THE STUDY OF BEHAVIORS AND FACTORS RELATING TO ALCOHOL DRINKING IN ATHLETES, CASE STUDY: INSTITUTE OF PHYSICAL EDUCATION

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Thesis
Entitled

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was submitted to the Faculty of Graduate Studies, Mahidol University
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Phanphasorn Phophan

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THE STUDY OF BEHAVIORS AND FACTORS RELATING TO ALCOHOL DRINKING IN ATHLETES, CASE STUDY: INSTITUTE OF PHYSICAL EDUCATION

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ABSTRACT

This research was survey research with the objective of studying behaviors and factors related to alcohol drinking in athletes. The sample group was 400 athletes at the Institute of Physical Education. The tools used were questionnaires. The data obtained were statistically analyzed by SPSS program for frequency, percentage, mean, standard deviation and Chi-square test.

The results showed that most of the athletes started drinking alcohol for the first time when they were between 13-18 years old. The primary reason for trying alcohol was curiosity. The favorite alcoholic beverage of most athletes was beer. For the most part they drank occasionally and with their friends. The factors related to alcohol drinking behavior were sex, influence from advertising media and alcohol drinking access and influence from peers. It was found that males had a higher alcohol drinking rate than females. The group highly influenced from advertising and alcohol drinking access and peers had greater frequency in alcohol drinking than those under low and medium influence.

This research suggests that the Institute of Physical Education and related organizations should be more strict about preventing alcohol drinking in athletes in order to reduce the risk of physical injury and efficiency during sports practices and competitions, and promote the abstinence of alcohol among athletes.

KEY WORDS : BEHAVIORS / ALCOHOL DRINKING / ATHLETES/ INSTITUTE OF PHYSICAL EDUCATION

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การศึกษาพฤติกรรมและปัจจัยที่มีความสัมพันธ์กับพฤติกรรมการดื่มเครื่องดื่มแอลกอฮอล์ของนักกีฬา สถาบันการพลศึกษา
(THE STUDY OF BEHAVIORS AND FACTORS RELATING TO ALCOHOL DRINKING IN ATHLETES, CASE STUDY: INSTITUTE OF PHYSICAL EDUCATION)

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บทคัดย่อ

การศึกษาครั้งนี้เป็นการวิจัยเชิงสำรวจ โดยมีวัตถุประสงค์เพื่อศึกษาพฤติกรรมและปัจจัยที่มีความสัมพันธ์กับการดื่มเครื่องดื่มแอลกอฮอล์ของนักกีฬา กลุ่มตัวอย่างที่ใช้ในการวิจัยเป็นนักกีฬาของสถาบันการพลศึกษา จำนวนทั้งสิ้น 400 คน เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูลคือ แบบสอบถาม และทำการวิเคราะห์ข้อมูลโดยใช้โปรแกรม SPSS วิเคราะห์ข้อมูลโดยใช้ค่าสถิติ ความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการทดสอบไคสแควร์

ผลการศึกษาพบว่า นักกีฬาส่วนใหญ่เริ่มดื่มแอลกอฮอล์ครั้งแรกเมื่ออายุ 13-18 ปี ซึ่งเหตุผลที่ดื่มครั้งแรก คือ อยากลอง ส่วนประเภทเครื่องดื่มที่นิยมดื่มมากที่สุด คือ เบียร์ และมักจะดื่มนานๆ ครั้ง โดยดื่มกับเพื่อน จากการวิเคราะห์พบปัจจัยที่มีความสัมพันธ์กับพฤติกรรมการดื่มเครื่องดื่มแอลกอฮอล์ ได้แก่ เพศ อิทธิพลจากสื่อโฆษณาและการเข้าถึงเครื่องดื่มแอลกอฮอล์ การคบเพื่อน พบว่าเพศชายมีอัตราการดื่มแอลกอฮอล์ถี่กว่าเพศหญิง และกลุ่มที่ได้รับอิทธิพลจากสื่อโฆษณาและการเข้าถึงเครื่องดื่มแอลกอฮอล์ และจากการคบเพื่อนในระดับสูงจะมีความถี่ในการดื่มแอลกอฮอล์มากกว่ากลุ่มที่อยู่ในระดับต่ำ และปานกลาง

ข้อเสนอแนะจากการวิจัยครั้งนี้ สถาบันการพลศึกษาและหน่วยงานที่เกี่ยวข้องควรมีการกวดขันเข้มงวดเกี่ยวกับการดื่มเครื่องดื่มแอลกอฮอล์ของนักกีฬาให้มากขึ้น เพื่อลดอัตราเสี่ยงด้านสมรรถภาพทางกายต่อการฝึกซ้อมและการแข่งขันกีฬา และส่งเสริมการสร้างทัศนคติกับนักกีฬาว่าด้วยเรื่องการไม่ดื่มเครื่องดื่มแอลกอฮอล์

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CHAPTER I
INTRODUCTION

1.1 Background and Significance of the Study

Alcohol has becoming a beverage that is increasingly gaining in popularity in Thai society. Despite the fact of its harmful effect causing many of afflictions. Not only it causes to a destructive health, it leads to many ongoing vital social problems.

According to Alcohol consumption data (per year per head) collected by World Health Organization (WHO) together with Food and Agriculture Organization (FAO), it has found that in year 2000, Thai is rank to be on the fifth among the heaviest drinking nations at approximately 13.59 liters of pure alcohol per capita following the first rank of Portugal, republic of Iceland, Bahamas and Czech Republic respectively. These are beyond the expected heavily drinking nations as France, Germany, Russia, England, United States of America and Japan. In addition, Excise Department and Customs department collected liquor excise tax income at the amount of 62.7 Billions Baht out of 0.2 trillions Alcohol sales. (Center of Alcohols study, 2005:5). A current trend for alcohols consumption in Thailand has been increasing rapidly at an approximately average consumption rate of 58.0 liters per capita per year in 2003, triple rising from 20.2 liters per capita per year in1989. The most worrying figures show in teenager alcohols consumption, especially of those male at age 11-19 years old. The numbers has reached as high as 1.06 million people, accounted for 21.33 percent of population at this age range (2003). Additionally, alcohols consumption trend in seven-year period from 1996 to 2003 of those female teenager at age 15-19 years old has risen six times from 1 percent to5.6 percent (twice a week to every day drinking) (Yongyut Kajornthum, Pimpa KajornThum and Bundid Sornpaisarn, 2004). Not only Alcohols consumptions causes harmful effect to drinkers themselves, it also generates troubles to others which can be witnessed from

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a crime rate resulted from alcohols consumed. Which can see from percentage of criminal case of province court that cause drinking compare to specific prevalence as violated base type (Vichai Posayajinda et al., 2001) such as loss of wealth guilt 59.1%, sex guilt 34.8%, physical guilt 20.8%, invade guilt 16.1%, rape guilt 10.5%. A great number of alcohols consumption by Thai could be initiated from Thai social value and culture that have altered over time. Drinking in occasions; in the event of celebration and ceremony is somewhat controlled by the society for the appropriate amount consumed. However, as people have changed their lifestyles and drinking habits, drinking becomes free and unlimited by any social norm as before.

Athlete is also considered to be an important human resource of nation who creates a good reputation to the country. A lot of attentions and expectation paid to them, Athletes are perceived by the society as a good example model with physical and mental strength who are disciplined and never involved with any drug. Additionally, they represent a good example of sport man to youth. A several level of sport competition in Thailand are supported to produce a skillful and talented athletes including national competition, regional competition, international competition and competition among organization such as competition among universities. National athlete typically enrolls in university so they accordingly have freedom in financial and socialization which expose to the risk of getting involved to drug abuse. Surrounded by the freedom environment and some type of friends, a person is likely to be persuades to get involved with drug and alcohols.

As a researcher is student of master of art (Addictionology) as well as one of the athletes, researcher sees a useful benefit of conducting a thesis paper in the topic: The study of behaviors and factors relating to alcohol drinking in athletes, a case study of Institute of Physical Education. The thesis paper aims to study the knowledge, attitudes and values related to alcohols consumption which affects health, education, sport competition, discipline in practicing. This will generates benefits to society as whole and other athletes further on.

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1.2 Objective of the Study

1.2.1 To study on the factors and alcohol drinking behaviors in athletes of Institute of Physical Education.

1.2.2 To study on the factors relating to alcohol drinking behaviors in athletes of Institute of Physical Education.

1.2.3 To study on the effects of alcohol drinking behaviors in athletes of Physical Education Institute.

1.3 Research Hypothesis

1.3.1 Personal factors related to alcohol drinking behaviors.

1.3.2 Social factors related to alcohol drinking behaviors.

1.4 Scope of the Study

1.4.1 Content scope: Studying behaviors and factors relating to alcohol drinking in athletes, case study: Institute of Physical Education. The study was based on theory relating to different factors, personal, family and social, to see which factor caused alcohol drinking behavior in athletes in the case study at Physical Education Institute.

1.4.2 Objective scope: 3,415 athletes of the Institute of Physical Education who participated in sport competition of Physical Education Institute of Thailand, the 33rd at Chaiyapoom province, (Student Affairs and Special Activities Division, Institute of Physical Education, 2008).

1.4.3 Location scope: Every stadium which there was sport competition of Institute of Physical Education of Thailand, the 33rd at Chaiyapoom province.

1.4.4 Timeframe scope: The study was done during July to October 2008.

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1.5 Definitions

1.5.1 Athlete means males and females who alcohol drinking behavior Institute of Physical Education representatives that participate in the Institute of Physical Education of Thailand competition 33rd at Chaiyaphum province.

1.5.2 Alcohol drinking behavior means to any action caused by drinking of beverages containing ethyl alcohol in the amount lesser than 60 degree which is considered to be an international standard amount one can consume. Together with a drinking behavior no less that one year (drinking average: high; everyday/week, moderate; 3-4 times/week, low; 1-2 times/week).

1.5.3 Knowledge about alcohol beverage means the comprehensive, cognitive and learning on alcohol beverages.

1.5.4 Alcoholic beverage means beverage with alcohol content such as liquor, beer, whiskey, brandy, rum, illegal liquor, white liquor, fermented sticky rice, sato, wine, sake, etc.

1.5.5 Sport type means the types of sport that are competed in the Institute of Physical Education of Thailand Sporting Competition.

1.5.6 Party means party with the objective for conversation, meeting and exchanging ideas with friends and known people.

1.5.7 Victory cerebration means party with the objective of congratulating the athletes that won the competition.

1.5.8 Looser means even or losing the sport competition.

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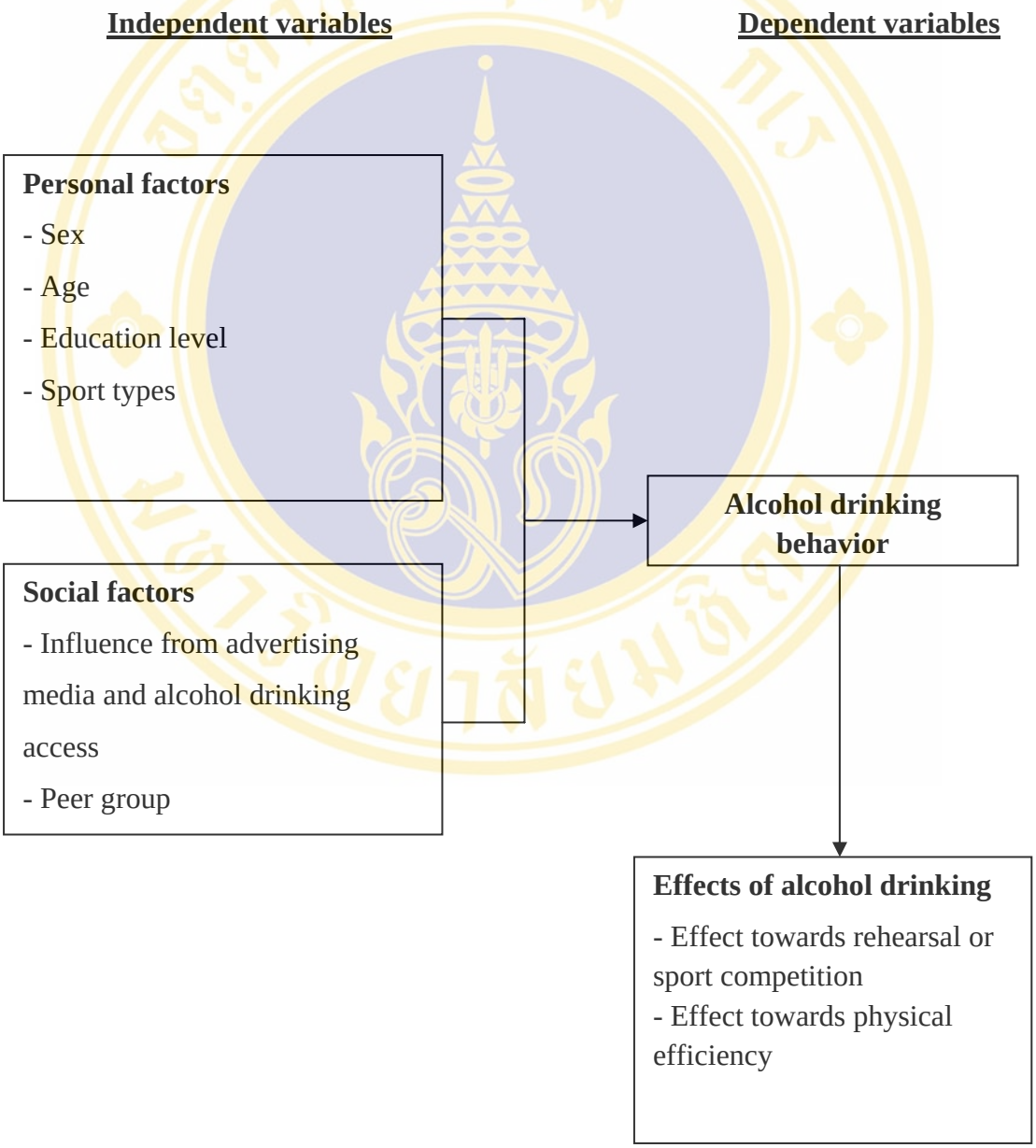
1.6 Research Conceptual Framework

Conceptual framework for this created research derives from various literature reviews, concepts and theories. Those can be presented in the form of framework by having the variables as follows;



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1.7 Research Variables

1.7.1 Independent variables

1) Personal factors:

- Sex
- Age
- Education level
- Sport types

2) Social factors:

- Influence from advertising media and alcohol drinking access
- Peer group

1.7.2 **Dependent variable**:

1) Alcohol drinking behavior

2) Effects of alcohol drinking:

- Effect towards rehearsal or sport competition
- Effect towards physical efficiency

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1.8 Variables and Measurement Level

Variable	Level of Measurement
Personal factors	
- Sex	Nominal scale
- Age	Nominal scale
- Education level	Ordinal scale
- Sport types	Nominal scale
Social factors	
- Influence from advertising media and alcohol drinking access	Rating scale
- Peer group	Rating scale
Alcohol drinking behavior	Nominal scale
Effects of alcohol drinking	
- Effect towards rehearsal or sport competition	Nominal scale
- Effect towards physical efficiency	Nominal scale

1.9 Expected Outcome and Uses

1.9.1 To identify the behaviors and factors relating alcohol drinking in athletes, a case study of Institute of Physical Education.

1.9.2 To identify the effects of alcohol drinking toward rehearsal or sport competition and physical efficiency.

1.9.3 To implement guideline and solution against alcohol drinking behaviors in athletes, a case study of Institute of Physical Education.

1.9.4 In order for being the database for athletes, trainers, organizations and the persons who involve with the athletes in terms of embedding good values in decreasing, vacating and quitting in athletes' alcohol drinking.

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CHAPTER II
LITERATURE REVIEW

This research on the topic of the factors caused alcohol drinking behaviors in athletes, a case study of Institute of Physical Education which researchers bring up theory related and literature review to support along as follows.

2.1 Concept and theory
- 2.1.1 Adolescent development
- 2.1.2 Differential association theory
- 2.1.3 Aker's social learning theory

2.2 Knowledge about alcoholic beverages
- 2.2.1 Definition
- 2.2.2 Types of alcoholic beverages
- 2.2.3 Types of alcohol
- 2.2.4 Alcohol toxication
- 2.2.5 Effect of alcohol
  - 2.2.5.1 Effect of alcohol on physical health
  - 2.2.5.2 Effect of alcohol on mentality
  - 2.2.5.3 Effect of alcohol on society

2.3 Substances prohibited in particular sports

2.4 Institute of Physical Education structure history

2.4 Related research

2.1 Concept and Theory

2.1.1 Adolescent development

The term "adolescence" derived from Latin "adolescence", which means to grow into maturity (Hurlock, E.B., 1978). The term "adolescence" has many names

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such as storm & stress, youngster, youth, teenage and juvenile. Furthermore, Sucha Chanaim (27) defined that “adolescence” is the period when a person enters sexual and mental maturation and is ready to become parent. Maturity developments have 4 sides such as body, emotion, intelligence and social. Adolescent is the period of turning point of life which the end of childhood into adulthood.

Luella Cole, an American psychiatrist has sorted adolescent life into 3 periods

1) Early adolescent (male: age between 15-17 years old)

2) Middle adolescent (male: age between 17-19 years old)

3) Late adolescent (male: age between 19-21 years old)

Characteristics of adolescent

1) Period of reconstruction: In this stage, physical development approaches very rapidly and later slows down.

2) Period of transformation: A stage of substantial change physical, mental and emotional.

3) Period of independence: Tends to be self-dependent, adolescent prefers to learn lesson from the mistake rather than an instruction. They are likely to argue a lot and turning moody if being refused.

4) Period of problem: Being on the edge of critical life period, adolescent experiences many problems together with personal adjustment. They express their emotion so aggressively to be named after as storm and stress age.

2.1.1.1 Physical development

Teenage is the period that the body is fully grown. The height and the weight quickly increase and the sexuality may or may not clearly appear. The majority of the changes that occur to the body are influenced by the hormone produced by glands. The characteristics of the growth or changes that occur to the body are as followed:

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1) Bone growth: The height will increase. The arms and legs will be longer. The increase height will be different between boys and girls. The girls will gain more height than the boys during the early phrase and the boy will gain more height during the later phrase. The girl height will be stable at the age of 18 years and will stop gaining height at roughly the age of 20-21 years. Whereas the boy height will be stable at the age of 20 years and will stop gaining height at roughly the age of 25 years. Additionally, the body weight would also increase due to the bone growth (Urai Sumatidhram, 1999: 12).

2) Muscle growth: The muscle will also grow along with the bone. Androgen would stimulate muscle growth and breast expansion for females. Testosterone would stimulate muscle growth and strength for males resulting in the chest, arm and leg muscle.

3) Body hair: The hair will change during teenage years. Some would have curly hair. Additionally, they would have body hair. The male would grow hair around the face, chest, armpits and sexual organ and the female would grow hair around the armpits, arms, legs and sexual organ.

4) Voice change: The voice change would be clearly apparent in males due to the voice box growth resulting in the male voice being broken. The voice usually begins to change at roughly the age of 13-14 years old and starting to be broken at the age of 16-18 years of age. Teenagers would be able to control their voice at the age of 20 years old and begins to speak more smoothly (Pornpimon Jeamnakarin, 1996: 42-43). The female voice would change to be higher pitch.

5) Reproduction organ change: When entering into the teenage years, testosterone would cause the reproduction organ change in male and progesterone and estrogen would cause the reproduction organ change in female. The male penis would grow and the female ovary would grow and menstrual would begin to be produced. (http://e-learning.snru.ac.th/els/hong/page_usa4.html)

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2.1.1.2 Emotional development

Emotion is the sensation that is aroused and stimulated by other variable. Being emotional generally occurs every minute. Expressing an aggressive emotion, adolescent with high self esteem sometimes has a argument with adult. And with the aggressive and sensitive emotion, being persuaded and encouraged in good and bad ways tends to be easy on adolescent. So this results in adolescent disturbance behavior which in the long term effecting their future. Constantly, emotion can be altered; it implies both advantage and disadvantage.

Adolescent's emotion

1) Fear

Adolescent is feeling fear when they are insecure. Fear typically involves with adjustment to fit in the social such as fear of not being accepted. Adolescent consequently take a concern on their behavior too seriously which discourages them being individual.

2) Worry from fear

Fearing with many things and keeping it in mind, adolescent tends to think pessimistic such as he can not do well in the exam, social relation and family relation as well.

3) Anger

Anger is sorted to be an aggressive emotional expression, can be shown in direct and indirect way, for example, Physical tense as shaking hands, Rapid and harsh judgment. Explosive outbursts lead to physical attack or destruction of property. Also it can indirectly express as being silence and kept oneself from society.

4) Love with several types

- Love to oneself refers to love and care paid to physical body.

- Love to friendship normally adolescent gets along with a large group with the same personality, similarity, tastes which they can consult the problem solving.

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- Love to idol normally adolescent admires those who are smart and talented in some particular way, they take these idol as a hero which influences how they become in the future.

- Love to opposite gender a teenager problem related to opposite gender tends to bother their mind a lot. An adolescent love refers to a desire to love, admire, complement on the opposite sex, thus preferring to be outstanding. Adolescent love comes and goes in drastic, desperately obsessive which can profoundly affect adolescence future life.

5) Jealousy

Jealousy happens when being defeated or taken away love. Jealousy can be expressed in the form of irrational and serious anger.

6) Curiosity

Adolescent are curious about the future and revealed things especially those of opposite sex.

2.1.1.3 Intellectual developments

With a dramatic physical change in this age, adolescent contains a lot of energy, being very enthusiastic and increasing in capability. This makes them learn to accept reasoning and express opinion to others. Moreover, they aware and observe how others emotional respond as well as improve their appearance and personality in the social acceptable way by imitating models such as intimate friends, movies, books. Intellectual development in adolescent period goes very rapidly, the highest development level reaches at the age of 16 years old then gradually diminishes after 19-20 years old. The stage of intellectual development can be summarized as follows.

1) The period of learning and exploring environment and surrounding people, they observe and try out the mistake in problem solving.

2) The period of creating moral and ethnic attitudes such as democratic attitude and social value.

3) The period of rational and organized reasoning, self esteem and skill development. These allows a proper time for education in terms of developing capability in many aspects including abstracts.

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4) The period of higher level of concern in future including career life, dependent decision making in making friends, socialization and relationship.

2.1.1.4 Social development

Adolescent personal changes can be apparently observed within the family. Obviously, adolescent loves freedom and enjoys their privacy in their own room. They are strongly demanding in being self esteem and being accepted from friends and social. This can be observed through.

- Special concern of appearance.
- Special concern in manner and family members.
- Demanding to be accepted as a grown up.
- Close friendship among same sex group and later a relationship with opposite sex.

As what mentioned above, adolescent age is vital for behavioral development. According to behavioral science, adolescent age is on the process of reasoning and being eager to learn and try out many new things. This implies an opportunity to develop healthy value so behavioral development should gain attention in this age. Including fault beliefs such as being a man requires smoking, drinking and sex, risky behavior causes a bad effect towards health.

In studying on determinants of adolescent alcohol drinking behavior, it provides a guild answer to solve such these behavior wrongly perceived by adolescents as a cool social acceptable thing. Experts agree upon 4 main reason of adolescent drinking related to emotion, mental and physical. (Siriporn Suwanatod, 1988:4)

1) Hastiness: drinking becomes a solution to problems.
2) Loneliness: heart broken, drinking to be death.
3) Emotional controlling: problems of getting along with others.
4) Fear, shyness, lack of confidence, guilty.

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Some adults and parent do not consider alcohol as a drug, instead they engage in drinking due to occasional celebration. As often drinking make an addiction. Over or under control over adolescent drinking can cause them to turn to do drug. Behavior of adolescent can be one of the measurements of the country prosperity, sufficient attention shall be brought into this concern.

2.1.2 Differential association theory

Differential Associations is a theory developed by Sutherland (1947) purposing that a criminal behavior does not directly cause from social influence and genetic but rather a learning experience of criminal behavior in interaction with other people in a process of communication both vocally and physically. However this does not mean a process of learning that can be produced like any other behavioral learning. A series of propositions will be explained as follows.

1) Criminal behavior is learned.

2) Criminal behavior is learned in interaction with other persons in a process of communication.

3) The principal part of learning of criminal behavior occurs within intimate personal groups.

4) When criminal behavior is learned, the learning includes.

4.1) Techniques of committing the crime, which are sometimes very complicated, sometimes very simple.

4.2) The specific direction of motives, drives, rationalizations and attitudes.

5) Specific direction of motives and drives is learned from definitions of the legal codes as favorable or unfavorable.

6) A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violations of law.

7) Differential associations may vary in frequency, duration, priority, intensity meaning differential characteristics of association between criminal behavior and against criminal behavior.

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8) The process of learning criminal behavior by association with criminal and anti-criminal patterns involves all of the mechanisms that are involved in any other learning.

9) While criminal behavior is an expression of general needs and values, it is not explained by those general needs and values, since non criminal behavior is an expression of the same needs and values. Thieves generally steal in order to secure money, but likewise honest laborers work in order to money. The attempts to explain criminal behavior by general drives and values such as the money motive have been, and must completely to be, futile, since they explain lawful behavior as completely as they explain criminal behavior. They are similar to respiration, which is necessary for any behavior, but which does not differentiate criminal from non criminal behavior.

Sutherland gave 2 central components to theory.

1) Content of what is learned: is what one learns referring to criminal techniques, motives, drives, rational explanations, attitudes, and persuading to involve a violation of laws.

2) Process by which the learning takes place: how one learns meaning the manner in which content is learned.

Learning process takes place when associating among acquaintance which is not limited in an intimate interaction only, a person may approach to process of learning while the associating opportunity allows to those sources of criminal behavior. Differential associations may vary in frequency, duration, priority and intensity. Sutherland valued the variable of intensity the most influenced to criminal behavior learning. Hence, according to the theory, a person learns to accept a legal violation behavior more than legal behavior in some beginning period of age, at certain frequency, and originated from important or famous person, that person tends to commit a legal violation behavior.

Differential Associations theory developed by Sutherland gives an attention to an association with criminal friends by supporting the reasons of a friendship

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intimacy will build up an appropriate environment that allows learning and support in terms of behavior and acceptance in that behavior. Adolescents who associate and intimate with good friends tend to behave well and agree with legal behavior. Conversely, adolescents who associate and intimate with criminal friends tend to behave like criminals and agree with its behavior.

From conceptual ideas and theory related to criminal behavior mentioned above, it is found that in judiciary procedure for youth and child aims to put more importance towards the idea that these young generations commit a crime because of many factors such as biological, psychological and social/environment factors given that these factors influence a variety of behavior across personal difference. These factors are incontrollable so that judiciary procedure for youth and child should focus on making an improving and solving them rather than giving a punishment. Psychiatrist necessarily encompasses knowledge and understands thoroughly on the relevant factors to criminal behavior of those child and youth. By utilizing and applying theoretical idea and psychological knowledge in making an evaluation, analysis and work out the solution in appropriate educating and therapies. This shows a right solution in fixing the problem as well as benefits in preventing them from committing further crime.

2.1.3 Aker's social learning theory

Aker has developed Suttherland's theory which focusing on "differences hanging out people" and combine with the principles of modern learning theory. The main idea is diverted behave is the consequence through closeness or copying others (Agnew, 1991). Furthermore, Aker explained that modern learning theory can define any crime behavior; it is also covering drug abuse, alcoholism, diverted sexual oriented, professional criminal, and mentality disorder. This idea, besides, covered variable that control and stimuli crime, and motivation of it. It explains as below.

1) Differential association

Differential association is the process that person had the experience and value in acceptance or rejection of laws. This idea covering all association and

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norms of society, the dimension in association is connecting people to share behavior. And for dimension in value is the experiencing through socialization

The accepted association still able to copy or adopt criminal character, the main group is family and friends. The lower is surrounding people, church, teacher, laws, rulers, and media or source of attitude. However, the longer relationship, the higher frequency, and more important person would affect on individual more than others.

2) Definition

Definition means attitude or meaning that one believe towards one behavior or directing, reasoning, meaning of incidence, also appropriateness. Definition combines of general definition and specific definition; the general one means religious, moral, norms, and value that accepted by society. The specific means depending on cases; one would accept that steal is a crime while drug abuse is not.

3) Differential reinforcement

Differential reinforcement means the balance of expectation or balance of rewards and punishment consequently from person's behavior. Person will omit from commit crime or not depending on experience about rewards and punishment from the past, present, and future. The possibility that person can repeat crime depended on the rewards for more money or feeling good. This is called positive reinforcement. For negative reinforcement means things that person able to avoid from undesired situation, also can lead to repeat action. If the differential reinforcement occurs often and in a large amount it could lead to higher crime rate.

4) Imitation

Imitation means getting involved in behavior after being observation from others. The imitation depends on type and characteristic of what they observed. It could be from media, celebrity that can be imitated.

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The definition or variable that already stated will take part on learning process of people and enhance to make mistake. Aker insisted that the learning process will be a reaction and reflect on it after all. Furthermore, the factor that affects criminal's behavior will affect further on mistaken as well. But after imitating, the behavior will be less affect on one. Doing another mistake in the open chance or not will depend on the past learning process of each individual and others supporting factors.

2.2 Knowledge about Alcoholic Beverages

2.2.1 Definition

Alcohol is defined by Thai dictionary version Rachabundittiyasatan (1999) as a series of organic substance in the form of clear colorless tangy liquid with boiling point at 78.5 Celsius. Full scientific name is Ethyl Alcohol which can shortly call Alcohol. Alcohol is usually made from sugar, starch, and other carbohydrates by fermentation with yeast.

Alcohols can be used as a beverage, as fuel and for many scientific, medical, and industrial utilities.

Liquor is classified to be a sort of drug defined by World Health Organization due to its effect of being addicted. However, it is still considered to be legal like cigarette.

In sum, liquor is a beverage that causes intoxication due to the quantity and density of alcohol within, yet, a legal drug.

2.2.2 Types of alcoholic beverages

Liquor has a chemistry name as Ethyl Alcohol or Ethanol with a chemistry equation of C2H3OH. It can be obtained from fermentation with yeast and grain or certain kinds of fruits, cactus and later proceed in different production process to produce different kind of liquor.

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Type of liquor classified into 12 types:

1) Fermented beverage: Liquor that has not been distilled including mixture with distilled beverage but contains alcohol density no more than 15 degree. Those are beer and wine.

2) Beer refers to fermented beverage made form malt or rice.

3) Fermented beverage made from grapes.

3.1) made from green grapes

3.2) made from red grapes

4) Local distilled beverage

4.1) Non distilled liquor that made from sugar, rice such as Sake

4.2) if made from fruits, it has to be defined in specific name such as pineapple wine, or mangos teen wine.

5) Distilled beverage refers to liquor that has been processed in distill, including those mixture with non distilled beverage but contains alcohol density greater than 15 degree.

6) White whisky refers to distilled beverage without any added favoring containing alcohol density less than 80 degree.

7) Local distilled beverage refers to distilled liquor that uses white whisky as material containing alcohol density in the range of 15-40 degree.

8) Mixed liquor refers to distilled liquor that mixed with white whisky and Samtab liquor containing alcohol density less than 80 degree such as Hongtong, Sangtip.

9) Special processed liquor refers to distilled liquor processing in a special production containing alcohol density less than 80 degree.

10) Special liquor is classified as

10.1) Whisky is liquor distilled from grain such rice, malt, maze. It must be aged at least 2 years before available.

10.2) Brandy refers to liquor that is distilled from grape wine.

11) Other distilled beverage refers to Rum, liquor that is distilled from sugar.

12) Samtub refers to distilled liquor containing alcohol over 80 degrees.

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(Source: Excise Department)

2.2.3 Types of alcohol

In the Thai society, there are many types of alcohol beverages especially, the distilled and fermented beverages such as:

1) Brandy is the best and most expensive distilled alcohol beverage because it is the drink distilled by grape through many production processes. Brandy is both imported and made locally but the local brand is unflavored.

2) Whisky, the distilled alcohol beverage, comes from the word "Yus Pita" which is the Gallic language of Seth, the local people in Scotland, this word means the merit water. Whisky is made from the rice grains such as barley, oat, corn or even glutinous rice. The original whisky is made by taking barley and ferment, distill, and mature it in the oaken bucket.

3) Rum is a distilled beverage made from sugarcane by-products such as molasses and sugarcane juice. Also, rum can include orange peel and other fruits to achieve a taste resembling wine. Rum is believed to originate from islands in the East Indies. There is still production of rum in the western region of Thailand as ingredients to mixing Chinese or Thai traditional medicines.

4) Vodka is a liquor similar to whiskies but with higher alcoholic concentration. It is believed that Russians were the original producers of vodka, which are distilled from wheat. Today, vodka has become very popular among consumers and is an ingredient to many cocktails available in the market.

5) Cocktails are mixed drinks which usually contains one or more types of liquor and flavorings depending on the recipe or preferences of drinkers. It is believed that cocktails originated in North America during their war with England, where there was a shortage in liquor. Thus it became a common practice to mix in fruit juices with liquor in the soldiers' drinks, each glass with a cock's tail feather, hence the name. In Thailand, there are many new cocktail recipes being written nowadays.

6) Rice whiskies are liquor produced in Asia, the Chinese liquor "sake" included. Rice whiskies are distilled from sugarcane molasses, rice, palm sugar, etc. In Thailand, rice whiskies are popular among rural and lower-income consumers.

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7) Fermented beverages are alcoholic beverages which did not pass through distillation. Often produced from fermentation of grapes, there are special characteristics in some types of fermented beverages. Champagne or sparkling wine is made from grapes with carbon dioxide to make it bubble, similarly to beer. The method of production and storage of these products are what gives it a higher value.

8) Wines are oldest type of fermented fruit alcoholic beverages in the world. The raw materials used are grapes but it differs from champagne that it is not carbonated and has a simpler manufacturing process. In Thailand, there are long-established wine producers but has not gain as much popularity as imported wines. Wine consumption has increased rapidly in the past 2-3 years and has become a symbol for a rise in social status.

9) Beer is the most popular type of alcoholic beverage in the world. It is produced by the process of brewing – barley are baked, mashed, boiled, and fermented in casks. After fermentation, hop is added for a bitter taste, and then yeast is added. Beer is popular among Thais and the industry has become one of the most competitive.

10) Local fermented beverages exist in all cultures, brewed for local consumption. They are usually produced in times of festivities and ceremonies, such as Rocket Festival in Northern East (Isan). The raw materials for these beverages are usually rice, fruits, or sugar, fermented to create alcohol.

2.2.4 Alcohol toxication

Little information on Toxic or any harmful substance compounded in alcohol is acknowledged by most people. None of publication on the alcohol ingredient information has been made. So people have no idea that alcohol is made from molasses which contaminated from toxic. People can not identify any certain kind of toxic and the amount contaminated across alcoholic beverage and brand. Organization takes responsibility and roles in examining and controlling these alcoholic beverages. Alcohol producing process with wrong ingredient, false production technique and immoral producer, alcohol beverage can be contaminated by several kinds of toxic which causes health damage as follows

1) Methyl Alcohol: causes headache, vomiting, nausea and blind

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2) Arsenic: causes a skin cancer, liver cancer and arsenic poisoning

3) Lead: causes lead poisoning, brain, kidney and blood system damage

4) Copper: causes Wilson's disease, kidney damage

5) Acetaldehyde: suppression of central nervous system, kidney damage

6) Sulfur dioxide: difficulty inhaling, collapsing trachea

7) Ester: irritation in respiratory system

8) Furfural: diminishing in body temperature, nausea, vomit, purging

2.2.5 Effect of alcohol

2.2.5.1 Effect of alcohol on physical health

Once alcohol enters body system, responses are different to person. However they share some common symptoms which are, with the small amount of alcohol consumed, feeling warm due to blood vessel expansion, rapid heartbeat, slightly sweat, expansion in blood vessel. Some people misunderstand that drinking keeps warmth. Small energy is gained from alcohol consumption; nevertheless, much more energy is loss through the skin from expansion of blood vessel. Therefore drinking ultimately loses heat and endangers the body sooner from cold since 20 percent of alcohol is absorbed into bloodstream once it reaches throat and stomach. In the presence of food, alcohol can be absorbed less however 80 percent will later be absorbed into blood stream and circulate in body system with in half an hour. Consequently, drinker with an empty stomach tends to be drunk faster than the other. After the alcohol is absorbed into blood stream and body organ, it is decomposed into water and Carbon dioxide in body tissues and mainly in liver. Liver takes an important role in transforming alcohol into toxicant Acetaldehyde which later decomposed into Acetate. Eventually, Acetate will be brought back to organ. According to an experiment, human body can tolerate alcohol up to the amount of 100 CC. (8 grams). And it is decomposed into water and Carbon dioxide within one hour (Kasian Pungkanon, 1995: 21-22). Therefore, level of alcohol concentration exceeding this level disable the system ability to eliminate alcohol resulting in an alcohol accumulation. Alcohol concentration over the level of 80 mg/cc causes

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dizziness. Apart from the amount that is eliminated, the rest is passed from the body in the form of sweat, urine and on the breath.

Consequently, a heavy drinker can be easily caught by examine and measure the amount of alcohol concentration in bloodstream and breath (1/2000 of amount in bloodstream) and urine (3 times in bloodstream) (Boonsom Martin: 1990: 168). However, the amount of alcohol in bloodstream, urine and breath depends upon weight of person (Richard G.sehlaadt, 2001:179).

Five stages of drunkenness (Dr. Songkiat Piyaka, 2001:91)

1) Jocose: being talkative, talking nonsense

2) Bellicose: Argumentative

3) Lachrymose: sensitive, depressed, tearful

4) Comatose: unconscious, heavily drunk, suppression on nervous system that control respiratory system, coma, death

Effects on brain

Alcohol is a paraldehyde. Evidence suggests that alcohol effects brain function by interacting with multiple neurotransmitter system such as GABA, Glycine, Serotonin, and Glutamate. Alcohol affects a change in behavior through the effect on brain system. Behaviors are varied on the proportion of alcohol concentration in bloodstream. (Pichai Sangchanchai et al., 2005: 62-63)

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Table 1 Level of alcohol concentration in bloodstream toward behaviors

Level of alcohol concentration in bloodstream (mg/dl or mg%)	Behaviors
0.05	Poor judgment, likely to take risks and actions not taken when sober
0.1	Reaction time slowed, decrease in ability of muscle movement
0.2	Losing ability in emotional control, memory impairment - "blackout" normally occurs in this range
0.3	Confuse event, start stress
0.4 - 0.5	Coma
> 0.5	Death occurs due to alcohol poisoning - central nervous system inhibition of heart and breathing

Effects on the nervous system

The effects of ethanol administration on central nervous tissue are due to direct action rather than to acetaldehyde, its first breakdown product. Following ethanol ingestion, very little acetaldehyde crosses the blood-brain barrier,despite elevated levels in the blood. Alcohol has a general effect on neural transmission by influencing axonal membranes and slowing nerve conductance. The permeability of the axonal membrane to potassium and sodium is altered by the lowering of central calcium levels that results from ingesting alcohol (Wesnes and Warburton, 1983). Alcohol has differential effects on the central neurotransmitters, acetylcholine, serotonin, noradrenaline and dopamine.

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Alcohol blocks the release of acetylcholine and disrupts its synthesis. As a result,transmission in the central cholinergic pathways will be lowered. The ascending reticular cholinergic pathway determines the level of cortical arousal and the flow of sensory information to be evaluated by the cortex. The lowering of electro-cortical arousal reduces the awareness of stressful information and the ability of the individual to attend to specific stimuli. These de-arousing changes are reflected in alterations in the electroencephalogram with moderate to large doses of alcohol. The obvious results are impairments in concentration, attention, simple and complex reaction times, skilled performance and, eventually, short-term memory.

Alcohol decreases serotonin turnover in the central nervous system by inhibiting tryptophan hydroxylase, and enzyme essential for serotonin's biosynthesis. Activity in the neurons of serotonergic pathways is important for the experience of anxiety; output of corticosteroid hormones from the adrenal cortex increases the activity in these neurons. Alcohol has an opposing action and so may reduce the tension that is felt by the individual in a stressful of situation.

An effect of alcohol is to increase activity in central noradrenergic pathways. This is transient and is followed, some hours later, by a decrease in activity. Catecholaminergic pathways are implicated in the central of mood states, activation of these pathways promoting happy and merry states. The fall in noradrenaline turnover as the blood alcohol concentration drops ties in with the reversal of mood that follows the initial drunken euphoric state. This is exacerbated by larges doses of alcohol as these tend to give rise to depression.

The small alcohol molecules penetrating the blood-brain barrier stimulate the brain to release dopamine. Dopamine is regarded as a "pleasure-related" hormone and its release is triggered in the limbic system whilst cerebral cortical activity is depressed. Pain sensors are numbed and later the cerebellum is effected, causing difficulty with balance.

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Alcohol also has an effect on cerebral energy metabolism: the drug increases glucose ultilization in the brain. As glucose is the main substrate furnishing energy for nerve cells, the results is that the lowered glucose level may induce mental fatigue. This will be reflected in failing cognitive functions, a decline in mental concentration and in information processing. It is unlikely that exercise, *per se*, will offset these effects.

The disruption of acetalcholine synthesis and release means that alcohol acts as a depressant, exerting its effect on the reticular activating system, whose activity represents the level of physiological arousal. It also has a depressant effect on the cortex: it first affected the frontal centres of the cortex before affecting the cerebellum. In large quantities it will interfere with speech and muscular co-ordination, eventually inducing sedation. In smaller dosed it inhibits cerebral control machanisms, freeing the brain from its normal inhibition. This release of inhibition has been blamed for aggressive and violent conduct of individuals behaving out of character when under the influence of alcohol. Undoubtedly, alcohol has been a factor in crowd violence and football and cricket grounds in Britain in the mid-1980s. These restrictions were extended to other sporting events in the years that followed.

Clearly, alcohol will have deleterious effects on performance in sports that require fast reactions, complex decision making and highly skilled actions. It will also have an impact on hand – eye co-ordination, on tracking tasks, such as driving, and on vigilance tasks such as long-distance sailing. An effect on tracking tasks is that control movements lose their normal smoothness and precision and become more abrupt or jerky. In vigilance tasks, some studies have shown a deterioration in performance with time on task (Tong et al., 1980). At high doses of alcohol, meaningful sport becomes impractical or even dangerous. Progressive effects of alcohol at different blood alcohol concentrations are summarized in table 1. An important effect of alcohol, not listed, is that it diminished the ability to process appreciable amounts of information arriving simultaneously from two difference sources.

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The most frequently cited study that reported facilitatory effects of alcohol on human performance was the classic experiment of Ikai and Steinhaus(1961). They showed that in some cases moderate alcohol doses could improve isomertric muscular strength. This result was similar to that obtained by cheering and loud vocal encouragement. They explained the effect on the basis of central inhibition of the impulse traffic in the nerve fibres of the skeletal muscles during maximal effort. This depression of the inhibitory effect of certain centres in the central nervous system may allow routine practices to proceed normally without any disturbing effects. This finding has not generally been replicated when other aspects of muscular performance are considered.

Effects on liver

The liver acts as an alcohol eliminator, helps in cleansing the body of poisons. In the same time, liver can be destroyed by the long period alcohol consumption. This can lead to an accumulation of fat and Protein in liver resulting in fatty liver, generally found as a much larger size compared to normal one. In addition, alcohol negatively affects liver in the symptom of liver cancer, hepatitis and cirrhosis.

Effect on digestive system

The stomach, the small and large intestines and the pancreas are each affected by alcohol. Alcohol increases acid in the stomach that can result in gastritis or stomach or intestinal ulcers. Once the concentration gets higher than 20 percent, it conversely prevents a releasing. A long period of alcohol consumption can cause pancreas cancer, esophagus cancer and Vitamin deficiency is due to an inability to absorb or a lack of various vitamins and amino acid hence malnutrition

Effects on heart and blood vessel

Alcohol consumption enhances blood circulation over the skin area, resulting in feeling warm. However, excessive drinking can lead to high blood pressure, heart muscle damages (cardiomyopathy). Damage to the cardiovascular system can increase risk of heart failure or stroke.

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Effects on metabolism and endocrine gland

Alcohol increases high blood sugar levels or diabetes. Alcohol can interfere with the mechanisms that work to release glucose into the bloodstream that protect against low blood sugar. Hence, alcohol can worsen the risk of experiencing hypoglycemia. Alcohol will reduce the level glycogen in blood and prevent sufficient glucose produced that will go in to blood circulation. This result in being exhausted, sweat and faint, note that it can be worse to death.

Moreover, alcohol can cause gout decease when it congests lactic acid in blood and tissues. The acid gets trapped and accumulates in joints resulting in an ache at thumbs and toes.

Effects on micro-organism

Alcohol reduces efficiency micro-organism to work well. This reflects in significant changes as follows,

1) Deficiency in producing Phagocyty which results in deteriorated competence in eliminating deceases in neutronfiu
2) Reduce neutrophil production
3) Reduce lung macrophages
4) Reduce circulatory bactericidal substance
5) Increase plasma hydrocortisone; sticky blood
6) Incomplete Glottis shutting: easily aspirate
7) Ciliary's cell works less

According to changes stated above, it implies that a person who consumes alcohol tend to get affected from decease, HIV, Pneumonia easier than those who do not. (Sriwong Havanon, 1991: 26-27)

Alcohol and physiological responses to exercise

Alcohol ingestion has been to lower muscle glycogen at rest compared with control conditions. As pre-start glycogen levels are important for sustained exercise at an intensity of about 70-80 per cent VO_{2max9} such as marathon running,

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taking alcolhol in the 24 hours before such endurance activities is ill-advised. Effects of alcohol on the metabolic responses to submaximal exercise seem to be small. Juhlin-Dannfelt and co-workers (1977) reported that alcohol does not impair lipolysis or free fatty acid utilization during exercise. It may decrease splanchnic glucose output, decrease the potential contribution of energy from liver gluconeogenesis, cause a more pronounced decline in blood glucose levels and decrease the leg muscle uptake of glucose towards the end of a prolonged (up to 3-hour) run. The impairment in glucose production by the liver would lead to an increased likelihood of hypoglycaemia developing during prolonged exercise.

Some studies have shown an increase in oxygen uptake (VO_2) at a fixed submaximal exercise intensity after alcohol ingestion. This may be due to a poorer co-ordination of the active muscles as the decrease in mechanical efficiency, implied by the elevation in VO_2, is not a consistent finding. Related to this is an increase in the rario of lactate level in alcohol; metabolism of alcohol shunts lactate away from the gluconeogenesis pathway and leads to an increase in ratio of lactate to pyruvate. It is possible that elevated blood lactate concentrations during exercise, after taking alcohol, may reflect impairment in clearance of lactate rather than an increase in production by the excercising muscles. A failure to clear lactate would militate against performance of strenuous exercise.

Alcohol does not seem to have adverse effects on maximum oxygen consumption (VO_{2max}) or on metabolic responses to high-intensity exercises approaching VO_{2max} levels. At high does (up to 200 mg per cent, i.e. 0.20 per cent blood alcohol level) it is understandable that athletes may feel disinclined towords maximal efforts that elicit VO_{2max} values and a reduction in peak VE (minute ventilation) is usually observed (Blomqvist et al.,1970). Similarly, they may be poorly motivated to sustain high-intensity exercise for as long as they would normally do. In middle-distance running Events with an appreciable aerobic component, performance was found to be detrimentally affeced in a dose-related manner, with increasing blood alcohol concentration (BAC) levels from 0.01 to 0.10 per cent (McNaughton and Preece, 1986).

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Although it has not been shown conclusively that alcohol alters VE, stroke volume or muscle blood flow at submaximal exercise levels, it does decrease peripheral vascular resistance. This is because of the vasodilatory effect of alcohol on the peripheral blood vessels, which would increase heat loss from the surface of the skin and cause a drop in body temperature. This consequence would be dangerous if alcohol is taken in conjuction with exercise in cold conditions. Sampling from a hip-flask of whisky on the ski slopes may bring an immediate feeling of warmth but its disturbance of normal thermoregulation may put the recreational skier at risk of hypothermia. Frost-bitten mountaineers especially should avoid drinking alcohol as the peripheral vasodilation it induces would cause the body temperature to fall further. In hot conditions, alcohol is also inadvisable as it acts as a diuretic and would exacerbate problems of dehydration.

Studies of maximum muscular strength, in the main, show no influence of moderate to medium doses of alcohol on maximum isometic tension. Similar results apply to dynamic functions, such as peak torque measured on isokinetic dynamometers. Muscular endurance is generally assessed by requiring the subject to hold a fixed percentage of maximum for as long as possible. Here, too, the influences of moderate alcohol doses are generally found to be non-significant. This may be because the tests represent gross aspects of muscular function and, as such, are insensitive to the effects of the drug.

2.2.5.2 Effect of alcohol on mentality

Alcohol toxin’s not only effects physical health but also mental health. Research suggests that small amount of alcohol consumed helps in relaxing, being talkative however if the amount consumed increases, it would in turn make a person being confused, moody, making poor judgment in controlling themselves. It generally finds drinker being aggressive, increase an interest in sexual behavior. Alcoholism nevertheless causes destruction in sexual capability.

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Apart from a direct effect on mentality, Delirium treatment can occur after a period of heavy alcohol drinking. Symptoms occur because of the toxic effects of alcohol on the brain and nervous system including feeling shaky, emotional volatility, irritability, anxiety, insomnia (difficulty falling and staying sleep), loss of appetite, hallucination and can be worse as death. (Kasian Pungkanon, 1995: 23)

Alcohols are brain depressants, suppressing brain's production of neurotransmitter. Consequently, after a certain period of consumption it is addicted called Alcohol dependent. This does not happen to only a person with fragile mental problem but everyone that consume alcohol heavily despite the time length. Alcohol causes chronic mental changes which are considered severe and difficult to completely cure. The examples are as follows

Pathological intoxication

This symptom happens to those who are allergic to alcohol toxin. Despite the small amount of alcohol consumed that can not affect people in general, they face a confusion of clouded sensation, incapability in remembering the situation. Typically, it takes within one day. The person can not remember what happened along with a symptom similar to Epilepsy.

Delirium Treatment

The most often symptom caused by alcohols intoxication is Delirium Treatment. A person experience more than one year heavy drinking, as a person attempts to consume as much alcohol as possible and lose the control of the quantity consumed. Amnesia sometimes occurs along. This symptom can be found in a patient with age above 30 years old.

Korsakov's Psychosis

A patient with this sickness appears to be a normal people. However, when talking one will realize a mental problem of sever memory loss; the patient can not distinguish different period of time, place and person. This affects physically via Peripheral neuritis.

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Acate Hallucinesis

The symptom includes distortion elaborated upon and confused with actual perception, paranoid. However the patient is still conscious with a normal memory and cognition.

Alcohol paranoid

The major symptom is paranoid, for example paranoid about a husband is having an affair. The patient‘s personality originally involves being paranoid and have a problem of adjusting along with social.

Werickkle Syndrome

The patients suffer severe memory loss, serious confusion, Ophthalmoplegia, Ataxia and horizontal vertical Nystagmus.

Alcohol deterioration

A heavy drinker at a long period of time suffers a contraction in forepart of the brain, deterioration in mental health and intelligence, reduction in working ability, emotional over-volatility, lack of shame and responsibility. This abnormal causes other severe effect such as sexual crime problem.

All seven mental disorders mentioned above are just some part of the problem caused by alcohol consumption. Study conducted by World health organization has found one third of each country mental disorder patients are related to alcohol consumption.

A person who has inconsistency in mental tends to get influenced and addicted to alcohol easily. Following are those who fall into this category.

1) A person belong to alcoholic family tends to have more potential of alcohol addiction.

2) A person who has little confidence, inferiority and difficulty in adjusting themselves to social, including those who are raised up in the

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overprotected way, it has a negative impact on personality, sociopath and dependence, and therefore higher potential to consume alcohol.

2.2.5.3 Effect of alcohol on society

Apart from the alcohol effects on physical and mental health, the result of this abnormal stage causes a change in self controllability that influences behavior. This directly impact on society that the person is belong to. Human as a socialize animal, behavior of one person always interacts with another within the same society. The problem of alcohol consumption can be classified as follows

Alcohol and crime

Even though alcohol can not be proved a main factor that causes a crime, many people believe that the more consumed, the higher possibility and risk of committing a crime. It is said that crime partially occurs because a person fails to control their behavior. Considering the crime that happens because of tiny issue, it always involves with alcohol consumption. However, this does not necessary mean that drinker commit crimes but excessive alcohol consumption will destroy personality and fail controlling behavior. Alcohol therefore is one determinant of presence of crime.

Relation of alcohol and crime can be divided into 2 ways.

1) Law and regulation violated when drinking for example being way too noisy in public, driving when being drunk without care.

2) Drinking becomes an incentive in committing a crime such robbery, rape, murder. Since there is a stimulus that reduces shame and guilt towards social norm and rules, actions endanger the social. (Chet Ruchadaphanathikul, 2005: 25-27)

Alcohol and accident

According to many evidence, it is proved that there exist relation between drunkenness of driver and traffic accident. This can be measured by the level

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of alcohol concentration in bloodstream. Different quantity can be divided into 4 levels (Chet Ruchadaphanathikul, 2005: 25-27).

Table 2 Level of alcohol concentration in bloodstream toward driving behaviors

Alcohol concentration level in bloodstream (mg %)	**Driving behaviors**
30%	Drive cheerfully
30-50%	Sensitive of being aroused, rapid decision making, mistakenening, aggressive driving
>50%	Slower reaction time, slow respond applied to the brake, confused thinking
>100%	Body system works beyond the brain command; impair co-coordination between body and brain. Being unconscious.

Table 3 Potential of traffic accident to proportion of alcohol concentration in bloodstream

Alcohol concentration in bloodstream g/100 c.c.	**Ability in driving and respond**	**Possibility of accident**
0.02	Slightly impact	Same risk to normal driver
0.05	Less ability in driving at 8 %, dangerous	2 greater chances of accident
0.08	Less ability in driving at	3 times greater chances of

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	12%	accident
0.10	Less ability in driving at 15	6 times greater chances of accident
0.15	Less ability in driving at 33%	40 times greater chances of accident
>0.20	Less ability in driving in proportion	100 times greater chances of accident

Driving ability refers to physical ability on controlling the car machine as well as the direction of movement.This requires a co-operation between nervous systems that control muscle. Any adversely effect to physical and mental health may result in a destruction driving ability. Alcohol influences a longer duration in decision making causing a slower movement of muscle. Normally the standard duration takes 0.75 seconds while heavy drinker spend more than 1 second which is risky and dangerous on making decision to pull ahead or stop the car (Vitul Aungprapu, 1983: 278-279)

Researches statistically suggest that 30-50 percent of severe traffic accidents are caused by alcohol consumption. Thailand has an increasing trend in consuming higher level of alcohol every year. Moreover, the drinking trend has expanded to adolescent and woman which are considered to be an important factor producing a traffic accident.

Proportion of injury due to traffic accident caused by alcohol consumption, on annual average in 2000-2004 reached 41.6, 41.9, 41.6, 46.2 and 47.9 respectively. This implies a drive drinking is a reason of injury from accident (Dr. Bundit Sornpaisarn and research group, Center for alcohol study)

2.3 Substances Prohibited in Particular Sports

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Ethanol is prohibited during the competition, examining via breath or blood test. Here are the maximum amount an athlete should not greater contain. (Sport Science Division Sector, Sports Authority of Thailand, 2007)

1) Aeronautic (0.20 g/liter)
2) Car racing (0.10 g/liter)
3) Karate (0.10 g/liter)
4) Bike racing (0.10 g/liter)
5) Boat speed racing (0.30 g/liter)
6) Arrow shooting (0.10 g/liter)
7) Boules (0.10 g/liter)
8) Modern five tract event (0.10 g/liter)

2.3.1 Alcohol in aiming sports.

In aiming sports, a steady limb is needed to provide a firm platform for launching the missile at its target or to keep the weapon still. Examples of such sports are archery, billiards, darts, pistol shooting and snooker. Two pistol shooters were disqualified during the 1980 Olympics due to taking alcohol in an attempt to improve their performance. There are also aiming components in sports such as fencing and modern pentathlon, especially in the rifle-shooting discipline of the latter. In some of these sports alcohol levels are now officially monitored, whilst in others, notably darts, drinking is a conventional complement of the sport itself.

To understand how alcohol might affect the archer, it is useful to took at the task *in toto.* The competitive player has to shoot three dozen arrows at each of four targets- 90, 70, 60 and 50 m away – to complete a FITA (the world governing body) round. Technological improvements in bow design have helped to produce outstanding scores, leaving the gap to perfection solely due to human factors. The modern bow has two slot-in limbs which insert into a magnesium handle section and stabilizers which help to minimize vibration and turning of the bow. Muscle strength is needed to draw the bow, whilst muscle endurance is required to hold it steady, usually for about 8 seconds for each shot while the sight is aligned with the target. Deflection of the arrow tip by 0.02 mm at 90 m causes the arrow to miss the target, which gives some idea of

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the hand steadiness required. The archer, before release or loose, pulls the arrow towards and through the clicker (a blade on the side of the bow which aids in measuring draw length). The archer reacts to the sound of the clicker hitting the side of the bow handle by releasing the string which, in effect, shoots the arrow. Archers are coached to react to the clicker by allowing the muscles to relax; a slow reaction to the clicker is generally recognized as hesitation. This affects the smoothness of the loose and is reflected in muscle tremor causing a “snatched loose”. For these reasons, the effects of alcohol on reaction time, arm steadiness, muscle strength and endurance, and the electromyogram of one of the arm muscles were selected as appropriate parameters to isolate and study under experimental conditions (Reilly and Halliday, 1985).

2.3.2 Alcohol and sport accidents

It has been recommened that alcohol should be outlawed prior to aquatic activities because of the potential for catastrophic accidents in the water. Alcohol is a signicant factor in spinal injuries occurring in recreational water sports. In scuba driving the potential for fatal nitrogen narcosis increases at shallow depths when alcohol is consumed. Of 752 drowning victims studies in North Carolina, 53 per cent were positive for alcohol and 38 per cent had blood alcohol values of 0.10 per cent or greater (see Reilly, 1997).

Peak effects on motor performance following administration of alcohol are typically observed 45-60 min later, but impairment is evident for up to 3 hours after dosing (Kelly et. al., 1993). This could render the drinker susceptible to accidents if alcohol is imbibed after sports competitions before driving the journey home.

There is evidence also of impaired exercise performance the morning after a bout of nocturnal drinking, adverse effects being observed in aerobic performance (O’Brien, 1993). This finding has implications for the behaviour of players the night before competition or serious training.

2.4 Institute of Physical Education Structure History

Department of Physical Education has been producing Physical Education

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teachers that have been transferred from Institute of Physical Education since 1936 and the curriculums have been continuously improved until the establishment of Physical Education University on January 1st 1953 to teach high vocational education level for physical education, and the establishment of Physical Education Teacher Training Institute in the academic year of 1958 to teach certificate level for physical education.

The Physical Education Teacher Training Institute was dismantled in 1969 and the curriculum expanded to Bachelor degree level, which is still administered by the Department of Physical Education, being taught by what is called "Physical Education College". In the year 1971, all central Physical Education colleges were dismantled and the Physical Education curriculum is transferred to Education College. The department of Physical Education has began regionally produced Physical Education teachers for the 1st time at Institute of Physical Education Chiang Mai and in the year 1972, Institute of Physical Education Maha Sarakham was opened as the 2nd institute of physical education and 17 other institute of physical education s have began opening afterward.

When the Ministry of Education implemented a policy for employing government teachers with at least Bachelor degree, it resulted in the Department of Physical Education enabling the institute of physical education s to offer Bachelor degree level physical education curriculums. During the early phrase, the Ministry of Education cooperated with the Department of Physical Education in offering Bachelor degree level continuous curriculum since the academic year 1988, while at the same time, the Department of Physical Education had been making effort for finding guideline in providing its own Bachelor degree level physical education curriculum until the drafting of statute that elevated Physical Education Collage status to degree level educational institute, which was completed in the year 1995 by the name of "Karnjanamonkol Institute Acts".

The Department of Physical Education has been proposing the Karnjanamonkol Institute Acts while at the same time that the Vocational Education

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Commission has been proposing the Pathumwan Institute of Technology Acts and the Fine Arts Department has been proposing Fine Arts Development Institute Acts, which all 3 were endorsed by the Ministry of Education. However, due to some reasons, the Ministry of Education had to review the Karnjanamonkol Institute Acts resulting in the Acts not being able to be submitted to the House of Representative in time because the House of Representative term expired. Therefore, the Karnjanamonkol Institute Acts must be presented again when there is an establishment of the new government by the order of the Department of Physical Education number 111/2541 appointing the Karnjanamonkol Institute Acts Review Committee to review and revise the content and details to be appropriate with the conditions and to submit the Acts to the Ministry of Education again. There has also been Department of Physical Education Development Plan for the budget year 1999 and 2000 with the principal objective being Physical Education College improvement to be Karnjanamonkol Institute.

Afterward, there was an order from the Department of Physical Education number 2180/2541 dated November 8th 1998 appointing Karnjanamonkol Institute Preparation Committee to prepare operation plan, follow up, coordinate with related agencies, and document preparation to be submitted along with preparation for the curriculum. Additionally, there was also an order from the Department of Physical Education number 614/2541 dated April 9th 1999 appointing committee for the revision of Bachelor degree level curriculum. In the year 1999, the National Education Acts implementation was announced, which designated the reconstruction of the education agencies structure. The Ministry of Education deemed that Physical Education College status should be elevated to be Karnjanamonkol Institute by announcing it in the royal decree; thus, the department of Physical Education proceeded with the Karnjanamonkol Institute Acts revision to be as specified in the royal decree and presented it to the Ministry of Education and the Ministry of Education announced the order number Sor Por 416/2543 on August 10th 2000 appointing Karnjanamonkol Institute Acts Royal Decree Committee to submit the ideas to the Ministry of Education Deputy. However, once proceeded according to the procedure, the Office of the Council of State deemed that it would not receive

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Royal Decree seal and the Acts would only be an Acts; thus, the Karnjanamonkol Institute Acts had to be reviewed once more time but it was not able to be submitted for the House of Representative consideration due to the House of Representative term expired at the end of 2000.

The Department of Physical Education had been continuously making efforts to push Physical Education College to be Bachelor degree level education institute by designating education management reform policy for education institutes under the governance of the Department of Physical Education and deemed that the name should be changed to "Institute of Physical Education". On February 9th 2001, the Department of Physical Education issued an order number 136/2544 appointing Institute of Physical Education Acts Committee to proceed further. The committee has revised and submitted the Karnjanamonkol Institute Acts to related agencies for approval such as Education Reformation Commission Office, the Office of Civil Service Commission, the Office of Public Sector Development Commission Thailand, Budget Bureau, Education Reformation Subcommittee under the governance of the Ministry of Education.

In the meeting on February 21st 2002, the Sport Committee, under the governance of the House of Representative, has approved the appointment of a subcommittee to consider the Institute of Physical Education Acts and another committee to assist the subcommittee. After the subcommittee has completed the consideration and submitted the report to the Sport Committee with the approval and recommended the committee members that are political party member to submit the Institute of Physical Education Acts to the house of Representative in the name of the party. There were 3 parties who submitted the Acts to the House of Representative; Democratic Party, Chatthai Putthana Party and Thai Putthana Party. Additionally, the committee also submitted the Institute of Physical Education Acts to the Tourism and Sport Minister (Mr. Sontaya Kunpleme) and the Minister has agreed and submitted the Acts to the Office of the Cabinet Secretary to be submitted to the Cabinet for consideration before presenting it to the meeting until the Acts was approved in the Cabinet meeting on May 26th 2003. Then the Acts was sent to the Office of the

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Council of State for consideration and to be submitted to the House of Representative.

The Office of the Council of State has assigned the issue to the Royal Decree Committee for the consideration of Institute of Physical Education Acts on June 23rd 2003 and the committee appointed representative to appear in front of the Office of the Council of State in every meeting until the Acts was submitted to the Office of Cabinet Secretary to be presented to the House of Representative.

The House of Representative Chairman included the Performance Result Institute Acts in the meeting on June 24th 2004 and the meting has approved the acceptance of the Acts for consideration of the details and the consideration was completed on May 28th 2004. However, the House of Representative has closed its ordinary meeting period on May 29th 2004; therefore, the issued must be delayed until the next meeting.

The House of Representative considered the Institute of Physical Education Acts on August 25th 2004 and approved (286 votes with 1 vote not submitted) the Acts and submitted the Acts to the Congress for consideration. On September 6th 2004, the Congress has accepted to consider the Institute of Physical Education Acts along with appointing unordinary committee t consider the detail of the Acts. The consideration was completed on October 18th 2004 and the Acts was presented and approved in the meeting on October 26th 2004.

Since the Congress has revised parts of the Institute of Physical Education Acts, the Acts was returned to the House of Representative for an approval once more. The revised Acts was considered and approved in the House of Representative meeting on November 10th 2004. The House of Representative submitted the Acts to the Office of Cabinet Secretary for review to be presented to the King for his signature. The Office of Cabinet Secretary submitted the Acts on November 26th 2004 and the Acts was signed by the King on January 31st 2005 and was returned to the Office of Cabinet Secretary to be announced in the Royal Gazette.

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The Office of Cabinet Secretary, by the Royal Gazette work group announced the Institute of Physical Education Acts in the Royal Gazette in part 13a on February 4th 2005 resulting the Acts being in effect the following day.

Therefore, it is deemed that the Institute of Physical Education Acts was effective starting from February 5th 2005.

There are 5 Institute of Physical Education missions as followed:

1) Producing and developing personnel for physical education, sport, sport science, health science, activities and other related subjects.

2) Providing academic services to the society and building learning society.

3) Studying, analyzing and researching physical education, sport, sport science, health science and activities.

4) Preserving art culture, local games and Thai sport.

5) Promoting and supporting the arrangement of education for individual who is talented in sport and activities and assisting those who are physically handicapped.

Institute of Physical Education Structure

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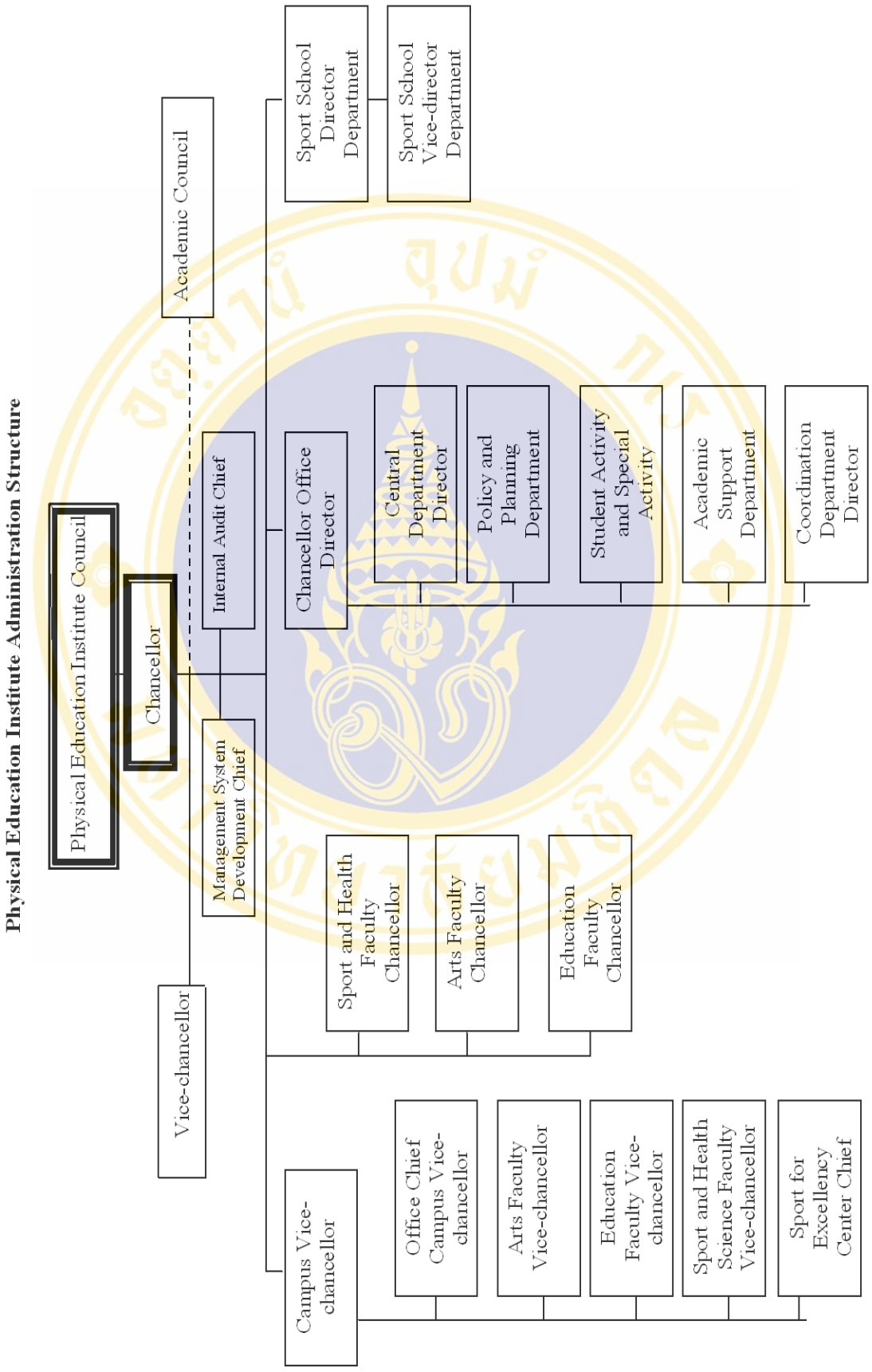
Physical Education Institute Administration Structure



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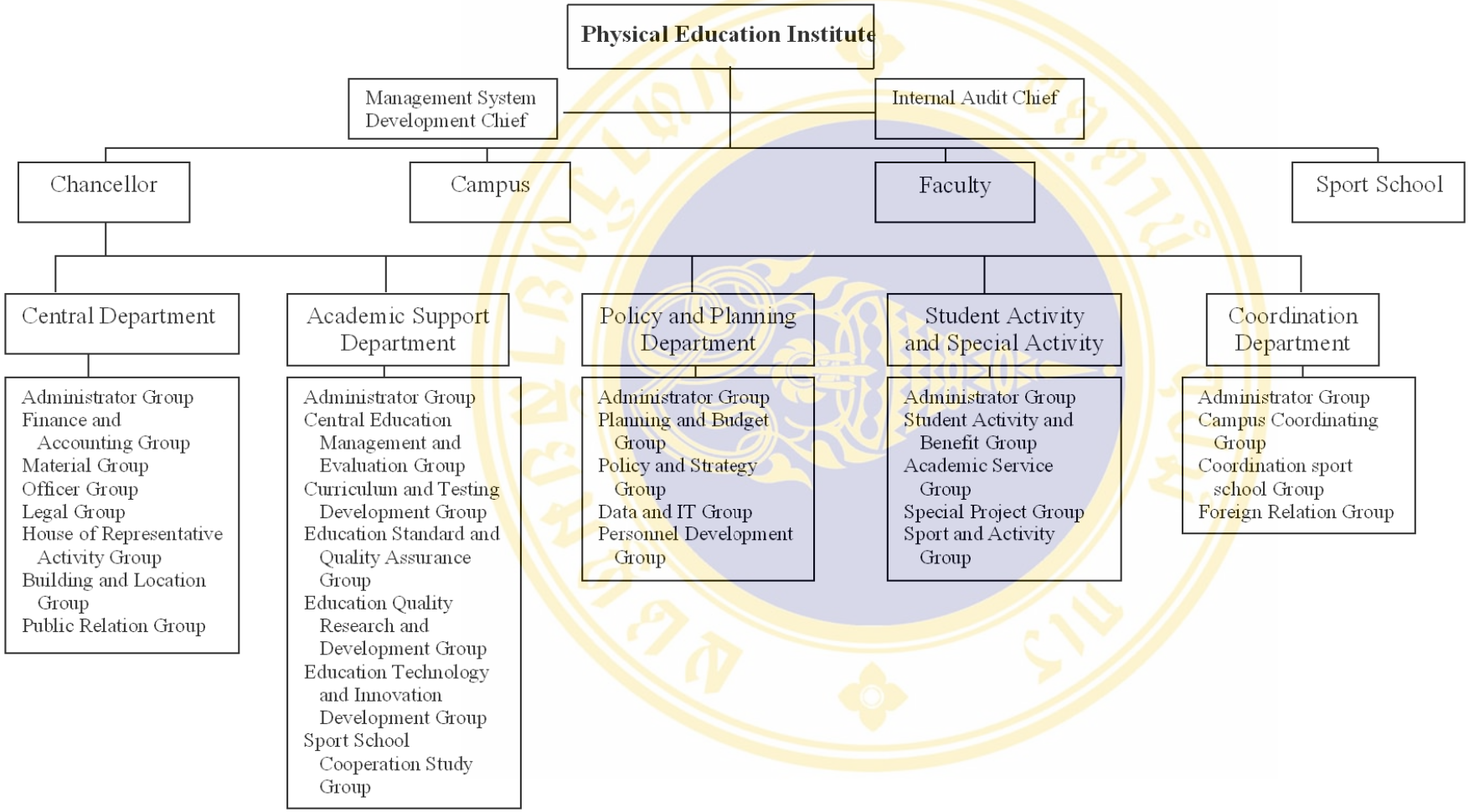
Physical Education Institute Administration Structure (Central)



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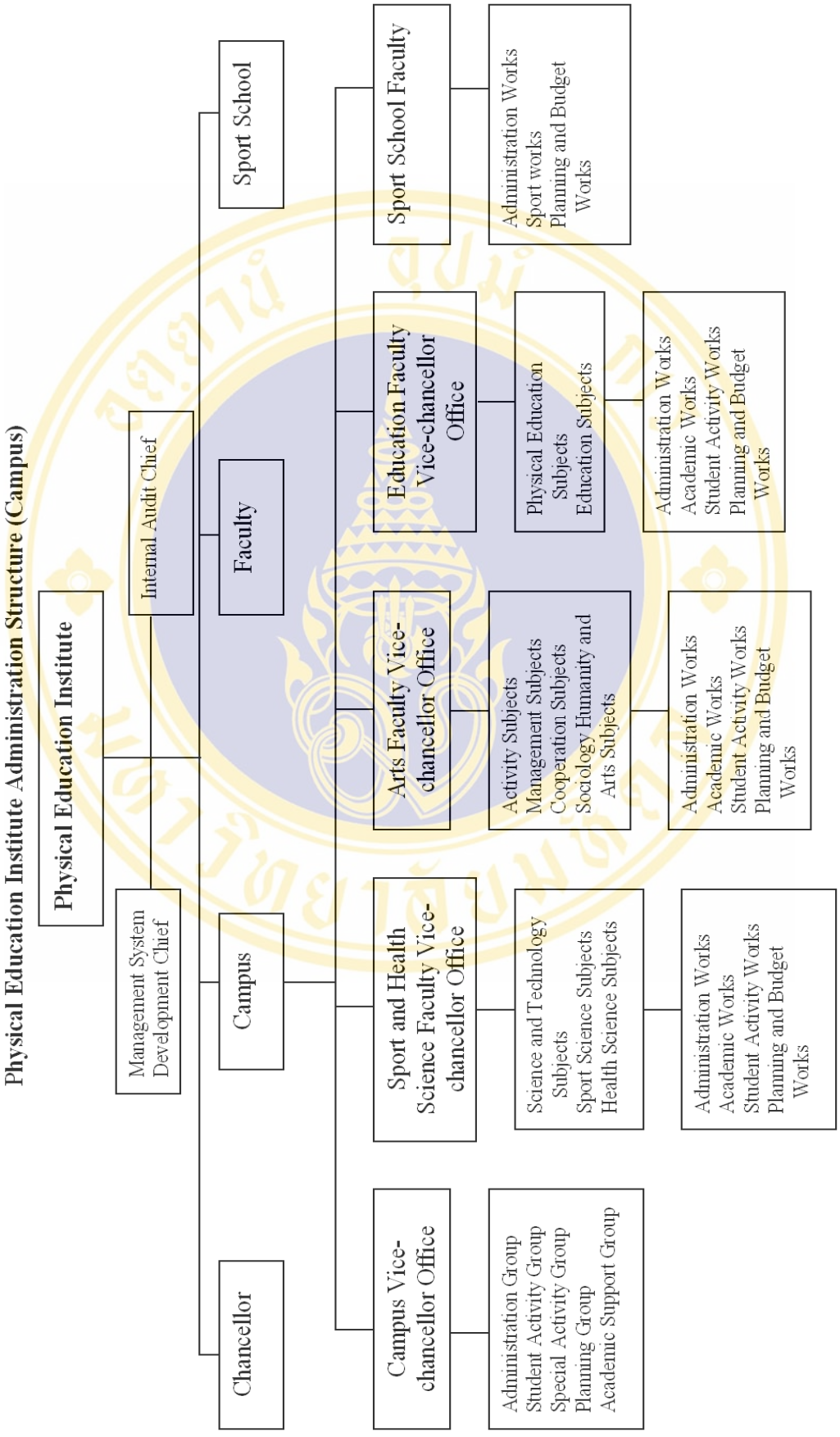

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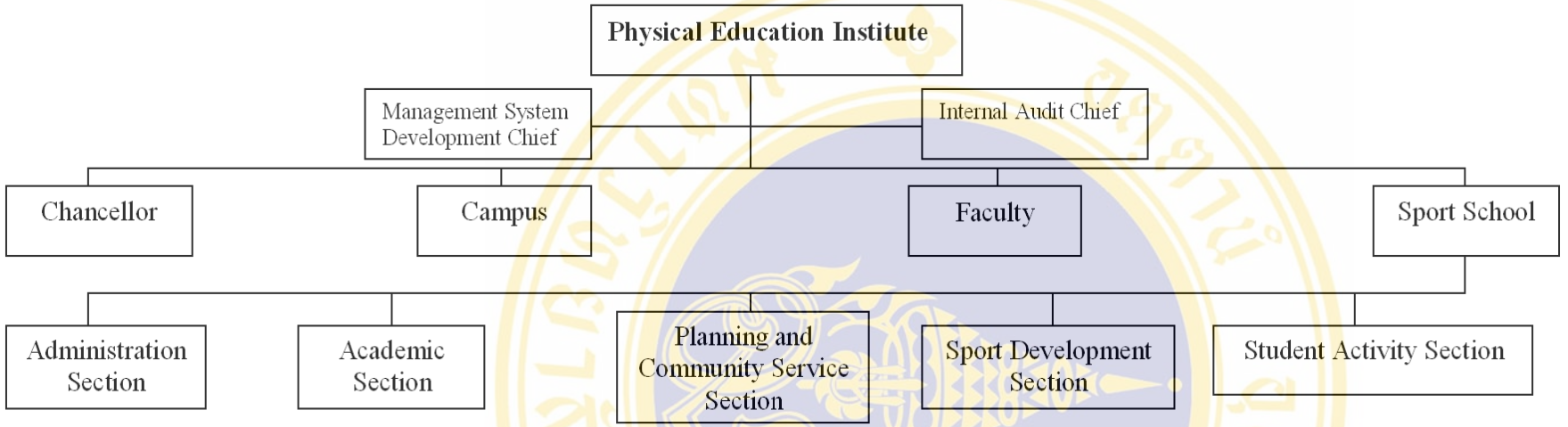
Physical Education Institute Administration Structure (Sport School)



- Index Works
- Finance and Accounting Works
- Material and Vehicle Works
- Personnel Works
- Building Location and Environment Development Works
- Nutrient Work
- Nursing and Benefit Works
- Public Relation Works

- Curriculum and Teaching Works
- Registration and Evaluation Works
- Library Works
- Innovation and Technology Education Works
- Document and Textbook Production Works
- Educational Research Works
- Education Quality Works

- Planning and Development Works
- IT and Foreign Relation Works
- Community Service Works
- Arts and Culture Promotion and Distribution Works

- Sport for Excellency Development Works
- Sport Science Center Works
- Athlete Statistics and Registration Works
- Sport Media Development Works
- Physical Treatment Works

- Student Personality and Discipline Development Works
- Education Advisory and Service Works
- Activity Works
- Student Dormitory Works
- Dressing Material and Laundry Works
- Student Congress and Parent Club Works

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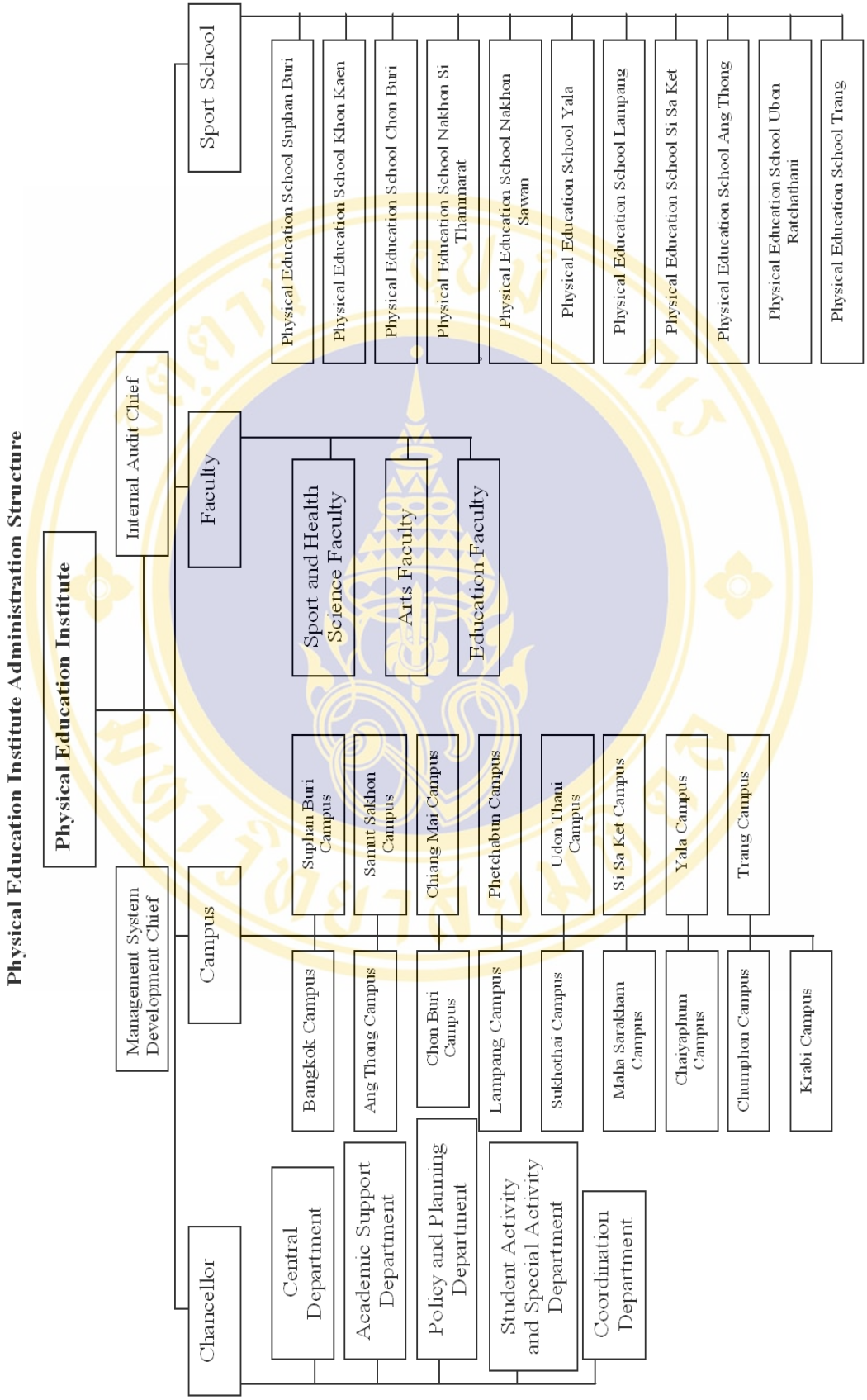
Physical Education Institute Administration Structure



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2.5 Related Research

Prapapen and others (1998) studied behavior and factors related to alcohol drinking in Thai youth by using survey research on the sample group, 1,141 children. They found that male youth and vocational educational institute have an effect on alcohol drinking behavior statistic significantly.

Kamolthip Wijitsoonthornkul (1999) studied factors that had influence on male vocational educational students in Bangkok. From 614 male high level vocational educational graduated students in Bangkok, She found that they drank alcohol for socialization like group drinking and drinking according to friend's persuasion. They often drank in many occasions. Friend's persuasion can be used to predict drinking in the wrong direction statistic significantly.

Carr et al. (1990) studies a comparison of alcohol use and intoxication in male and female high school athletes and non-athletes. They found that male high school athletes both use and abuse alcohol more frequently than do non-athletes. Also male non-athletes tend to abstain from alcohol use more than the athletes do. They found no difference in the frequency of use or abuse of alcohol by female athletes and non-athletes. There was also no difference in the frequency of alcohol consumption between male and female athletes. But three fourths of the male athletes reported getting intoxicated when consuming alcohol compared to half of the female athletes.

Overman and Terry (1991) studies alcohol use and attitudes: a comparison of college athletes and nonathletes found that there was no significant difference between the drinking behaviors of athletes and non-athletes, though athletes did report drinking more beer. Athletes tended to limit drinking to weekends and special occasions, and seemed to think of it more as a celebration. Differences in drinking behaviors were found between black and white students with regards to choice of drink, frequency of drinking, problems caused by drinking.

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Christopher, et al. (1996) studies alcohol use among high school athletes found that Half (50.1%) of the male athletes reported the regular use of alcohol compared to 41.3% of the male non-athletes, a statistically significant difference. In addition, more male non-athletes (10.8%) reported abstinence from consumption than did male athletes (7.5%). Among females, however, the results demonstrated no significant difference in the frequency of alcohol consumption between athletes and non-athletes; 7.4% of the female athletes verses 7.5% of the non-athletes abstained from alcohol, and 42.1% of the female athletes verses 41.8% of the non-athletes used alcohol regularly.

Hayes and Tevis (1977) studies a comparison of attitudes and behavior of high school athletes and non-athletes with respect to alcohol use and abuse. They found non-athletes used alcohol more and were more tolerant of others using it compared to athletes. Overall, males had a more tolerant attitude than females toward temperate and irresponsible use of alcohol. There seemed to be a correlation between attitudes of irresponsible drinking and who drinks the most, being the more they drank the more tolerant their attitudes were.

Shields' (1998) studies relative likelihood of in-season and off-season use of alcohol by high school athletes in North Carolina found that looked at the in-season and off-season use of alcohol by high school athletes and also compared it to a similar study done w/ the same population in 1988. Overall, athletes are using alcohol less both in and off-season in the current study compared to 1988. Also they used less alcohol during their in-season than off-season. It was found that white athletes are 2.5 times more likely to use alcohol both in and off-season compared to black athletes.

Leichliter et al. (1998) studies alcohol use and related consequences among students with varying levels of involvement in college athletics found that male and female athletes consumed significantly more alcohol per week, engaged in binge drinking more often, and suffered more adverse consequences from their substance abuse. Team leaders were found to be no more responsible in using alcohol compared

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to their teammates. In fact male captains drank more alcohol, binged more often, and suffered more consequences than their team members.

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CHAPTER III
MATERIALS AND METHODS

This study was in the form of survey research with the focus being on studying the **"The study of behaviors and factors relating to alcohol drinking in athletes, a case study of the Institute of Physical Education"** in order to gain information according to the set objective. The researcher has proceeded with the followings:

3.1 Target Population

The target population in this study is athletes of the Institute of Physical Education who participated in sport competition of the Institute of Physical Education of Thailand, the 33rd at Chaiyapoom province, there are about 3,415 athletes.

3.2 Sample Group

The researcher had performed a random selection of population using the following method.

3.2.1 Sample size was specified from samples selected from 3,415 athletes, using Yamane's formula (1973), as referred by Yuth Kaiyawon (2003), with deviation size = 0.05.

$$\text{Formula} \quad n = \frac{N}{1 + Ne^2}$$

Where n = Size of the sample
N = Size of the population
e = Size of deviation

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Substitute $n = \frac{3,415}{1 + 3,415\ (0.05)^2}$

$= 358$ peoples

Accordingly, the total number of subject in this study is at least 358.

So, the researcher information collection from 400 athletes of Institute of Physical Education in all types of sport that were sent to compete in the Institute of Physical Education of Thailand Competition 33rd at Chaiyapoom province.

3.3 Research Instrument

The tool used for data collection in this study was questionnaire with both open and close ended questions. The questionnaire was divided into the following 4 sections:

Part 1: Personal factors

Part 2: Social factors

Part 3: Alcohol drinking behavior and occasion to drink

Part 4: Effects of alcohol drinking toward efficiency of athlete

Scoring rubric

Perception of influence from advertising media and alcohol drinking access and perception of influence of peer toward alcohol drinking in part 2 of questionnaire, questionnaire in the form of rating scales 10 questions has 5 scales to choose from according to Likert perspective (Buntum Kitpredaborosut, 1994). The scoring depends on the content. For the positive questions and negative questions, the scoring is as followed:

Level	positive questions	negative questions
Highest	5	1
High	4	2
Moderate	3	3
Low	2	4
Lowest	1	5

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And the score can be classified are 3 levels as followed:

$$\text{Interval} = \frac{\text{Highest score} - \text{Lowest score}}{\text{Class interval}}$$

$$= \frac{5 - 1}{3}$$

$$= 1.33$$

Interpreting

From the following guideline, the score can be interpreted as followed:

1.00-2.33	meaning the opinion score are	low
2.34-3.67	meaning the opinion score are	medium
3.68-5.00	meaning the opinion score are	high

3.4 Data Collection

The data was collected from the sample group by the researcher for the period of 3 months.

3.5 Tool Testing

The researcher proceeded with the followings:

3.5.1 The accuracy was tested by experts.

3.5.2 The questionnaire was then revised for accuracy and appropriateness.

3.5.3 The questionnaire was pre-tested with 30 Institute of Physical Education Bangkok athletes, which is similar to the sample group and then the faulty was repaired in order to be able to collect the actual data.

From testing of coefficient- α of Cronbach, the validity of tools (Suvimon Tirakanun, 2003), shown as follow

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Part 2 social factor used Coefficient-α of Cronbach

- Influence from advertising media and alcohol drinking access, the validity (α) equals to 0.74

- Peer group, the validity (α) equals to 0.78

From analyzing validity, this research is quite reliable.

3.6 Data Analysis

The researcher coded the information received from the questionnaire and then the data was evaluated with SPSS (Statistical Package for Social Science) computer program.

3.6.1 The target group characteristics were explained by using frequency, percentage, mean, and standard deviation.

3.6.2 The relationship between the independent variables and control variables was found by using statistics Chi-square test (χ^2).

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CHAPTER IV
RESULTS

From the study of "the study of behaviors and factors relating to alcohol drinking in athletes: case study of the Institute of Physical Education", found out that there are various factors related to alcohol drinking behaviors. The researcher data collection from 400 athletes of Institute of Physical Education that compete in the Institute of Physical Education of Thailand Competition 33rd at Chaiyapoom province by use questionnaire to accumulate data. The data from cross section was analyzed by use the instant program SPSS. The results of each variable and correlation are divided into 5 parts as follow;

4.1 Personal factor
4.2 Social factor
4.3 Alcohol drinking behavior and occasion to drink
4.4 Effects of alcohol drinking toward efficiency of athlete
4.5 Result of analyzed relation between factors

4.1 Personal Factor

From analytical data in term of personal factor with the sample in athlete who study at Institute of Physical Education of 400 persons, about the personal factor cause to know the sample about the general information is sex, age, education level and sport types, criticized by statistic descriptive in frequency and percentage as follow.

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Table 4 Number and percentage of sample group classified by sex, age and education level

Factor	Number (%)
Sex	
Male	261 (65.3)
Female	139 (34.7)
Total	400 (100.0)
Age	
17 – 20 years	144 (36.0)
21 – 24 years	237 (59.2)
> 25 years	19 (4.8)
Total	400 (100.0)
Education level	
First year	94 (23.5)
Second year	77 (19.3)
Third year	117 (29.2)
Fourth year	112 (28.0)
Total	400 (100.0)

From table 4 shows sex, age and education level data of sample group which indicated that the main ratio is male (65.3%), another is female (34.7%). In age term, almost sample group has majority age between 21 – 24 years old (59.2%), the lower is 17 – 20 years old (36.0%) and over 25 years old (4.8%) respectively. For the education level, almost the sample is third year (29.2%), the lower is fourth year (28.0%) and first year (23.5%) respectively.

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Table 5 Number and percentage of sample group classified by sport types

Sport Types	Number (%)
Team sport (n=189)	
Sepak Takraw	23 (5.8)
Footsal	33 (8.5)
Football	91 (22.8)
Handball	11 (2.8)
Volleyball	21 (5.3)
Basketball	7 (1.8)
Hockey	2 (0.5)
Rugby football	1 (0.3)
Personal sport (n=211)	
Track and Field	30 (7.5)
International Amateur Boxing	17 (4.3)
Petanque	15 (3.8)
Judo	11 (2.8)
Badminton	7 (1.8)
Thai Amateur Boxing	5 (1.3)
Weight Lifting	8 (2.0)
Taekwondo	21 (5.3)
Swimming	12 (3.0)
Archery	32 (8.0)
Tennis	22 (5.5)
Pencak silat	9 (2.3)
Wrestle	3 (0.8)
Shooting	3 (0.8)
Karate-Do	9 (2.3)
Table- Tennis	6 (1.5)
Golf	1 (0.3)
Total	400 (100.0)

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From table 5 shows playing sport types of sample group which indicated that mostly is personal sport about 211 athletes (52.7%) which is shooting (8.0%), the lower is track and field (7.5%), and tennis (5.5%) respectively. For the team sport about 189 athletes (47.3%), almost the sample is football (22.8%), the lower is footsal (8.5%), and sepak takraw (5.8%) respectively.

Table 6 Number and percentage of sample group categorized by the believe about alcohol drinking (more than one answer)

Believe about alcohol drinking	Number (%)
Not believe	56 (9.0)
Help good appetite	110 (17.8)
Help good sleep	187 (30.2)
Reduce bruised symptom	62 (10.0)
Help creating concentration and calmness before competition	32 (5.2)
Help activeness before competition	59 (9.5)
Help muscles relief after rehearsing or competing	106 (17.1)
Health damage	7 (1.2)
Total	619 (100.0)

From table 6 shows believes about alcohol drinking of sample group. The results found that mostly belief about alcohol drinking is help good sleep (30.2%), the lower is help good appetite (17.8%), and help muscles relief after rehearsing or competing (17.1%) respectively.

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Table 7 Number and percentage of sample group categorized by the perception about regard alcohol as prohibited substance in athletes

Perception	Number (%)
No	186 (46.5)
Yes	214 (53.5)
Total	400 (100.0)

From table 7 shows the perception about regard alcohol as prohibited substance in athletes of sample group. The results found that mostly know that "WORLD ANTI-DOPING AGENCY" (WADA) regard alcohol as prohibited substance in athletes which don't be allowed to use during competition in some cases of sport (53.5%) and the rest is don't know about it (46.5%) respectively.

4.2 Social Factor

From analytical data in social factor term of sample from Institute of Physical Education athlete, it causes to know the social data of the samples such as influence from advertising media and alcohol drinking access and peer group, criticized by statistic descriptive in frequency, percentage, mean, and standard deviation as follow.

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Table 8 Analysis results by items of perception of influence from advertising media and alcohol drinking access

Message	Opinion level					$\overline{X}$	S.D.
	Highest	High	Moderate	Low	Lowest		
1. When you see the advertisement about alcohol drink, it makes you feel you would like to drink it	31 (7.8)	48 (12.0)	130 (32.5)	103 (25.8)	88 (22.0)	2.58	1.18
2. The advertisement about alcohol drink new, strange and modern attracts you to feel like to drink it	27 (6.8)	70 (17.5)	137 (34.3)	101 (25.3)	65 (16.3)	2.73	1.13
3. You know the alcohol drink from the advertisement and it makes you feel like to try to drink it	28 (7.0)	65 (16.3)	153 (38.3)	108 (27.0)	46 (11.5)	2.80	1.06
4. From the advertisement, you feel that the alcohol drink is a kind of drink that you can drink it in common and it is not bad at all	26 (6.5)	61 (15.3)	163 (40.8)	90 (22.5)	60 (15.0)	2.76	1.08
5. The alcohol drink is available to be purchased at any time	109 (27.3)	97 (24.3)	123 (30.8)	54 (13.5)	17 (4.3)	3.57	1.14
6. Although there is the law that prohibits the children who is lower than 18 years old to buy alcohol drink, some stores still are available for them to purchase	109 (27.3)	147 (36.8)	86 (21.5)	46 (11.5)	12 (3.0)	3.74	1.07
7. The advertisement about alcohol drink should likely have warning about advantages and drinking limitation	11 (2.8)	46 (11.5)	117 (29.3)	109 (27.3)	117 (29.3)	2.31	1.09
8. Because of the easiness in finding and purchasing alcohol drink, so it causes the increased frequency in drinking alcohol drink	119 (29.8)	137 (34.3)	101 (25.3)	32 (8.0)	11 (2.8)	3.80	1.04
9. The children lower than 20 years can seek and purchase the alcohol drink alone without being limited or prohibited	99 (24.8)	125 (31.3)	108 (27.0)	44 (11.0)	24 (6.0)	3.58	1.15
10. Nowadays alcohol drink is being supported in various kinds of sports competition and this affects the athletes increase their alcohol drinking	62 (15.5)	91 (22.8)	152 (38.0)	59 (14.8)	36 (9.0)	3.21	1.14
Total Mean = 3.10 S.D. = 0.61							

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From table 8 show the analysis results by items of perception of influence from advertising media and alcohol drinking access. The analysis can be found that, the perception of influence from advertising media and alcohol drinking access has the average to be equal to 3.10 and the standard deviation is to be equal to 0.61. Most of them have the opinions about the perception of influence from advertising media and alcohol drinking access the most which are because of the easiness in finding and purchasing alcohol drink, so it causes the increased frequency in drinking alcohol drink (average = 3.80), the second is although there is the law that prohibits the children who is lower than 18 years old to buy alcohol drink, some stores still are available for them to purchase (average = 3.74) and the children lower than 20 years can seek and purchase the alcohol drink alone without being limited or prohibited (average = 3.58) respectively.

Table 9 Number and percentage of sample group classified by level of influence from advertising media and alcohol drinking access

Influence from advertising media and alcohol drinking access level	**Number (%)**
Low (1 – 2.33)	37 (9.3)
Medium (2.34 – 3.67)	294 (73.5)
High (3.68 – 5)	69 (17.2)
Total	400 (100.0)

Table 9 shows level of influence from advertising media and alcohol drinking access of sample group. From researched sample found that the majority of people have influence from advertising media and alcohol drinking access at medium level (73.5%), the lower is high level (17.2%) and low level (9.3%) respectively.

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Table 10 Number and percentage of sample group classified by alcohol drinking behavior of peers

Factor	Number (%)
Alcohol drinking of peers	
Drink	340 (85.0)
Not drink	60 (15.0)
Total	400 (100.0)

From table 10 shows alcohol drinking behavior of peers of sample group which indicated that mostly drinks (85.0%) and not drinks (15.0%) respectively.

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Table 11 Analysis results by items of perception of influence of peer toward alcohol drinking

Message	Opinion level					$\overline{X}$	S.D.
	Highest	High	Moderate	Low	Lowest		
1. All parties you go with your friend have such a kind of alcohol drink	98 (24.5)	123 (30.8)	122 (30.5)	41 (10.3)	16 (4.0)	3.62	1.08
2. Your friends persuade you to drink alcohol but you usually decline it	34 (8.5)	72 (18.0)	168 (42.0)	82 (20.5)	44 (11.0)	2.93	1.07
3. Your friends usually suggest you not to drink alcohol because it will damage you health	48 (12.0)	101 (25.3)	144 (36.0)	73 (18.3)	34 (8.5)	3.14	1.11
4. Your friends usually drink alcohol until drunk	77 (19.3)	127 (31.8)	146 (36.5)	29 (7.3)	21 (5.3)	3.53	1.04
5. Your friends usually talk to you that not accept the alcohol drink is regarded as not to give respect to your friends	50 (12.5)	110 (27.5)	136 (34.0)	66 (16.5)	38 (9.5)	3.17	1.13
6. Your friends usually challenge you to drink alcohol	41 (10.3)	113 (28.3)	139 (34.8)	71 (17.8)	36 (9.0)	3.13	1.10
7. While your friends are drinking alcohol, they usually persuade you to join them	72 (18.0)	142 (35.5)	130 (32.5)	41 (10.3)	15 (3.8)	3.54	1.02
8. Your friends drink alcohol by letting you see this behavior regularly	55 (13.8)	98 (24.5)	150 (37.5)	59 (14.8)	38 (9.5)	3.18	1.13
9. Your friends talk to you about the disadvantage of drinking alcohol	67 (16.8)	105 (26.3)	152 (38.0)	57 (14.3)	19 (4.8)	3.36	1.06
10. Your friends talk to you about the advantage of drinking alcohol	22 (5.5)	59 (14.8)	123 (30.8)	100 (25.0)	96 (24.0)	2.53	1.16
Total Mean = 3.21 S.D. = 0.54							

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From table 11 show the analysis results by items of perception of influence of peer toward alcohol drinking. The analysis can be found that, the perception of influence of peer toward alcohol drinking has the average to be equal to 3.21 and the standard deviation is to be equal to 0.54. Most of them have the opinions about the perception of influence of peer toward alcohol drinking the most which are all parties you go with your friend have such a kind of alcohol drink (average = 3.62), the second is while your friends are drinking alcohol, they usually persuade you to join them (average = 3.54) and your friends usually drink alcohol until drunk (average = 3.53) respectively.

Table 12 Number and percentage of sample group classified by level of influence of peer toward alcohol drinking

Influence of peer toward alcohol drinking level	Number (%)
Low (1 – 2.33)	29 (7.3)
Medium (2.34 – 3.67)	297 (74.3)
High (3.68 – 5)	74 (18.4)
Total	400 (100.0)

Table 12 shows level of influence of peer toward alcohol drinking of sample group. From researched sample found that the majority of people have influence of peer toward alcohol drinking at medium level (74.3%), the lower is high level (18.4%) and low level (7.3%) respectively.

4.3 Alcohol Drinking Behavior and Occasion to Drink

From analytical data in alcohol drinking behavior and occasion to drink term of sample from Institute of Physical Education athlete, it causes to know the alcohol drinking behavior of the samples such as age starting drink, reasons to drink at first time, alcoholic beverages favorable, drink frequency etc. Describe the data by use statistic descriptive in frequency and percentage as follow.

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Table 13 Number and percentage of sample group classified by age starting drink

Age for first start drinking alcohol	Number (%)
7 – 12 years	20 (5.0)
13 – 18 years	271 (67.8)
19 – 25 years	109 (27.2)
Total	400 (100.0)

From table 13 shows age starting drink of sample group which indicated that age for first start drinking alcohol is mostly 13 – 18 years old (67.8%), the lower is 19 – 25 years old (27.2%), and 7 – 12 years old (5.0%) respectively.

Table 14 Number and percentage of sample group classified by reasons to drink at first time

Reasons to drink at first time	Number (%)
Curiosity	195 (48.8)
Chicly show-off	11 (2.8)
Peer persuasion	84 (21.0)
Maturation show-off	2 (0.4)
Release tension/anxiety	27 (6.8)
Family problems	2 (0.4)
Social drinking	62 (15.5)
Cool weather	4 (1.0)
Brokenhearted	13 (3.3)
Total	400 (100.0)

From table 14 shows the reason why samples decided to drink at first time. The results found that the highest reason is curiosity (48.8%), the lower is peer persuasion (21.0%), and social drinking (15.5%) respectively.

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Table 15 Number and percentage of sample group classified by most alcoholic beverages favorable

Kind of alcoholic beverages	Number (%)
Rice whisky	82 (20.5)
Brandy	12 (3.0)
Beer	263 (65.7)
Bootleg liquor	7 (1.8)
Wine	19 (4.7)
White whisky	8 (2.0)
Whisky	9 (2.3)
Total	400 (100.0)

From table 15 shows most alcoholic beverages favorable of sample. The results found that the highest one is beer (65.7%), the lower is rice whisky (20.5%) and wine (4.7%) respectively. And the most unfavorable one is bootleg liquor (1.8%).

Table 16 Number and percentage of sample group categorized by drink frequency

Drink frequency	Number (%)
Everyday	15 (3.8)
1 - 2 times a week	109 (27.2)
3 - 4 times a week	74 (18.5)
Seldom	202 (50.5)
Total	400 (100.0)

From table 16 shows drink frequency of sample group. The results found that mostly seldom drinking (50.5%), the lower is 1-2 times a week (27.2%), and 3 - 4 times a week (18.5%) respectively.

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Table 17 Number and percentage of sample group categorized by drinking with closed people (more than one answer)

With whom	Number (%)
Alone	51 (9.3)
Parents	23 (4.1)
Friends	371 (67.8)
Relatives	59 (10.8)
Lover	44 (8.0)
Total	548 (100.0)

From table 17 shows alcohol drinking of sample group with closed people. The results found that mostly with friends (67.8%), the lower is with relatives (10.8%), and alone (9.3%) respectively.

Table 18 Number and percentage of sample group categorized by occasions to drink (more than one answer)

Occasions to drink	Number (%)
Festive party	273 (36.7)
Festivals	175 (23.5)
Celebration of win	145 (19.5)
Did not win	42 (5.6)
Disregard drink	109 (14.7)
Total	744 (100.0)

From table 18 shows occasions usually drink alcohol of sample group. The results found that mostly usually drink alcohol in festive party (36.7%), the lower is festivals (23.5%), and celebration of win (19.5%) respectively.

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Table 19 Number and percentage of sample group categorized by places for drinking (more than one answer)

Places	Number (%)
House	140 (24.3)
Dormitory	222 (38.5)
Restaurant or tavern	190 (32.9)
Party place	25 (4.3)
Total	577 (100.0)

From table 19 shows places for drinking of sample group. The results found that mostly in dormitory (38.5%), the lower is restaurant or tavern (32.9%), and house (24.3%) respectively.

Table 20 Number and percentage of sample group categorized by experiencing after drinking alcohol

Effect of drink	Number (%)
How often have you ever hangover?	
Never	62 (15.5)
Sometimes	211 (52.7)
Usually	79 (19.8)
Always	48 (12.0)
Total	400 (100.0)
Level of hangover	
Jocose	290 (72.5)
Bellicose	47 (11.8)
Lachrymose	55 (13.7)
Comatose	8 (2.0)
Total	400 (100.0)

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Table 20 Number and percentage of sample group categorized by experiencing after drinking alcohol (Cont.) (more than one answer)

Effect of drink	Number (%)
How does it affect you?	
Don't have effect	112 (24.3)
Quarrel	105 (22.8)
Accident	104 (22.7)
Sex without intention	90 (19.6)
Unconscious sleeping	49 (10.6)
Total	460 (100.0)

From table 20 shows experiencing after drinking alcohol of sample group. The results found that mostly sometimes to hangover (52.7%), the lower is always get hangover (19.8%), and never been drunk (15.5%) respectively. For the level of hangover found that mostly they have symptoms is jocose level (72.5%), the lower is lachrymose level (13.7%), and bellicose level (11.8%) respectively. For effects of alcohol drinking, mostly don't have effect from drinking (24.3%), the lower is quarrel (22.8%), and accident (22.7%) respectively.

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Table 21 Number and percentage of sample group categorized by alcohol drinking while rehearsing or competing

Drinking while rehearsing or competing	Number (%)
Never	290 (72.5)
Ever	110 (27.5)
Total	400 (100.0)
Duration of drinking (case: ever drinking)	
Before rehearsing	71 (64.5)
While rehearsing	17 (15.5)
Before competing	18 (16.4)
While competing	4 (3.6)
Total	110 (100.0)

From table 21 shows alcohol drinking while rehearsing or competing of sample group. The results found that mostly never drinking while rehearsing or competing (72.5%), and the rest is ever drinking while rehearsing or competing (27.5%). In the total of person who ever drinking while rehearsing or competing, mostly drinking before rehearsing (64.5%), the lower is before competing (16.4%), and while rehearsing (15.5%) respectively.

4.4 Effects of Alcohol Drinking toward Efficiency of Athlete

From analytical data in effects of alcohol drinking toward efficiency of athlete term from Institute of Physical Education athlete, it causes to know the effects of alcohol drinking of the samples such as effect towards rehearsal or sport competition, effect towards physical efficiency etc. Describe the data by use statistic descriptive in frequency and percentage as follow.

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Table 22 Number and percentage of sample group categorized by effect towards rehearsal or sport competition (more than one answer)

Effect towards rehearsal or sport competition	Number (%)
No	80 (20.0)
Yes	320 (80.0)
Total	400 (100.0)
Effects	
To be tired easily	202 (23.9)
Slowly recover from being tired	56 (6.6)
To be cramped easily	40 (4.8)
Headache and giddy	112 (13.2)
Thirsty very often	93 (10.9)
Pulse is too fast	87 (10.2)
Easy to feel exhaust	132 (15.7)
Muscles feel weak	124 (14.7)
Total	846 (100.0)

From table 22 shows effect towards rehearsal or sport competition of sample group. The results found that mostly alcohol drinking have effect towards rehearsal or sport competition (80.0%), and the rest is doesn't have effect towards rehearsal or sport competition (20.0%). Which the most effects from alcohol drinking towards rehearsal or sport competition is to be tired easily (23.9%), the lower is easy to feel exhaust (15.7%), and muscles feel weak (14.7%) respectively.

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Table 23 Number and percentage of sample group categorized by effect towards physical efficiency (more than one answer)

Effect towards physical efficiency	Number (%)
Reduced muscle strength	175 (15.4)
Reduced speed	143 (12.6)
Reduced agility	187 (16.5)
Reduced flexibility	80 (7.2)
Reduced muscular power	135 (11.9)
Reduced physical balance	145 (12.7)
Reduced cardiovascular endurance resistance	133 (11.7)
Reduced coordination	136 (12.0)
Total	1,134 (100.0)

From table 23 shows effect towards physical efficiency of sample group. The results found that mostly there is reduced agility (16.5%), the lower is reduced muscle strength (15.4%), and reduced physical balance (12.7%) respectively.

4.5 Result of Analyzed Relation between Factors

4.5.1 Relationship between alcohol drinking behavior and personal factor

This part presents the correlation analysis between alcohol drinking behavior and personal factor of the sample group which consists of 4 variables such as sex, age, education level and sport types. The statistic tests used in this study is chi-square method (χ^2).

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Table 24 Comparison of proportion analysis of sample group between alcohol drinking behavior and sex

Alcohol drinking behavior	Sex		χ^2	p-value
	Male (n=261)	Female (n=139)		
Everyday	11 (4.2)	4 (2.9)	32.171	0.000*
1 - 2 times a week	88 (33.7)	21 (15.1)		
3 - 4 times a week	57 (21.8)	17 (12.2)		
Seldom	105 (40.3)	97 (69.8)		

* $P < 0.05$

From table 24 the result of chi-square test, $\chi^2 = 32.171$, $p = 0.000 < \alpha = 0.05$ means that the proportion of alcohol drinking behavior in male and female are difference with statistically significant at level 0.05. From the results, the male had the alcohol drinking rate more frequently than female.

Table 25 Comparison of proportion analysis of sample group between alcohol drinking behavior and age

Alcohol drinking behavior	Age			χ^2	p-value
	17 – 20 years (n=144)	21 – 24 years (n=237)	> 25 years (n=19)		
Everyday	6 (4.2)	7 (2.9)	2 (10.5)	10.823	0.094
1 - 2 times a week	35 (24.3)	65 (27.4)	9 (47.4)		
3 - 4 times a week	22 (15.3)	49 (20.7)	3 (15.8)		
Seldom	81 (56.2)	116 (49.0)	5 (26.3)		

From table 25 the result of chi-square test, $\chi^2 = 10.823$, $p = 0.094 > \alpha = 0.05$ means that the proportion of alcohol drinking behavior in each age periods are not difference with statistically significant at level 0.05.

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Table 26 Comparison of proportion analysis of sample group between alcohol drinking behavior and education level

Alcohol drinking behavior	Education level				χ^2	p-value
	1 (n=94)	2 (n=77)	3 (n=117)	4 (n=112)		
Everyday	0 (0.0)	6 (7.8)	4 (3.4)	5 (4.5)	14.669	0.100
1 - 2 times a week	26 (27.7)	18 (23.4)	29 (24.8)	36 (32.1)		
3 - 4 times a week	13 (13.8)	15 (19.5)	29 (24.8)	17 (15.1)		
Seldom	55 (58.5)	38 (49.3)	55 (47.0)	54 (48.3)		

From table 26 the result of chi-square test, $\chi^2 = 14.669$, $p = 0.100 > \alpha = 0.05$ means that the proportion of alcohol drinking behavior in each education levels are not difference with statistically significant at level 0.05.

Table 27 Comparison of proportion analysis of sample group between alcohol drinking behavior and sport types

Alcohol drinking behavior	Sport types		χ^2	p-value
	Team sport (n=189)	Personal sport (n=211)		
Everyday	7 (3.7)	8 (3.8)	6.607	0.086
1 - 2 times a week	58 (30.7)	51 (24.2)		
3 - 4 times a week	41 (21.7)	33 (15.6)		
Seldom	83 (43.9)	119 (56.4)		

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From table 27 the result of chi-square test, $\chi^2 = 6.607$, $p = 0.086 > \alpha = 0.05$ means that the proportion of alcohol drinking behavior in team sport and personal sport are not difference with statistically significant at level 0.05.

4.5.2 Relationship between alcohol drinking behavior and social factor

This part presents the correlation analysis between alcohol drinking behavior and social factor of the sample group which consists of 2 variables such as the influence from advertising media and alcohol drinking access, and peer group. The statistic tests used in this study is chi-square method (χ^2).

Table 28 Comparison of proportion analysis of sample group between alcohol drinking behavior and level of influence from advertising media and alcohol drinking access

Alcohol drinking behavior	Level of influence from media			χ^2	p-value
	Low (n=37)	Medium (n=294)	High (n=69)		
Everyday	2 (5.4)	10 (3.4)	3 (4.3)	17.870	0.007*
1 - 2 times a week	6 (16.2)	74 (25.2)	29 (42.1)		
3 - 4 times a week	6 (16.2)	51 (17.3)	17 (24.6)		
Seldom	23 (62.2)	159 (54.1)	20 (29.0)		

*P < 0.05

From table 28 the result of chi-square test, $\chi^2 = 17.870$, $p = 0.007 < \alpha = 0.05$ means that the proportion of alcohol drinking behavior in group has influence from advertising media and alcohol drinking access in any low, medium, and high level are difference with statistically significant at level 0.05. From the results, found out that the group influenced from advertising media and alcohol drinking access in the high level had more frequency in alcohol drinking than the group in the low and medium level.

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Table 29 Comparison of proportion analysis of sample group between alcohol drinking behavior and level of influence of peer toward alcohol drinking

Alcohol drinking behavior	Level of influence of peer			χ^2	p-value
	Low (n=29)	Medium (n=297)	High (n=74)		
Everyday	1 (3.4)	12 (4.0)	2 (2.8)	19.982	0.003*
1 - 2 times a week	2 (6.9)	81 (27.3)	26 (35.1)		
3 - 4 times a week	1 (3.4)	56 (18.9)	17 (22.9)		
Seldom	25 (86.3)	148 (49.8)	29 (39.2)		

* $P < 0.05$

From table 29 the result of chi-square test, $\chi^2 = 19.982$, $p = 0.003 < \alpha = 0.05$ means that the proportion of alcohol drinking behavior in group has influence from peer in any low, medium, and high level are difference with statistically significant at level 0.05. From the results, found out that the group influenced from peer toward alcohol drinking in the high level had more frequency in alcohol drinking than the group in the low and medium level.

4.5.3 Relationship between alcohol drinking behavior and effects of alcohol drinking toward efficiency of athlete

This part presents the correlation analysis between alcohol drinking behavior and effects of alcohol drinking toward efficiency of athlete of the sample group which consists of 2 variables such as effect towards rehearsal or sport competition and effect towards physical efficiency. The statistic tests used in this study is chi-square method (χ^2).

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Table 30 Comparison of proportion analysis of sample group between alcohol drinking behavior and effect towards rehearsal or sport competition

Alcohol drinking behavior	effect towards rehearsal or sport competition		χ^2	p-value
	Yes (n=320)	No (n=80)		
Everyday	9 (2.9)	6 (7.5)	6.339	0.096
1 - 2 times a week	83 (25.9)	26 (32.5)		
3 - 4 times a week	63 (19.6)	11 (13.8)		
Seldom	165 (51.6)	37 (46.2)		

From table 30 the result of chi-square test, $\chi^2 = 6.339$, $p = 0.096 > \alpha = 0.05$ means that the proportion of alcohol drinking behavior in group has influence from peer in any low, medium, and high level are not difference with statistically significant at level 0.05.

Table 31 Comparison of proportion of sample group between alcohol drinking behavior and effect towards physical efficiency

Effect towards physical efficiency	Alcohol drinking behavior			
	Everyday (n=45)	1 - 2 times a week (n=296)	3 - 4 times a week (n=181)	Seldom (n=612)
Reduced muscle strength	7 (15.5)	39 (13.2)	37 (20.4)	92 (15.0)
Reduced speed	3 (6.6)	37 (12.5)	27 (14.9)	76 (12.4)
Reduced agility	9 (20.0)	53 (17.9)	31 (17.1)	94 (15.4)
Reduced flexibility	3 (6.6)	23 (7.8)	10 (5.6)	44 (7.2)
Reduced muscular power	6 (13.4)	36 (12.1)	21 (11.6)	72 (11.8)
Reduced physical balance	5 (11.1)	39 (13.2)	17 (9.4)	84 (13.7)
Reduced cardiovascular endurance resistance	6 (13.4)	35 (11.8)	21 (11.6)	71 (11.6)
Reduced coordination	6 (13.4)	34 (11.5)	17 (9.4)	79 (12.9)

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From table 31 show the comparison of proportion between alcohol drinking behavior and effect towards physical efficiency. The results found that, the sample group who drinking alcohol everyday has effect towards physical efficiency the most which are reduced agility (20.0%), the lower is reduced muscle strength (15.5%), and reduced muscular power, reduced cardiovascular endurance resistance, and reduced coordination (13.4%) respectively.

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CHAPTER V
DISCUSSION

Nowadays alcohol drink is widespread in common people including athletes. This affects the rehearsing and competing sports. Therefore the researcher realizes the alcohol drink of the Institute of Physical Education athletes and what the factors related to the alcohol drinking behavior of the athletes. The factors brought to study are personal factor, social factor and effects of alcohol drinking. The research results are discussed as follows;

5.1 Personal Factor

The personal factors have related with alcohol drinking behavior is sex. Which analyzed by the comparison of male and female, the results found that the behavior of drinking alcohol between male and female was different with statistically significant at level 0.05. Alcohol drink rate of male has more frequency rate than female therefore male has a chance or is at risk from drinking alcohol more than female. This is in accordance with the research of Prakit Potiart (1998) who studied about the factors influenced adolescents' alcohol drink behaviors. The research revealed that gender factor was related to alcohol drink behaviors by statistical significance. It is also in accordance with the research of Prapapen Suwan et al. (1998) who studied about related behaviors and factors with alcohol drink in Thai youths, the research revealed that male youths influenced the alcohol drink behavior by statistical significance. Moreover there is the research in accordance with above research results; the research of Jiraporn Tephnu (1997) revealed that male was at risk to drink alcohol 13.03 times of female.

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Whereas the personal factors are not related with the alcohol drinking behaviors; age, education level and sport types. This is shown that theses factors are not influenced the alcohol drinking behaviors of the sample group.

5.2 Social Factor

For the social factor related to alcohol drinking behavior, it is about acceptance the influence from advertising media and alcohol drinking access. From the analysis and comparison the proportion of alcohol drinking behaviors in the group influenced in the low, medium and high level has the statistically significant difference at level 0.05. The results got are those group influenced from advertising media and alcohol drinking access in the high level has the frequency in drinking alcohol more than the group in the low and medium level. The group influenced from advertising media and alcohol drinking access in the low level has the frequency in drinking alcohol less than the group in the medium and high level. Therefore it means that the advertisement about alcohol drink rather affects alcohol drink appetite of the sample group. This is in accordance with the research of Prakij Potiart (1998) and Prapapen Suwan et al. (1998) which found that the acceptance the influence from advertisement media is related to the alcohol drink behavior by statistical significance.

It is also direct to the Akers' learning theory (Akers, 1998) about the imitation which said that the imitation means the involvement in behavior after observing the behaviors similar to others'. The imitation will occur depends on the aspects and form of the behaviors observed as well as the results got from those behaviors. The observation the obvious form in the important personal group and mass media influenced the legal and illegal behaviors and these observation is more important for the creating new behaviors than maintain or stop the behaviors which has been created and it is important for maintaining the occurred behaviors. This is the same as alcohol drink advertisement which nowadays is the advertisement that tries to view the alcohol is not such a kind of bad things so everyone can drink and try to create good attitudes towards drinking alcohol until everyone imitates according to that advertisement.

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For these mass media, all of the images about alcohol drink that can be seen until we feel familiar to our eyes and heart become the important media that attracts people to drink alcohol more, makes people eager to know and to try. However some view that the advertisement doesn't affect because this is about personal favor; if that person never drinks, he/she will still not to drink while the person who drinks regularly will still drink as usual. Therefore it means that whether drink or not depends on each person's consideration. Hence the influence of various media is also being an importance factor for alcohol drinking and drug using of teenagers. From the research, we have found that the teenagers who viewed alcohol advertisement was interesting viewed alcohol drinking in a positive way and bought products which had alcoholic labels more than the teenagers who responded the alcohol issue in a negative way (Austin et al., 2006). Moreover, from the studied of Swang Boonchalermvipas (2008) found that drinking portrayal in advertising exposed to children has negative effect on young audience leading them to believe that drinking is a "normal" and socially acceptable behavior.

For the selling and buying source approach factor in alcohol drink, the survey revealed that most of the samples group thought that there are available from buying alcohol drink in every time therefore it made the increasing of frequency in alcohol drink. Additionally, there is the law that prohibits the children lower than 18 years old to buy alcohol drink, but some stores are available for them and the children lower than 20 years old can buy alcohol drink alone without any limitation or prohibition. This is in accordance with the research of Kanittha Thaikla et al. (2008) who had studied about the relationship between consumers' selling location and alcohol drinking behaviors found that the selling location and alcohol drinking behaviors had the relationship to each other statistically significant at the 0.000 level namely groceries, retail shops, convenience store and liquor shop.

Today it can be obviously seen that alcohol drink in Thailand is the kind of product that can be purchased easily almost all of the places of restaurant,

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supermarket, pub, bar or even the selling cabinet by dropping coins in it by having various kinds of alcohol drink to choose and its price also not expensive much.

For the influence of peer toward alcohol drinking, from the analysis and comparison the proportion of alcohol drinking behaviors in the group influenced in the low, medium and high level has the statistically significant difference at level 0.05. The results got are those group influenced from peer toward alcohol drinking in the high level has the frequency in drinking alcohol more than the group in the low and medium level. This is in accordance with the research of Parra et al. (2007) who studied about frequency of heavy drinking and perceived peer alcohol involvement. The research revealed that the patterns of change from ages 18 to 30 for both frequency of heavy drinking and perceived peer alcohol involvement are best represented by two distinct developmental periods (i.e., college and post-college years). Evidence suggests that selection mechanisms may best account for the relation between frequency of heavy drinking and perceived peer alcohol involvement especially during the post-college years.

It is also direct to the differential associations theory (Sutherland, 1947) about the imitation which said that learning process takes place when associating among acquaintance which is not limited in an intimate interaction only, a person may approach to process of learning while the associating opportunity allows to those sources of criminal behavior. Differential associations may vary in frequency, duration, priority and intensity.

Moreover, from the studied of Luksana Inglab (2008) who studied about consumption behavior and perception of impacts on alcohol consumption of students in private higher education in west Bangkok and metropolitan areas. For friend aspect was the ones who consumed alcohol, consuming persuasion and intentionally making friends with the consuming ones were related to the students' alcohol consumption behavior at the level 0.05.

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5.3 Effects of Alcohol Drinking toward Efficiency of Athlete

From the data analysis, it was found that the sample group the athletes of the Institute of Physical Education for the amounts of survey, there were 27.5% of persons who drank alcohol from total amounts that ever drank while rehearsing or competing. Mostly drank before rehearsing which is regarded as impropriate behaviors because alcohol is regarded as prohibited substance in athlete especially the athlete who had to use high concentration in competition such as shooting, archery, car race, etc.

The sample group of 80.0% told that drinking alcohol caused disadvantages to the rehearsal and competition which were exhaust and tired easily, muscles felt weak, headache, giddy, etc. For the physical disadvantages were agility was reduced, muscles strength was reduced, physical balance was reduced, cardiovascular endurance resistance were reduced, etc. Although alcohol does not increase physical efficacy, a little alcohol affects pressing brain and nerve and affects the relation between hand muscles and optical nerve. Moreover it affects to stop excited symptom or mind nervous of the athletes as well. This is in accordance with the study of Pichai Sangchanchai et al. (2005) which found that the alcohol is a paraldehyde. Evidence suggests that alcohol effects brain function by interacting with multiple neurotransmitter system such as GABA, Glycine, Serotonin, and Glutamate. Alcohol affects a change in behavior through the effect on brain system.

Furthermore, alcohol will have deleterious effects on performance in sports that require fast reactions, complex decision making and highly skilled actions. It will also have an impact on hand – eye co-ordination, on tracking tasks, such as driving, and on vigilance tasks such as long-distance sailing. An effect on tracking tasks is that control movements lose their normal smoothness and precision and become more abrupt or jerky. Consistent within a study by Tong et al. (1980), some studies have shown deterioration in performance with time on task. At high doses of alcohol, meaningful sport becomes impractical or even dangerous. Progressive effects of alcohol at different blood alcohol concentrations are summarized in table 1. An

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important effect of alcohol, not listed, is that it diminished the ability to process appreciable amounts of information arriving simultaneously from two difference sources.

For the alcohol drinking belief, most of the samples group believed that drinking alcohol helps good sleep, good appetite and muscles relief after rehearsing or competing. This is in accordance with the study of Suwanna Arunpongpaisan (2006) who studied about each person in each age had different alcohol drinking belief, the study was found that all ages group both male and female if they had positive alcohol drinking belief, it made the increasing of alcohol drinking belief, it made the decreasing or not drinking alcohol. This reveals the results of suppression effects of alcohol expectancy that the positive belief in alcohol drink predicts the drinking behavior better than the negative belief in alcohol drink. Vice versa, if they had negative alcohol drinking.

From the analysis about the relation between alcohol drinking behavior and effect towards sport rehearsal and competition and the effect towards physical efficiency, it was found that the sample group who had different alcohol drinking behavior would not be affected differently from alcohol drinking towards sport rehearsal and competition and physical efficiency by statistically significance at level 0.05. It is shown that the persons who drank alcohol no matter how much they drank would affect them similarly.

For conclusion, the research study reveals the factors related to the athletes' alcohol drinking behaviors which are sex and the perception of influence from advertising media and alcohol drinking access. Therefore the teenagers' problems with alcohol drink are considered as crisis problems which the society must realize and acknowledge then cooperate to one another in order to prevent and solve these problems by sharing together among governmental, private organizations, publics and mass media. Since alcohol drink has destroyed the various dimensions of society by perceiving news every day no matter what from quarrel to killing news, accident

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along the road, having sex before appropriate time, all of these mostly come from alcohol which is the important factors which cause various problems.

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CHAPTER VI
CONCLUSION AND RECOMMENDATION

This research is considered to be survey research with objective to study of behaviors and factors relating to alcohol drinking in athletes, a case study of the Institute of Physical Education. The main factors are personal factor, social factor, alcohol drinking behavior and effects of alcohol drinking toward efficiency of athlete.

The sample group selected is the Institute of Physical Education athletes, with the amount of 400 peoples. The collective tools are questionnaire and analysis by using SPSS program in the descriptive statistics which are frequency, percentage, mean and standard deviation and also inferential statistics which is Chi-square test (χ^2). The conclusion and recommendation are about to be described next.

6.1 Research Conclusion

6.1.1 Personal factor

From the survey of sample group 400 athletes of Institute of Physical Education, it was found that most of the samples group was male (65.3%) and female (34.7%). Most of them were 21-24 years old and study in the third year students.

For the sport types, it was found that most of the sports type was personal; archery was the most and the second was track and field and tennis respectively. For the team type, it was the football athletes the most, the second was footsal, sepak trakor respectively.

For the believe about alcohol drinking, it was found that mostly believed that drinking alcohol help good sleeping, good appetite and muscles relieving the muscles after rehearsing or competing, respectively.

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From the survey of sample group in terms of acknowledgement about alcohol that was regarded as the prohibited substance in athletes, there were 53.5% knew that the organization resisted the prohibited substance or it was called “WORLD ANTI-DOPING AGENCY” (WADA). The alcohol was regarded to be the prohibited substance in athletes by prohibiting using alcohol during some kinds of sport competition.

6.1.2 Social factor

From the survey of the sample group’s perception of the influence from advertising media and alcohol drinking access, it was found that the level the sample group’s perception from advertising media and alcohol drinking access was medium. The sample group had the opinions through alcohol drinking access that alcohol drink could be available every time so it increased the frequency of drinking alcohol. Although there was the law that prohibited the children who were lower than 18 years old to buy alcohol drink, some stores allowed the children lower than 18 years old to buy it easily and the children lower than 20 years could purchase alcohol drink alone without limitation and prohibition. But the opinions of the sample group towards advertisement media was when they saw the alcohol drink images in the advertisement, it made them feel like to drink alcohol.

From the survey the behavior of alcohol drinking of peer group, it was found that most of the groups had friends who drank alcohol 85.0%. The influence of friends’ level towards alcohol drinking of most of the sample group was medium. The things that the sample group got from friends were every party that the sample group joined their friends usually had alcohol drink. Their friends usually drank until being drunk and while their friends were drinking, they usually persuaded the sample group to join them. However the thing that friends behaved towards the group the least were talking about the benefits of alcohol drink.

6.1.3 Alcohol drinking behavior and occasion to drink

From the survey the alcohol drinking behavior of the sample group, it was found that most of them started drinking alcohol at the first time when they were

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between 13-18 years (67.8%). The reasons of drinking at the first time were they would like curiosity, their peers persuaded them and they drank in order to join the society, respectively. When categorized the most famous of alcohol drink types the sample group drank the most, it was found that the sample group liked to drink beer, liquor and wine respectively. For the frequency of drinking alcohol, mostly they drank occasionally; the second was they drank 1– 2 times a week and 3– 4 times a week respectively by drinking with their friends.

From the survey the occasion to drink alcohol of the sample group, it was found that most of them usually drank in the festive party occasion, various festivals and celebration of win, respectively. For the places they usually used to drink were their dormitory the most, the second was restaurant or tavern, and home, respectively.

From the experience results of alcohol drinking of the sample group, it was found that mostly they drank would be drunk occasionally. For the level of being drunk, mostly they had the symptom of blabber, talkative but all nonsense things or jocose. The effect occurred from drinking alcohol were quarrel, accident and having sex without intention.

For the alcohol drinking while rehearsing or competing, it was found that most of the sample group had never drunk while they were rehearsing or competing (72.5%). Only a few that ever drank while rehearsing or competing (27.5%). For the numbers of persons who had ever drunk while rehearsing or competing, most of them usually drank before rehearsing.

6.1.4 Effects of alcohol drinking toward efficiency of athlete

From the survey the effects of drinking alcohol towards the rehearsal and competition of the sample group, most of them viewed that drinking alcohol caused the bad result towards the sport rehearsing and competing (80.0%) which are easy to be exhausted, easy to be tired and weak muscles, respectively. For the disadvantage occurred from drinking alcohol which affected the physical efficiency; agility was

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reduced, strength of muscles was reduced and the physical balance was reduced, respectively.

6.1.5 Result of analyzed relation between factors

From the analysis the relation between alcohol drinking behavior and various factors, the results were as follows;

- The alcohol drinking behavior between male and female was different with statistically significant at level 0.05 which was male had the alcohol drinking rate more frequently than female.

- The alcohol drinking behavior in each age period was not different with statistically significant at level 0.05.

- The alcohol drinking behavior in each year study level was not different with statistically significant at level 0.05.

- The alcohol drinking behavior in some kinds of team and personal sport was not different with statistically significant at level 0.05.

- The alcohol drinking behavior in the group of being influenced from advertising media and alcohol drinking access in the low, medium and high level was different with statistically significant at level 0.05. The group influenced from advertising media and alcohol drinking access in the high level had more frequency in alcohol drinking than the group in the low and medium level.

- The alcohol drinking behavior in the group of being influenced by peers in the low, medium and high level was different with statistically significant at level 0.05. The group influenced from peer toward alcohol drinking in the high level had more frequency in alcohol drinking than the group in the low and medium level.

- The different alcohol drinking behavior would effect from alcohol drinking towards rehearsal and competition sport without difference with statistically significant at level 0.05.

- The sample group who drinking alcohol everyday has effect towards physical efficiency the most which are reduced agility, reduced muscle strength, and reduced muscular power, reduced cardiovascular endurance resistance, and reduced coordination respectively.

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6.2 Recommendation of Results

From the research, it is realized the various factors data which affect the alcohol drinking behavior. Therefore these are the recommendations from this research as follows;

6.2.1 From the analysis the relation between the alcohol drinking behavior between male and female, it was found that there was related to each other; male had alcohol drink rate more frequently than female. Therefore the Institute of Physical Education and related organizations should be strict more about alcohol drinking in male in order to reduce the risk of physical efficiency towards sport rehearsing and competing and promote the attitudes of not drinking alcohol towards the male athletes.

6.2.2 From the data analysis, it was found that the influence from advertising media and alcohol drinking access affected the alcohol drinking behavior; the advertisement about alcohol drinking through various kinds of media and the ability to approach the alcohol drink sources easily affected the appetite in alcohol drink of the sample group. Therefore the government should assessed alcohol advertising compliance with the Alcoholic Beverage Control Act BE. 2008. It must be regulated and must be taken with strict legal measures. Alcohol advertising which carries alcohol product, packaging, corporate symbol or related items should be restricted.

6.2.3 From the study, it was found that in the athletes group of Institute of Physical Education, there were friends who drank alcohol 85.0% therefore it made the friend association influenced the drinking alcohol rather high. Hence the related organizations should campaign the knowledge about effects from alcohol drink especially in the adolescent’s group who imitate the behaviors from their friends.

6.2.4 Alcohol drinking causes disadvantages towards the physical efficiency and sport rehearsing and competing of the athletes. Although there has been the prohibition alcohol drinking during competition in some kinds of sports, it was found

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that there is still drinking alcohol while rehearsing and competing the sport in various levels. Therefore it is necessary to investigate the prohibited substance regularly in order to control the prohibited substance use in athletes.

6.2.5 From the survey about the believe on alcohol drinking, it was found that alcohol drinking helps good sleep, have a good appetite, relax muscles after rehearsing or competing, etc. This is the belief that alcohol drinking makes more advantages to the body than disadvantages. Therefore in the Thai society, it increases alcohol drink without regarding the destruction in the long terms. For these cases, the solving problem ways are creating good consciousness and realizing the destruction of alcohol drinking by no need to regard that which organizations have to be responsible for this case.

6.3 Recommendation for Future Research

From this research, it makes the recommendations to the further researches as follows;

6.3.1 It was found that friend association who drink alcohol is the important part in persuasion to drink alcohol like them because of the imitation behavior. Therefore it should have additional study about the wrong imitation behavior among friends group in order to find the ways to prevent problems occurred from friends.

6.3.2 It should have the study and research about the advertisement of alcohol drink of the companies which produce the alcohol drink in terms of creating the master piece in order to express the responsibility towards the society that how it affects the alcohol drink of the society and which the advertisement gives more between advantage and disadvantage.

6.3.3 It should have the study and assessment of the campaign about knowledge giving in terms of advantages and disadvantages of alcohol drink that how much efficiency and quality it has.

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6.3.4 It should have the comparison study about the attitudes and behaviors of the athletes and personals who are not the athletes about alcohol drink and using liquor in the wrong way that how it is different in order to be the way to prevent liquor of the athletes.

6.3.5 It should not only study about alcohol drink in athletes but also study other kinds of addict drug use beneficial for the athletes such as amphetamine, cocaine, etc.

6.3.6 It should have the study and comparison about the alcohol drinking in athletes during in and out competition season that how it is different.

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BIBLIOGRAPHY

กนิษฐา ไทยกล้า, สุโข เสมมหาศักดิ์ และอภินันท์ อร่ามรัตน์. (2551). *การศึกษาความสัมพันธ์ระหว่างสถานที่จำหน่ายและพฤติกรรมการดื่มเครื่องดื่มแอลกอฮอล์ของผู้บริโภค.* การประชุมวิชาการสุราระดับชาติ ครั้งที่ 4. กรุงเทพฯ, 76-78.

กมลทิพย์ วิจิตรสุนทรกุล. (2542). *ปัจจัยที่มีอิทธิพลต่อการดื่มเครื่องดื่มแอลกอฮอล์ของนักเรียนอาชีวศึกษาชายในกรุงเทพฯ.* วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต (สุขศึกษาและพฤติกรรมศาสตร์), บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

เกษียร ภังคานนท์. (2538). *แอลกอฮอล์กับโรคหัวใจ.* หมอชาวบ้าน ปีที่ 12 ฉบับที่ 196 สิงหาคม : 17-24

จิราภรณ์ เทพหนู. (2540). *ปัจจัยที่มีผลต่อการดื่มเครื่องดื่มแอลกอฮอล์ของนักเรียนมัธยมศึกษาตอนปลายสายสามัญศึกษาในจังหวัดพัทลุง.* วิทยานิพนธ์ปริญญาสาธารณสุขศาสตรมหาบัณฑิต (อนามัยครอบครัว), บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

เชษฐ์ รัชดาพรรณาธิกุล. (2548). *มาตรการป้องกันแก้ไขเพื่อลดผลกระทบจากการบริโภคเครื่องดื่มแอลกอฮอล์.* 25-29

ทรงเกียรติ ปิยะกะ. (2544). *ยิ้มสู้เรียนรู้ยาเสพติด.* กรุงเทพฯ: สำนักพิมพ์มติชน.

บัณฑิต ศรไพศาล และคณะ. (2549). *รายงานสถานการณ์สุราประจำปี พ.ศ. 2549.* กรุงเทพฯ: ศูนย์วิจัยปัญหาสุรา.

บุญธรรม กิจปรีดาบริสุทธิ์. (2537). *เทคนิคการสร้างเครื่องมือรวบรวมข้อมูลสำหรับการวิจัย.* พิมพ์ครั้งที่ 4. กรุงเทพฯ: โรงพิมพ์เจริญผล.

บุญสม มาร์ติน. (2533). *สุขศึกษา.* กรุงเทพฯ: โรงพิมพ์อักษรเจริญทัศน์.

ประกิจ โพธิอาศน์. (2541). *ปัจจัยที่มีอิทธิพลต่อพฤติกรรมการดื่มเครื่องดื่มแอลกอฮอล์ของวัยรุ่นจังหวัดพระนครศรีอยุธยา.* วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาสุขศึกษาและพฤติกรรมศาสตร์, บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

ประภาเพ็ญ สุวรรณ และคณะ. (2541). *การศึกษาพฤติกรรมและปัจจัยที่เกี่ยวข้องกับการดื่มแอลกอฮอล์ในเยาวชนไทย.* ทุนสนับสนุนงานวิจัยจากกรมอนามัย กระทรวงสาธารณสุข.

Copyright by Mahidol University

ฝ่ายวิทยาศาสตร์การกีฬา การกีฬาแห่งประเทศไทย. (2550). *ความรู้เกี่ยวกับสารต้องห้าม*. กรุงเทพฯ: การกีฬาแห่งประเทศไทย.

พรพิมล เจียมนาครินทร์. (2539). *พัฒนาการวัยรุ่น*. กรุงเทพฯ: บริษัท ต้นอ้อ แกรมมี่ จำกัด.

พิชัย แสงชาญชัย และคณะ. (2548). *ตำราจิตเวชศาสตร์การติดสารเสพติด*. เอกสารเผยแพร่ สำนักงาน ป.ป.ส กรุงเทพฯ : 62-63.

ราชบัณฑิตยสถาน. (2542). *พจนานุกรมฉบับราชบัณฑิตยสถาน พ.ศ.2542*. กรุงเทพฯ: นานมีบุ๊คส์ พับลิเคชั่น จำกัด.

ยงยุทธ ขจรธรรม, พิมพา ขจรธรรม และ บัณฑิต ศรไพศาล. (2547). *ประสิทธิผลของนโยบายและมาตรการควบคุมการบริโภคเครื่องดื่มแอลกอฮอล์*. กรุงเทพฯ: บริษัทดีไซด์.

ยุทธ ไกยวรรณ์. (2546). *สถิติเพื่อการวิจัย*. กรุงเทพฯ: สำนักพิมพ์ พิมพ์ดี.

วิชัย โปษยะจินดา และคณะ. (2544). *โครงการศึกษาปัญหาที่เกี่ยวข้องกับการบริโภคเครื่องดื่มแอลกอฮอล์เพื่อหามาตรการทางเลือกป้องกันแก้ไข*. กรุงเทพฯ: รายงานวิจัย.

วิชัย โปษยะจินดา และ อาภา ศิริวงศ์ ณ อยุธยา. (2545). *สุราในสังคมไทย*. กรุงเทพฯ: โรงพิมพ์จุฬาลงกรณ์มหาวิทยาลัย.

วิฑูรย์ หะวานนท์. (2534). *คู่มือรณรงค์ป้องกันปัญหาจากสุรา*. สมาคมป้องกันปัญหาสุราแห่งประเทศไทย กระทรวงสาธารณสุข.

ศูนย์วิจัยปัญหาสุรา. (2548). *ธุรกิจสุรากับตลาดหลักทรัพย์*. เรียบเรียงข้อมูลโดยศูนย์วิจัยปัญหาสุรา.

สุชา จันทร์เอม. (2529). *จิตวิทยาวัยรุ่น*. กรุงเทพฯ: ไทยวัฒนาพานิช.

สุวรรณา อรุณพงศ์ไพศาล. (2549). *คนแต่ละวัยมีความเชื่อเกี่ยวกับผลของแอลกอฮอล์และลักษณะการดื่มที่แตกต่างกัน*. ศูนย์วิจัยปัญหาสุรา สำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ.

สุวิมล ติรกานันท์. (2546). *ระเบียบวิธีการวิจัยทางสังคมศาสตร์: แนวทางสู่การปฏิบัติ*. พิมพ์ครั้งที่ 4. กรุงเทพฯ: โรงพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย.

แสวง บุญเฉลิมวิภาส. (2551). *พ.ร.บ.ควบคุมเครื่องดื่มแอลกอฮอล์ มาตรการคุ้มครองเด็กและเยาวชนของชาติ*. การประชุมวิชาการสุราระดับชาติ ครั้งที่ 4. กรุงเทพฯ, 35-37.

Akers, R. L. (1998). *Social Learning and Social Structure: A General Theory of Crime and Deviance*. Boston, MA: Northeastern University Press.

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Austin, E. W., Chen, M. J., & Grube, J. W. (2006). How does alcohol advertising influence underage drinking? The role of desirability, identification and skepticism. *J Adolesc Health*, 38(4), 376-84.

Blomqvist, G., Saltin, B., & Mitchell. J. (1970). Acute effects of ethanol ingestion on the response to submaximal and maximal exercise in man. *Circulation*, 62, 463-470.

Carr, C. N., Kennedy, S. R., & Dimick, K. M. (1996). Alcohol use among high school athletes. *The Prevention Researcher*, 1-3.

Carr, C. N., Kennedy, S. R., & Dimick, K. M. (1990). Alcohol Use Among High School Athletes: A Comparison of Alcohol Use and Intoxication in Male and Female High School Athletes and Non-Athletes. *Journal of Alcohol and Drug Education*, 36(1), 39-43.

David, R. M. (2005). *Drugs in sport* (4 ed.). London: Taylor & Francis. 263-273.

Hayes, R. W., & Tevis, B. W. (1977). A comparison of Attitudes and Behavior of High School Athletes and Non-Athletes with Respect to Alcohol Use and Abuse. *Journal of Alcohol and Drug Education*, 23(1), 20-28.

Ikai, M., & Steinhaus, A. H. (1961). Some factors modifying the expression of human strength. *J. Appl. Physiol*., 16, 157-161.

Juhlin-Dannfelt, A., Ahlberg, G., & Hagenfelt, L. (1977). Influence of ethanol on splanchnic and skeletal muscle substrate turnover during prolonged exercise in man. *Am,J . Physio.*, 233, E195-202.

Kelly, T. H., Fultin., R. W., Emurian, C. S., & Fischman, M.W. (1993). Performance based testing for drugs of abuse: dose and time profiles of marijuana, amphetamine, alcohol and diazepam. *J.Analyt.Toxicol.*, 17, 264-272.

Leichliter, J. S., Meilman, P. W., Presley, C. A., & Cashin, J. R. (1998). Alcohol Use and Related Consequences Among Students With Varying Levels of Involvement in College Athletics. *Journal of American College Health*, 46(6), 257-262.

McNaughton, L., & Preece, D. (1988). Alcohol and its effect on sprint and middle-distance Running. *Br. J .Sports Med.*, 20, 56-59.

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Overman, S. J., & Terry, T. (1991). Alcohol Use and Attitudes: A Comparison of College Athletes and Nonathletes. *Journal of Drug Education*, 21(2), 107-117.

O'Brien, C. (1993). Alcohol and sport: impact of social drinking on recreational and competitive sports performance. *Sports Med.*, 15, 71-77.

Parra, G. R., Krull, J. L., Sher, K. J., & Jackson, K. M. (2007). Frequency of heavy drinking and perceived peer alcohol involvement: Comparison of influence and selection mechanisms from a developmental perspective. *Journal of Addictive behaviors*, 32(10), 2211-2225.

Reilly, T. (1997). Alcohol: its influence in sport and exercise. In T. Reilly and M. Orme (Eds), *The Clinical Pharmacology of sport and exercise* (pp. 281-290). Amsterdam: Elsevier.

Reilly, T., & Halliday , F. (1985). Influence of alcohol ingestion on tasks related to archery. *J. Hum, Ergol.*, 14, 99-104.

Shields, E. W. Jr. (1998). Relative Likelihood of In-season and Off-season Use of Alcohol by High School Athletes in North Carolina: Trends and Current Status. *Journal of Alcohol and Drug Education*, 43(2), 48-63.

Sutherland, E. H. (1947). *Principles of Criminology.* 4th ed. Philadelphia: Lippincott.

Tong, J. E., Henderson, P. R., & Chipperfield, G. A. (1980). Effects of ethanol and tobacco on auditory vililance performance. *Addict. Behav.*, 5, 153-158.

Wesnes, K., & Warburton, D. M. (1983). Stress and drugs. In R. Hockey (Ed.), *Stress and Fatigue in Human Performance* (pp. 203-243). Chichester: John Wiley.

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APPENDIX

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แบบสอบถาม

คำชี้แจงในการตอบแบบสอบถาม

แบบสอบถามชุดนี้ เป็นแบบสอบถามเพื่อการวิจัย เรื่อง “การศึกษาพฤติกรรมและปัจจัยที่มีความสัมพันธ์กับการดื่มเครื่องดื่มแอลกอฮอล์ของนักกีฬา สถาบันการพลศึกษา”

1. แบบสอบถามมีทั้งหมด 8 หน้า แบ่งออกเป็น 4 ส่วน

ส่วนที่ 1 ข้อมูลส่วนบุคคล

ส่วนที่ 2 ปัจจัยด้านสังคม

2.2 การรับอิทธิพลจากสื่อและการเข้าถึงเครื่องดื่มแอลกอฮอล์

2.1 การคบเพื่อน

ส่วนที่ 3 พฤติกรรมการดื่มเครื่องดื่มแอลกอฮอล์

ส่วนที่ 4 ผลกระทบที่ตามมาจากการดื่มเครื่องดื่มแอลกอฮอล์ที่มีต่อสมรรถภาพทางกายของนักกีฬา

2. การวิจัยครั้งนี้ เป็นการศึกษาเพื่อทำวิทยานิพนธ์ของนักศึกษาปริญญาโท สาขาวิทยาการเสพติด โครงการร่วมคณะแพทยศาสตร์ศิริราชพยาบาล กับ คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล จึงขอให้ท่านตอบคำถามตามความเป็นจริงและเป็นความรู้สึกของท่านมากที่สุด โดยไม่ต้องระบุชื่อ นามสกุล คำตอบของท่านถือเป็นความลับ ไม่มีผลกระทบใดๆ ต่อตัวผู้ตอบ และถือเป็นเอกสารทางวิชาการที่เป็นประโยชน์ต่อไปที่ยังส่งผลไปสู่การศึกษา “พฤติกรรมและปัจจัยที่เกี่ยวข้องกับการเครื่องดื่มแอลกอฮอล์ของนักกีฬา” และหาแนวทางแก้ไขปัญหาอันเนื่องจากการดื่มเครื่องดื่มแอลกอฮอล์

3. ให้ท่านอ่านคำชี้แจงของแบบสอบถามแต่ละส่วน ก่อนลงมือทำและโปรดตอบคำถามให้ครบทุกข้อ เพราะถ้าตอบไม่ครบทุกข้อ จะทำให้ผู้วิจัยไม่สามารถนำคำตอบมาประมวลผลได้

ขอขอบคุณในการให้ความร่วมมือของท่านมา ณ โอกาสนี้

นางสาว พรรณภสร โพธิ์พันธ์

นักศึกษาปริญญาโท สาขาวิทยาการเสพติด บัณฑิตวิทยาลัย

มหาวิทยาลัยมหิดล

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<u>คำชี้แจง</u>

1. ทำเครื่องหมาย / ในช่องว่าง ( ) ของแต่ละข้อ ซึ่งตรงกับความเป็นจริงของท่านมากที่สุด

2. ในแต่ละข้อตอบได้ 1 คำตอบ เว้นบางข้อที่ตอบได้มากกว่า 1 คำตอบและบางข้อสามารถเขียนคำตอบได้ นอกเหนือจากคำตอบที่ให้ไว้

ส่วนที่ 1 ข้อมูลส่วนบุคคล

1. เพศ

( ) ชาย ( ) หญิง

2. ปัจจุบันท่านมี อายุ ระหว่าง

( ) 17 – 20 ปี ( ) 21 – 24 ปี ( ) 25 ปี ขึ้นไป

3. ชั้นปีที่กำลังศึกษา

( ) ชั้นปีที่ 1 ( ) ชั้นปีที่ 2 ( ) ชั้นปีที่ 3 ( ) ชั้นปีที่ 4

4. ชนิดกีฬาที่เล่น โปรดระบุ ชนิดกีฬา.....

5. ท่านมีความเชื่อในด้านใดบ้างเกี่ยวกับการดื่มแอลกอฮอล์ (ตอบได้มากกว่า 1 ข้อ)

( ) ช่วยให้เจริญอาหาร ( ) ช่วยให้นอนหลับสบาย ( ) ช่วยบรรเทาอาการฟกช้ำ

( ) ช่วยให้เกิดสมาธิและนิ่ง ก่อนการแข่งขัน ( ) ช่วยทำให้รู้สึกคึกคัก ก่อนการแข่งขัน

( ) ช่วยให้คลายกล้ามเนื้อ {คลายเส้น} หลังจากการฝึกซ้อมหรือแข่งขัน

( ) อื่นๆ ระบุ.....

6. ท่านทราบหรือไม่ว่า องค์กรต่อต้านการใช้สารต้องห้ามโลก “WORLD ANTI-DOPING AGENCY” (WADA) จัดให้แอลกอฮอล์เป็นสารต้องห้ามในนักกีฬา (ห้ามใช้ในช่วงการแข่งขันในบางชนิดกีฬา)

( ) ทราบ ( ) ไม่ทราบ

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ส่วนที่ 2 ปัจจัยด้านสังคม

(1). การรับอิทธิพลจากสื่อและการเข้าถึงเครื่องดื่มแอลกอฮอล์

ข้อที่	ข้อความ	ระดับความคิดเห็น				
		มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
1	เมื่อเห็นภาพโฆษณาเครื่องดื่มแอลกอฮอล์ ทำให้ท่านรู้สึกอยากดื่มเครื่องดื่มแอลกอฮอล์					
2	โฆษณาเกี่ยวกับเครื่องดื่มแอลกอฮอล์ที่แปลกใหม่ทันสมัย เป็นการชี้ชวนให้ท่านอยากดื่มเครื่องดื่มแอลกอฮอล์					
3	จากการโฆษณาทำให้ท่านรู้จักเครื่องดื่มแอลกอฮอล์และอยากลองดื่มบ้าง					
4	จากการโฆษณาท่านรู้สึกว่าเครื่องดื่มแอลกอฮอล์เป็นเครื่องดื่มชนิดหนึ่งที่ดื่มได้ตามปกติไม่เลวร้าย					
5	เครื่องดื่มแอลกอฮอล์สามารถซื้อง่ายทุกเวลา					
6	ถึงแม้จะมีกฎหมายห้ามเด็กอายุต่ำกว่า 18 ปีซื้อเครื่องดื่มแอลกอฮอล์ แต่ร้านค้าบางแห่งก็ยังให้เด็กอายุต่ำกว่า 18 ปี ซื้อได้ง่าย					
7	โฆษณาเกี่ยวกับเครื่องดื่มแอลกอฮอล์ที่น่าจะมีคำเตือนเกี่ยวกับโทษและข้อจำกัดของการดื่ม					
8	การซื้อหาเครื่องดื่มแอลกอฮอล์ได้ง่ายทำให้มีความถี่ในการดื่มเครื่องดื่มแอลกอฮอล์เพิ่มมากขึ้น					
9	เด็กอายุต่ำกว่า 20 ปี สามารถหาซื้อเครื่องดื่มแอลกอฮอล์ได้ตามลำพัง โดยไม่ถูกจำกัดหรือห้าม					
10	ปัจจุบันเครื่องดื่มแอลกอฮอล์ได้เข้ามาสนับสนุนการจัดการแข่งขันกีฬาชนิดต่างๆ ส่งผลให้นัก กีฬามีการการดื่มเครื่องดื่มแอลกอฮอล์เพิ่มมากขึ้น					

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(2). การคบเพื่อน

1. กลุ่มเพื่อนของท่านดื่มเครื่องดื่มแอลกอฮอล์หรือไม่

( ) ดื่ม ( ) ไม่ดื่ม

ข้อที่	ข้อความ	ระดับความคิดเห็น				
		มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
1	งานเลี้ยงสังสรรค์ทุกงานที่ท่านไปกับเพื่อนจะต้องมีเครื่องดื่มแอลกอฮอล์					
2	เพื่อนชวนท่านดื่มเครื่องดื่มแอลกอฮอล์ท่านมักปฏิเสธ					
3	เพื่อนมักจะแนะนำท่านว่าไม่ควรดื่มเครื่องดื่มแอลกอฮอล์เพราะจะทำให้เสียสุขภาพ					
4	เพื่อนของท่านมักจะดื่มเครื่องดื่มแอลกอฮอล์จนมีอาการเมา					
5	เพื่อนมักพูดกับท่านว่าการไม่รับเครื่องดื่มแอลกอฮอล์ ถือว่าไม่ให้เกียรติเพื่อน					
6	เพื่อนมักจะท้าทายให้ท่านดื่มเครื่องดื่มแอลกอฮอล์					
7	ขณะที่เพื่อนของท่านดื่มเครื่องดื่มแอลกอฮอล์เพื่อนมักชวนท่านเข้าร่วมวงด้วย					
8	เพื่อนของท่านดื่มเครื่องดื่มแอลกอฮอล์ให้ท่านเห็นเป็นประจำ					
9	เพื่อนของท่านพูดกับท่านถึงโทษของเครื่องดื่มแอลกอฮอล์					
10	เพื่อนของท่านพูดกับท่านถึงประโยชน์ของเครื่องดื่มแอลกอฮอล์					

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ส่วนที่ 3 พฤติกรรมการดื่มเครื่องดื่มแอลกอฮอล์และโอกาสที่จะได้ดื่มเครื่องดื่มแอลกอฮอล์

1. ท่านเริ่มดื่มแอลกอฮอล์ครั้งแรกเมื่อ อายุ.....ปี

2. ท่านดื่มเครื่องดื่มแอลกอฮอล์ครั้งแรกเพราะสาเหตุใด (ตอบเพียง 1 ข้อ)

( ) อยากลอง ( ) ดื่มเพื่อความโก้เก๋ ( ) เพื่อนชวน

( ) ดื่มเพื่อความเป็นผู้ใหญ่ ( ) ดื่มเพื่อคลายเครียด ( ) ดื่มเพราะมีปัญหาทางครอบครัว

( ) ดื่มเพื่อเข้าสังคม ( ) ดื่มเพราะอากาศหนาว ( ) อกหัก

( ) อื่นๆ ระบุ.....

3. ปัจจุบันเครื่องดื่มแอลกอฮอล์ที่ท่านนิยมดื่มมากที่สุด (ตอบเพียง 1 ข้อ)

( ) สุรา ( ) บรั่นดี ( ) เบียร์

( ) อุ หรือสาโท ( ) ไวน์ ( ) น้ำตาลเมาหรือกระแช่

( ) วิสกี้ ( ) อื่นๆ ระบุ.....

4. ปัจจุบันท่านดื่มแอลกอฮอล์มากน้อยเพียงใด

( ) ดื่มทุกวัน ( ) ดื่ม 1-2 ครั้ง/สัปดาห์

( ) ดื่ม 3-4 ครั้ง/สัปดาห์ ( ) อื่นๆ ระบุ.....

5. เวลาที่ท่านดื่มเครื่องดื่มแอลกอฮอล์ท่านดื่มกับใคร (ตอบได้มากกว่า 1 ข้อ)

( ) ดื่มคนเดียว ( ) ดื่มกับบิดามารดา ( ) ดื่มกับเพื่อน

( ) ดื่มกับญาติพี่น้อง ( ) ดื่มกับแฟน ( ) อื่นๆ ระบุ.....

6. ท่านมักดื่มเครื่องดื่มแอลกอฮอล์ในโอกาสใดบ้าง (ตอบได้มากกว่า 1 ข้อ)

( ) งานเลี้ยงสังสรรค์ ( ) งานเทศกาลต่างๆ ( ) การฉลองชัยชนะ

( ) การไม่ได้รับชัยชนะ ( ) อยากดื่มเฉยๆ ( ) อื่นๆ ระบุ.....

7. ท่านมักดื่มเครื่องดื่มแอลกอฮอล์ในสถานที่ใดบ้าง (ตอบได้มากกว่า 1ข้อ)

( ) ที่บ้าน ( ) หอพัก

( ) ร้านอาหารหรือร้านขายเหล้า ( ) อื่นๆ ระบุ.....

8. จากประสบการการดื่มเครื่องดื่มแอลกอฮอล์ของท่านเคยมีอาการเมาบ่อยแค่ไหน

( ) ไม่เคยเมา ( ) นานๆครั้งถึงจะเมา ( ) เมาเกือบทุกครั้ง ( ) เมาทุกครั้งที่ดื่ม

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9. จากประสบการณ์การดื่มเครื่องดื่มแอลกอฮอล์ของท่านมีอาการเมาถึงขั้นไหน

( ) พูดอ้อแอ้ พูดมาก แต่ไม่ได้สาระ ประโยชน์ (Jocose)

( ) พูดยั่วยวนกวนประสาท ท้าตีท้าต่อยแต่ไม่ถึงกับล้มโต๊ะ (Bellicose)

( ) มีอาการซึมเศร้า อ่อนไหวง่าย น้ำตาไหล ร้องไห้ไม่อายใคร (Lachrymose)

( ) มีอาการเมาหนัก หายใจลำบาก เกิดการโคม่า ถูกส่งตัวเข้าโรงพยาบาล (Comatose)

10. จากประสบการณ์การดื่มเครื่องดื่มแอลกอฮอล์ของท่าน ได้เกิดผลกระทบต่อตัวท่านเองอย่างไรบ้าง (ตอบได้มากกว่า 1 ข้อ)

( ) เกิดการทะเลาะวิวาท ( ) เกิดอุบัติเหตุ

( ) เกิดการมีเพศสัมพันธ์โดยไม่ได้ตั้งใจ ( ) อื่นๆ ระบุ.....

11. ท่านเคยดื่มเครื่องดื่มแอลกอฮอล์ขณะฝึกซ้อมหรือขณะแข่งขันหรือไม่

( ) เคย ( ) ไม่เคย

ถ้าเคยโปรดระบุช่วงของการดื่ม

( ) ก่อนฝึกซ้อม ( ) ขณะฝึกซ้อม ( ) ก่อนลงแข่งขัน ( ) ขณะลงแข่งขัน

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ส่วนที่ 4 ผลกระทบจากการดื่มเครื่องดื่มแอลกอฮอล์ที่มีต่อสมรรถภาพทางกายของนักกีฬา

1. การดื่มเครื่องดื่มแอลกอฮอล์มีผลเสียต่อการฝึกซ้อมกีฬาและการแข่งขันกีฬาของท่าน หรือไม่

( ) มี ( ) ไม่มี

ถ้ามี โปรดระบุ

( ) เหนื่อยง่าย ( ) หายเหนื่อยช้า ( ) เป็นตะคริวได้ง่าย

( ) วิงเวียนศีรษะหน้ามืด ( ) กระหายน้ำบ่อย ( ) ชีพจรเต้นเร็วผิดปกติ

( ) อ่อนล้าง่าย ( ) กล้ามเนื้ออ่อนแรง ( ) อื่นๆ ระบุ.....

2. การดื่มเครื่องดื่มแอลกอฮอล์มีผลเสียต่อสมรรถภาพทางกายของท่านอย่างไรบ้าง (ตอบได้มากกว่า 1 ข้อ)

( ) ความแข็งแรงกล้ามเนื้อลดลง (muscle strength) ( ) ความเร็วลดลง (speed)

( ) ความคล่องแคล่วว่องไวลดลง (agility) ( ) ความอ่อนตัวลดลง (flexibility)

( ) พลังกล้ามเนื้อลดลง (muscular power) ( ) การทรงตัวของร่างกายลดลง (balance)

( ) ความทนทานของระบบหัวใจและไหลเวียนเลือดลดลง (cardiovascular endurance)

( ) ความสัมพันธ์ระบบประสาทและกล้ามเนื้อลดลง (coordination)

ขอบคุณมากค่ะ

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QUESTIONNAIRES

Instruction: This research questionnaire is designed to investigate the study of behaviors and factors relating to alcohol drinking in athletes, a case study of Physical Education Institute.

1. The questionnaires contain 8 pages which are divided into 4 parts.

Part 1 Personal factor

Part 2 Social factor

- Influence from advertising media and alcohol drinking access
- Peer group

Part 3 Alcohol drinking behavior and occasion to drink

Part 4 Effects of alcohol drinking toward efficiency of athlete

2. This survey study is integral part of thesis manipulated by the Master degree of Addictionology, Graduate Studies of Mahidol University. Please choose the answer that presents your real opinion as optimally as possible. All surveys are completed anonymously with no identifiable remarking recorded and your personal information and answers are kept confidential. The obtained information is regarded as academic references that will be useful to further research and bring to study behaviors and factors relating to alcohol drinking in athletes as guideline in solving alcoholic-related problems.

3. Read and follow the instructions for each section prior to completing the questionnaires. Your cooperation is essential; please answer all the questions for making the result of this survey comprehensive and accurate. The incomplete questionnaires will be excluded from processing.

Thanks for your cooperation

Miss Phanphasorn Phophan

Researcher

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Instruction: 1. Mark / in the parenthesis ( ) that matches your opinion mostly.

2. In each question, you are required to choose only on optimal answer that presents your actual opinion mostly, unless in certain questions you are allowed to give more than one answer and can specify in writing your additional opinion other than the answers provided.

Part 1 Personal factor

1. Sex

( ) Male ( ) Female

2. Age

( ) 17 – 20 years ( ) 21 -24 years ( ) Over 25 years

3. Year of study

( ) First year

( ) Second year

( ) Third year

( ) Fourth year

4. Types of sport: ……

5. Which kinds of your belief do you have about alcohol drinking? (You can choose more than 1 answer)

( ) Help good appetite ( ) Help good sleep

( ) Reduce bruised symptom

( ) Help creating concentration and calmness before competition

( ) Help activeness before competition

( ) Help muscles relief after rehearsing or competing

( ) Other……

6. Do you know that "WORLD ANTI-DOPING AGENCY" (WADA) regard alcohol as prohibited substance in athletes (don't be allowed to use during competition in some cases of sport)

( ) Yes ( ) No

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Part 2 Social factor

1) Influence from advertising media and alcohol drinking access

No.	Message	Opinion level				
		Highest	High	Moderate	Low	Lowest
1	When you see the advertisement about alcohol drink, it makes you feel you would like to drink it					
2	The advertisement about alcohol drink new, strange and modern attracts you to feel like to drink it					
3	You know the alcohol drink from the advertisement and it makes you feel like to try to drink it					
4	From the advertisement, you feel that the alcohol drink is a kind of drink that you can drink it in common and it is not bad at all					
5	The alcohol drink is available to be purchased at any time					
6	Although there is the law that prohibits the children who is lower than 18 years old to buy alcohol drink, some stores still are available for them to purchase					
7	The advertisement about alcohol drink should likely have warning about advantages and drinking limitation					
8	Because of the easiness in finding and purchasing alcohol drink, so it causes the increased frequency in drinking alcohol drink					
9	The children lower than 20 years can seek and purchase the alcohol drink alone without being limited or prohibited					
10	Nowadays alcohol drink is being supported in various kinds of sports competition and this affects the athletes increase their alcohol drinking					

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2) Peer group

2.1 Does your friends group drink alcohol drink?

( ) Yes ( ) No

No.	Message	Opinion level				
		Highest	High	Moderate	Low	Lowest
1	All parties you go with your friend have such a kind of alcohol drink					
2	Your friends persuade you to drink alcohol but you usually decline it					
3	Your friends usually suggest you not to drink alcohol because it will damage you health					
4	Your friends usually drink alcohol until drunk					
5	Your friends usually talk to you that not accept the alcohol drink is regarded as not to give respect to your friends					
6	Your friends usually challenge you to drink alcohol					
7	While your friends are drinking alcohol, they usually persuade you to join them					
8	Your friends drink alcohol by letting you see this behavior regularly					
9	Your friends talk to you about the disadvantage of drinking alcohol					
10	Your friends talk to you about the advantage of drinking alcohol					

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Part 3 Alcohol drinking behavior and occasion to drink

1. At what age do you first start drinking alcohol? Aged..... years old

2. What reasons are they you consume alcohol for the first time? (Only answer 1 choice)

( ) Curiosity ( ) Chicly show-off
( ) Peer persuasion ( ) Maturation show-off
( ) Release tension/anxiety ( ) Family problems
( ) Social drinking ( ) Cool weather
( ) Brokenhearted ( ) Other……

3. What kind of alcoholic beverages do you prefer mostly? (Only answer 1 choice)

( ) Rice whisky ( ) Brandy
( ) Beer ( ) Bootleg liquor
( ) Wine ( ) White whisky
( ) Whisky ( ) Other……

4. How much do you drink alcohol currently?

( ) Everyday ( ) 1-2 times a week
( ) 3-4 times a week ( ) Other……

5. With whom do you usually drink alcohol? (You can choose more than 1 answer)

( ) Alone ( ) Parents
( ) Friends ( ) Relatives
( ) Lover ( ) Other……

6. What occasions do you usually drink alcohol? (You can choose more than 1 answer)

( ) Festive party ( ) Festivals
( ) Celebration of win ( ) Did not win
( ) Disregard drink ( ) Other……

7. Where do you drink alcohol? (You can choose more than 1 answer)

( ) House ( ) Dormitory
( ) Restaurant or tavern ( ) Other……

8. Based on your alcohol drinking experience, how often have you ever hangover?

( ) Never ( ) Sometimes

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( ) Usually ( ) Always

9. From your alcohol drink experience, how much do you have the symptom of being drunk?

( ) Jocose

( ) Bellicose

( ) Lachrymose

( ) Comatose

10. From your alcohol drink experience, how does it affect you? (You can choose more than 1 answer)

( ) Quarrel ( ) Accident

( ) Sex without intention ( ) Other……

11. Have you ever drunk alcohol while you are rehearsing or competing?

( ) Ever ( ) Never

If ever, please identify the drinking time period

( ) Before rehearsing ( ) While rehearsing

( ) Before competing ( ) While competing

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Part 4 Effects of alcohol drinking toward efficiency of athlete

1. Does drinking alcohol cause bad effect towards your sport rehearsal and competition?

( ) Yes ( ) No

If any, please identify

( ) To be tired easily ( ) Slowly recover from being tired
( ) To be cramped easily ( ) Headache and giddy
( ) Thirsty very often ( ) Pulse is too fast
( ) Easy to feel exhaust ( ) Muscles feel weak
( ) Other……

2. How does alcohol drink make bad effect towards your physical efficiency? (You can choose more than 1 answer)

( ) Reduced muscle strength ( ) Reduced speed
( ) Reduced agility ( ) Reduced flexibility
( ) Reduced muscular power ( ) Reduced physical balance
( ) Reduced cardiovascular endurance resistance ( ) Reduced coordination

Thank you

……..

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BIOGRAPHY

NAME	Phanphasorn Phophan
DATE OF BIRTH	14 February 1983
PLACE OF BIRTH	Sisaket, Thailand
INSTITUTIONS ATTENDED	College of Sports Science and Technology, Mahidol University, 2006: Bachelor of Science (Sports Science) Mahidol University, 2009: Master of Arts (Addictionology)
WORK EXPERIENCE	Doping control officer, Sports Science in Sport Authority of Thailand, Bangkok, Thailand

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