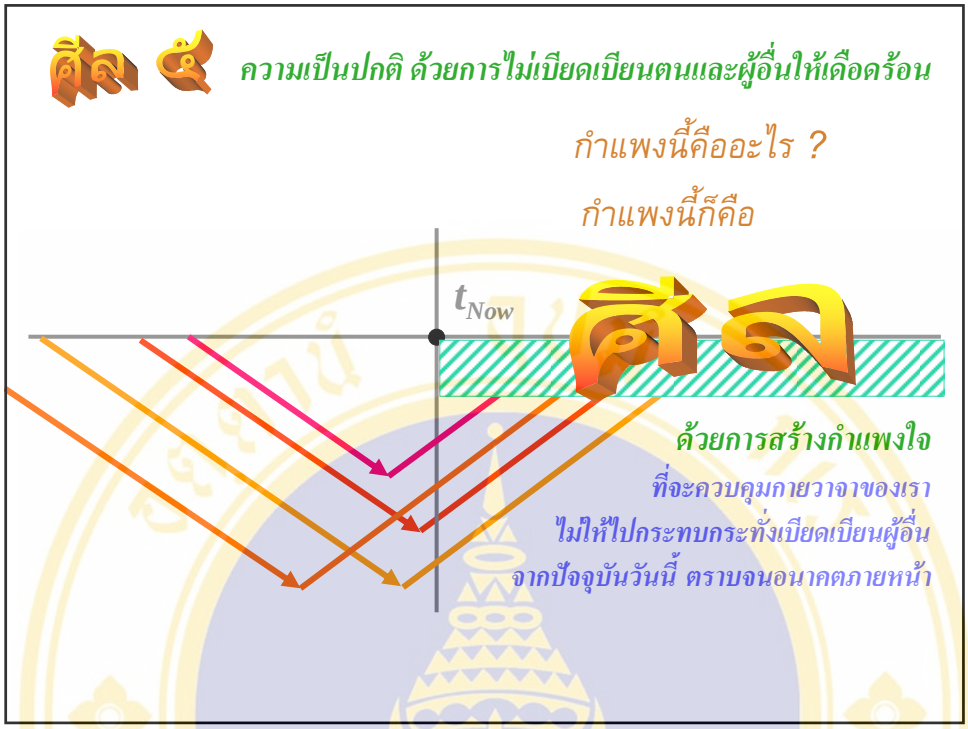

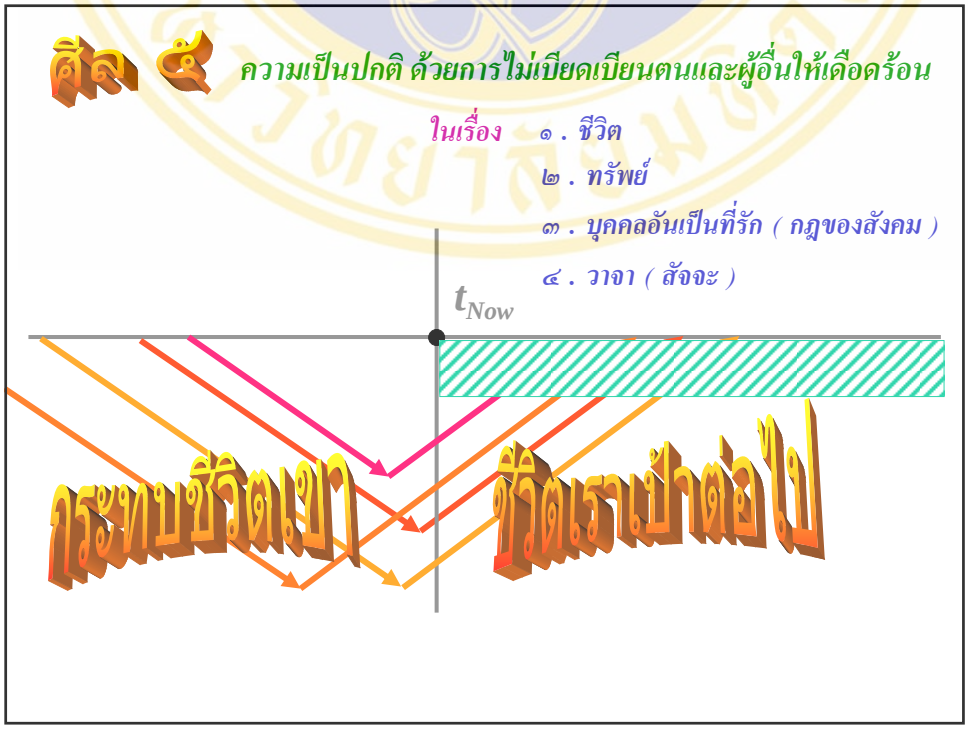

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ศีล ๕ ความเป็นปกติ ด้วยการไม่เบียดเบียนตนและผู้อื่นให้เดือดร้อน

เหตุ : เบียดเบียนชีวิตเขา

ผล : ชีวิตเรา ก็ไม่ปลอดภัย ป่วยไข้ พิการ หรือถึงตาย

เหตุ : ลักขโมย ปล้นชิง คดโกง เอาเปรียบ เบียดบัง ยักยอก ซึ่งทรัพย์ของเขามา

ผล : ทรัพย์สมบัติของเรา มีอันต้องวิบัติ เสื่อมสูญย่อยยับไป

เหตุ : กระทำผิดกฎของสังคม

ผล : สังคมรังเกียจ ไม่ไว้วางใจ ไม่ให้การยอมรับ เสื่อมความนิยม

เหตุ : โกหกหลอกลวง ไม่รักษาคำพูด

ผล : ขาดความเชื่อถือ ไม่มีเครดิต เสื่อมอำนาจ

ขาดสติ เหตุที่ทำให้ขาดสติเพิ่มขึ้น :

เพราะ เสพสุรา **ยาเสพติด** เครื่องดองของเมา

แล้วเราจะรักษาศีลกันอย่างไรดี ?

ศีล แปลว่า ความเป็นปกติ

ความปกติของมนุษย์ คือ การไม่เบียดเบียนตนเองและผู้อื่นให้เดือดร้อน

แต่การเกิดขึ้นมาในโลกนี้ ย่อมไม่อาจหลีกเลี่ยง เกี่ยวข้อง กระทบ กับผู้อื่น สัตว์อื่น

เมื่อระวังนอกให้บริสุทธิ์ได้ยาก ก็ต้องมารักษาที่ใจ คือ **เจตนา**

ด้วยการตั้งเจตนาแน่วแน่ แก่ใจของตนว่า

ข้าพเจ้าจะไม่ยอมทำ ในสิ่งที่ส่งผลให้เกิดความเดือดร้อน

ทั้งแก่ตนเองและผู้อื่น โดยจงใจเป็นอันขาด

อาตมา ผู้นำเสนอ จึงขอเชิญชวนให้ท่านทั้งหลาย ตั้งเจตนารักษาศีล

อย่างง่ายๆ ดังต่อไปนี้...

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เป็นสุขเพราะศีล

พุทโธ ธัมโม สังโฆ

ศีลข้อหนึ่ง : ไม่ฆ่าสัตว์

ศีลข้อสอง : ไม่ลักทรัพย์

ศีลข้อสาม : ไม่ประพฤติผิดในกาม

ศีลข้อสี่ : ไม่พูดเท็จ

ศีลข้อห้า : ไม่ดื่มสุรา ของมึนเมาและใช้สารเสพติด

บัดนี้ ข้าพเจ้า ..... ตั้งใจรักษาศีลแล้ว

บัดนี้ ข้าพเจ้า ..... คือผู้มีศีล

ด้วยอำนาจศีลนี้ ขอให้ข้าพเจ้าจง .....(อธิษฐานได้ตามสมควร) เพี้ยง !

ตื่นเช้าขึ้นมา รู้ตัวตื่นเต็มที่เมื่อไร หันไปทางหิ้งพระ หรือยกพระเครื่องที่ติดตัวอยู่ขึ้นมาจบ สมาทานศีล ว่า พุทโธ ธัมโม สังโฆ ศีลข้อหนึ่ง ... ฯ ด้วยความตั้งใจจริง ๑ ครั้ง

ในระหว่างวัน ตอนไหนที่รู้ตัวว่าได้ผิดพลาด ทำผิดศีลไปแล้ว หรือไม่มั่นใจว่าศีลยังดีอยู่หรือไม่ ก็ปักใจ สมาทานศีลใหม่ ว่า พุทโธ ธัมโม สังโฆ ศีลข้อหนึ่ง ... ฯ ไปจนครบทั้ง ๕ ข้อ แล้วกำหนดใจว่า สิ่งใดที่ได้ทำผิดพลาดไป อย่างไรต้องให้ผลแน่นอน แต่บัดนี้เราได้สำนึกแล้ว และพยายามจะไม่ทำผิดเช่นนั้นอีก

ถึงเวลาก่อนนอน ก็ตั้งใจสมาทานอีกรอบ พุทโธ ธัมโม สังโฆ ศีลข้อหนึ่ง ...

...ด้วยอำนาจศีลนี้ ขอให้นอนหลับ ฝันดี ผีไม่หลอก เพี้ยง !

ถ้าเราเอาใจใส่ สมาทานรักษาศีลอย่างนี้ ตลอดหนึ่งเดือน นับจากวันนี้ไป

อะไรจะเกิดขึ้น

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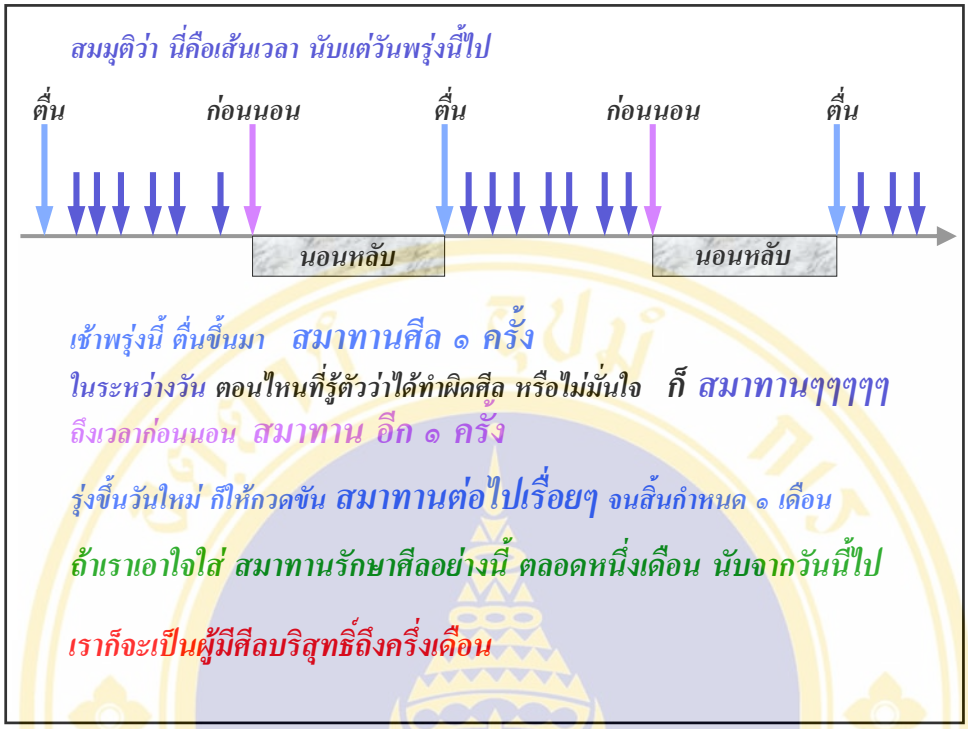

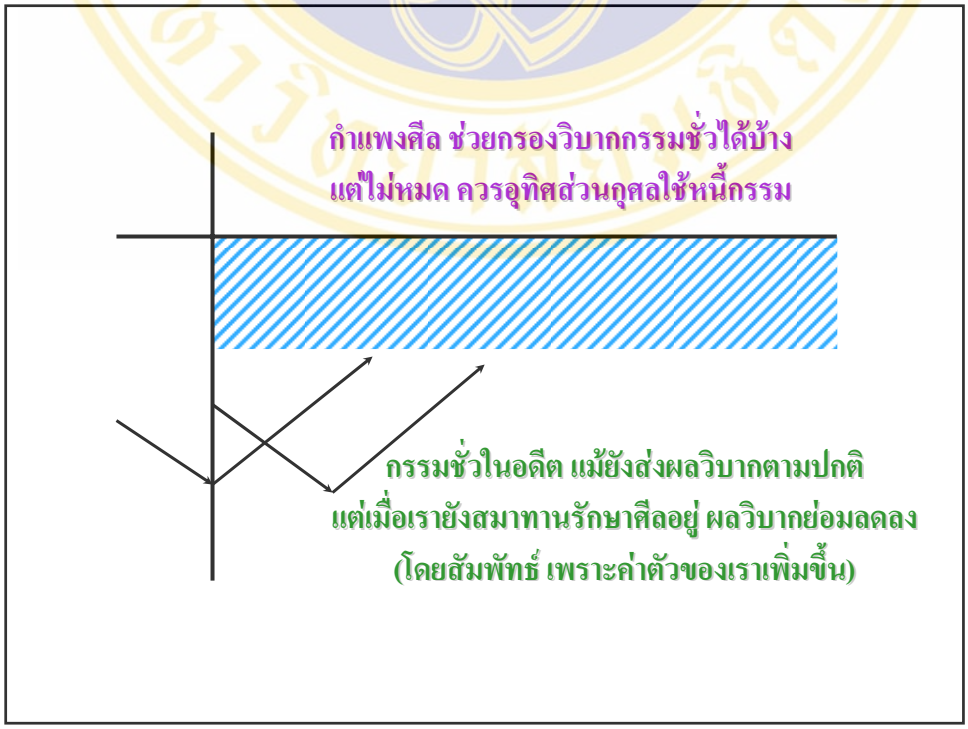

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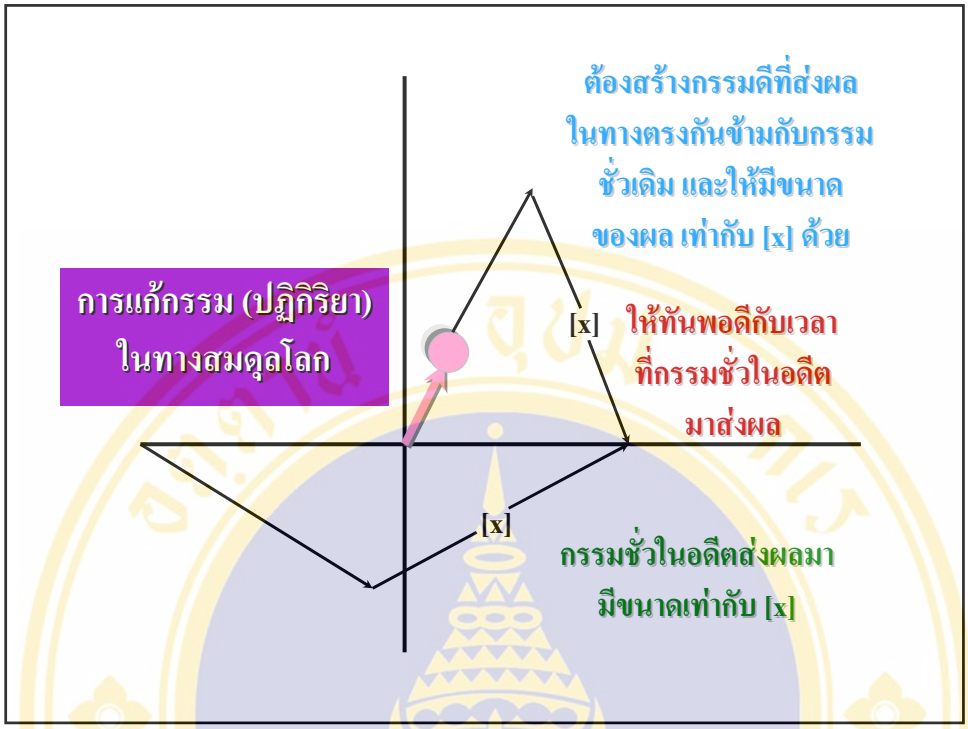

ตัวแบบเชิงพุทธ
เพื่อการป้องกันการใช้สารเสพติด
มีเนื้อหาประกอบด้วย

โยนิโสมนสิการ
กฎแห่งกรรม
ศีลห้า

ผู้วิจัยได้นำเอารูปแบบการนำเสนอเฉพาะส่วน กฎแห่งกรรม มาประยุกต์ใช้ โดยได้รับอนุญาติจาก พระภาสกร ภูริวฑฺฒโน (ภาวิไล) ผู้อำนวยการธรรมสถาน มหาวิทยาลัยเชียงใหม่ ให้นำเนื้อหา สมดุลโลก มาใช้ได้ตามต้องการ

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APPENDIX D.

กิจกรรมใช้ตัวแบบเชิงพุทธ และทำการเก็บรวบรวมข้อมูล

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BIOGRAPHY

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Master of Arts (Addictionology)
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POSITION AND OFFICE Visit Lect. Faculty of Communication Arts,
Krirk University, Bangkhen, Bangkok

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Thesis

Entitled

DEVELOPMENT OF LIFE SKILL AND MORALITY WITH BUDDHIST MODEL APPLIED TO PREVENTION OF DRUG ABUSE: A CASE STUDY IN SECONDARY LEVEL SCHOOLS IN NAKHON PATHOM PROVINCE

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Mr. Sumaj Kitisurakulchai

Candidate

Sumana Tangkanasingh

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Asst. Prof. Dr. Sumana Tangkanasingh

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Program Director

Master of Arts Programme

in Addictionology

Faculty of Graduate Studies

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Thesis

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was submitted to the Faculty of Graduate Studies, Mahidol University

for the degree of Master of Arts (Addictionology)

on

January 31, 2008

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