PREVALENCE AND RELATED FACTORS OF SUICIDAL IDEATION AMONG UNDERGRADUATE STUDENTS IN TWO UNIVERSITIES IN NORTHEASTERN THAILAND

MONRUEDEE SANGWONG

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Monruedee Sangwong
.....
Miss Monruedee Sangwong
Candidate

Kamol Udol
.....
Asst. Prof. Kamol Udol,
M.D.(Hons),
M.Sc. (Health Research Methodology)
Major advisor

Panom Ketumarn
.....
Asst. Prof. Panom Ketumarn,
M.D.,
Dip. of Child and Adolescent Psychiatry
Co-advisor

Saowalak Hunnangkul
.....
Miss Saowalak Hunnangkul,
Ph.D.
Co-advisor

B. Mahaisavariya
.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

Prasert Assantachai
.....
Prof. Prasert Assantachai,
M.D.,(Hons), F.R.C.P. (London)
Program Director
Master of Science Program in Epidemiology
Faculty of Medicine Siriraj Hospital
Mahidol University

Thesis
entitled

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on
April 1, 2013

Monruedee Sangwong
.....
Miss Monruedee Sangwong
Candidate

Prakarn Thomyangkoon
.....
Mr. Prakarn Thomyangkoon,
M.D.
Chair

Kamol Udol
.....
Asst. Prof. Kamol Udol,
M.D. (Hons),
M.Sc. (Health Research Methodology)
Member

Saowalak Hunnangkul
.....
Miss Saowalak Hunnangkul,
Ph.D.
Member

Panom Ketumarn
.....
Asst. Prof. Panom Ketumarn,
M.D.,
Dip. of Child and Adolescent Psychiatry
Member

B. Mahaisavariya
.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

Udom Kachintorn
.....
Prof. Udom Kachintorn,
M.D.
Dean
Faculty of Medicine Siriraj Hospital
Mahidol University

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Monruedee Sangwong

PREVALENCE AND RELATED FACTORS OF SUICIDAL IDEATION AMONG UNDERGRADUATE STUDENTS IN TWO UNIVERSITIES IN NORTHEASTERN THAILAND

MONRUEDEE SANGWONG 5336605 SIEP/M

M.Sc. (EPIDEMIOLOGY)

THESIS ADVISORY COMMITTEE: KAMOL UDOL, M.D. (Hons), M.Sc. (HEALTH RESEARCH METHODOLOGY), PANOM KETUMARN, M.D., DIP. OF CHILD AND ADOLESCENT PSYCHIATRY, SAOWALAK HUNNANGKUL, Ph.D.

ABSTRACT

This cross-sectional research aimed to determine the prevalence of suicidal ideation, the relationship between attitude towards suicide and suicidal ideation, and the association of parental bonding and suicidal ideation. The selected population in this study was undergraduate students in two universities located in Ubon Ratchathani province. Four hundred and eighty-five participants were recruited using stratified three–stage cluster sampling. Questionnaires were utilized as tools for data collection.

The study results show that 45.2% (95% CI 41% - 50%) of undergraduate students had suicidal ideation in the previous year. Logistic regression analysis revealed a statistically significantly strong association between attitude towards suicide and suicidal ideation. Compared to those with a negative attitude toward suicide, students with low- and high-level attitudes towards suicide were more likely to have suicidal ideation [odds ratio 3.73 (95% CI 1.74 to 8.01) and 26.0 (95% CI 9.69 to 69.77) respectively]. On the contrary, parental bonding was not statistically significantly associated with suicidal ideation.

KEY WORDS: SUICIDAL IDEATION / UNDERGRADUATE STUDENT / ATTITUDE TOWARD SUICIDE / PARENTAL BONDING

77 pages

ความชุกและปัจจัยที่เกี่ยวข้องกับความคิดฆ่าตัวตายของนักศึกษาระดับปริญญาตรี ในมหาวิทยาลัย 2 แห่ง ทางภาคตะวันออกเฉียงเหนือ

PREVALENCE AND RELATED FACTORS OF SUICIDAL IDEATION AMONG UNDERGRADUATE STUDENTS IN TWO UNIVERSITIES IN NORTHEASTERN THAILAND

มนฤดี แสงวงษ์ 5336606 SIEP/M

วท.ม. (วิทยาการระบาด)

คณะกรรมการที่ปรึกษาวิทยานิพนธ์: กมล อุดล, M.D. (Hons), M.Sc. (HEALTH RESEARCH METHODOLOGY), พนม เกตุมาน, M.D., DIP. OF CHILD AND ADOLESCENT PSYCHIATRY, เสาวลักษณ์ ฮุนนางกูร, Ph.D.

บทคัดย่อ

การวิจัยนี้เป็นการศึกษาภาคตัดขวาง เพื่อหาความชุกของความคิดฆ่าตัวตาย และหาความสัมพันธ์ระหว่างความคิดฆ่าตัวตายกับทัศนคติต่อความคิดฆ่าตัวตาย และสัมพันธภาพกับบิดา – มารดา ของนักศึกษาระดับปริญญาตรีในมหาวิทยาลัย 2 แห่ง ของจังหวัดอุบลราชธานี จำนวน 485 คน ซึ่งได้มาจากการสุ่มตัวอย่างแบบ stratified 3 – stage cluster sampling โดยใช้แบบสอบถาม การวิเคราะห์ข้อมูล ใช้สถิติเชิงพรรณา เพื่ออธิบายลักษณะข้อมูลส่วนบุคคล ความชุกของความคิดฆ่าตัวตายและแบ่งกลุ่มระดับความคิดฆ่าตัวตายของกลุ่มตัวอย่าง และใช้ Logistic regression analysis เพื่อบอกระดับความสัมพันธ์ระหว่างทัศนคติต่อการฆ่าตัวตาย สัมพันธภาพกับบิดา – มารดา กับความคิดฆ่าตัวตาย

ผลการศึกษา พบความชุกของความคิดฆ่าตัวตายของนักศึกษาร้อยละ 45.2 (95% CI 41% – 50%) และปัจจัยที่มีความสัมพันธ์กับความคิดฆ่าตัวตาย คือทัศนคติต่อการฆ่าตัวตาย โดยที่นักศึกษาที่มีทัศนคติเป็นบวกอยู่ในระดับต่ำต่อการฆ่าตัวตายจะมีความเสี่ยงที่จะมีความคิดฆ่าตัวตายมากเป็น 3.73 เท่า (odds ratio 3.73, 95% CI 1.74 – 8.01, p = 0.001) และนักศึกษาที่มีทัศนคติเป็นบวกอยู่ในระดับสูงต่อการฆ่าตัวตายจะมีความเสี่ยงที่จะมีความคิดฆ่าตัวตายมากเป็น 26 เท่า (odds ratio 26.0, 95% CI 9.69 – 69.77, p < 0.0001) เมื่อเปรียบเทียบกับนักศึกษาที่มีทัศนคติที่เป็นลบต่อการฆ่าตัวตาย ส่วนสัมพันธภาพกับบิดา – มารดา ไม่มีความสัมพันธ์กับความคิดฆ่าตัวตาย

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CHAPTER I
INTRODUCTION

1.1 Rationale and Background

Suicide has become a major public health problem. Not only the family members and close relatives of those who die of suicide are bereaved and affected by suicide, but the condition also has significant impact on communities and economy of the country (1).

The World Health Organization estimates that approximately 10 – 20 million people attempt suicide and one million people worldwide die of suicide each year. This corresponds to one death from suicide in every 40 seconds. For each person who completes a suicide, 20 or more may attempt to end their lives (2). In the case that this occurs in factories or schools, hundreds of people will be affected (1). By the year 2020, this annual toll of suicide deaths will rise to one and half million. The economic costs of suicide are estimated to be 550 million baht each year (3).

In Thailand, suicidal ideation was the 5th among mental disorders with the highest lifetime prevalence and represented 3.1% of overall mental health problems across the country (4). The impact of suicide on health of Thai population was reported in the Thailand's burden of disease study in 1999. Among the leading conditions associated with the greatest number of years of life lost due to premature mortality (YLL), suicide was ranked the 7th in males and the 14th in females. In terms of the disability-adjusted life years (DALYs), which represent the number of healthy years lost due to both mortality and morbidity, suicide was ranked the 9th in males. For females, it was not listed in the top twenty (5).

In Thailand, the suicide rate per 100,000 populations was 5.9 in 2010, which increased from 5.73 in 2009. Ten provinces have high suicide rate. Lamphun has the highest rates of 20.2 per 100,000 population followed by Chiangrai, Maehongson, Nan, Chiangmai, Chanthaburi, Phrae, Uttaradit, Rayong and Lampang. It is noticeable that the suicide rates were highest in eight provinces located in the

northern region and two provinces in the east (6). The suicide rates were highest in late adolescence and early adulthood (age group of 20 – 39). People at this age range are the main populations who drive nations in terms of development (7). In addition, suicide at this age range certainly affects family members' mental health and quality of life.

Suicide behavior is any action that could cause a person to die. It is a complex phenomenon that usually occurs along a continuum, progressing from suicidal thoughts, to attempting suicide, and finally to dying by suicide (8). Suicidal ideation is the strongest predictor of future death from suicide (9).

Suicidal ideation shows a large variation across countries. The lifetime prevalence of suicidal ideation in the general population is 2%-18% (10). For instance, the prevalence of suicidal ideation in the United States of America was 13.5% (11). It is estimated that in about one-third of people who attempt suicide, there are plan for suicide. The prevalence of suicidal ideation among university students in Australia was 62% (12). In Korea, the two-week prevalence of suicidal ideation was 9.8%, and the lifetime prevalence of attempted suicide was 3.3% (13).

A person who tries to commit suicide takes the first step from suicide idea, followed by attempting suicide and finally committed suicide. The process can be divided into the following steps (14, 15).

Suicide idea ⟶ Attempting suicide ⟶ Committed suicide

1. Suicide idea concerns with the thought that occurs occasionally regarding the idea that one should not live one's life anymore. The person will concentrate on this thought again and again until reaching the state of planning to kill oneself.

2. Attempting suicide concerns with the intention to kill oneself using various methods. The attempt may or may not be successful. This action is not the person's normal habit.

3. Committed suicide is completed suicide resulting in death, which is the direct or indirect outcome of the action of the person who deliberately takes one's own life.

Most of the studies of suicide in Thailand focused on early (approximately 11 through 14 years of age) and middle-adolescence (15 through 18 years), and few studies were community-based (16-19). Studies of suicidal idea among late adolescence (19 through 21 years) are rare. In a survey of health status among first-year students in Ubon Ratchathani University, the prevalence of suicidal ideation was 8.7% (20). In another study to examine anxiety and depression status among students in the Faculty of Dentistry, Chulalongkorn University, 17.5% had suicidal ideation (21). In addition, 66 cases of suicidal attempts among undergraduate students had been reported in newspapers between 2003 and 2008. The attempts were successful resulting in death in 61 cases, 72% males and 28% females. (22).

In Ubon Ratchathani, the suicide rates (per 100,000 population) have increased from 3.40 in 2003 to 3.49 in 2006 and to 3.88 in 2010 (23). There is no study of suicidal ideation in late adolescents who are undergraduate students. Teenagers in this age group are important human resources of the country in the future. The result of one case revealed the complexity of risk factors and causes for suicidal initiation. Final decision to suicide must be based on several reasons (24). Suicidal ideation is the first step leading to completed suicide. This study aims to estimate the prevalence of suicidal ideation and to determine factors related to suicidal ideation, specifically parental bonding and attitude toward suicide, among undergraduate students in Ubon Ratchathani. The result of this study will be the basis for planning prevention programs and for monitoring of suicidal behaviors among undergraduate students in this province.

1.2 Research questions

1. What is the prevalence of suicidal ideation among undergraduate students in Ubon Ratchathani province?

2. Are attitude toward suicide and parental bonding associated with suicidal ideation among undergraduate students in Ubon Ratchathani province?

1.3 Research hypotheses

1. Positive attitude toward suicide is associated with suicidal ideation.
2. Negative parental bonding is associated with suicidal ideation.

1.4 Objectives

1. To determine the prevalence of suicidal ideation among undergraduate students located in Ubon Ratchathani province.

2. To study the relationship between attitude toward suicide, parental bonding and suicidal ideation among undergraduate students located in Ubon Ratchathani province.

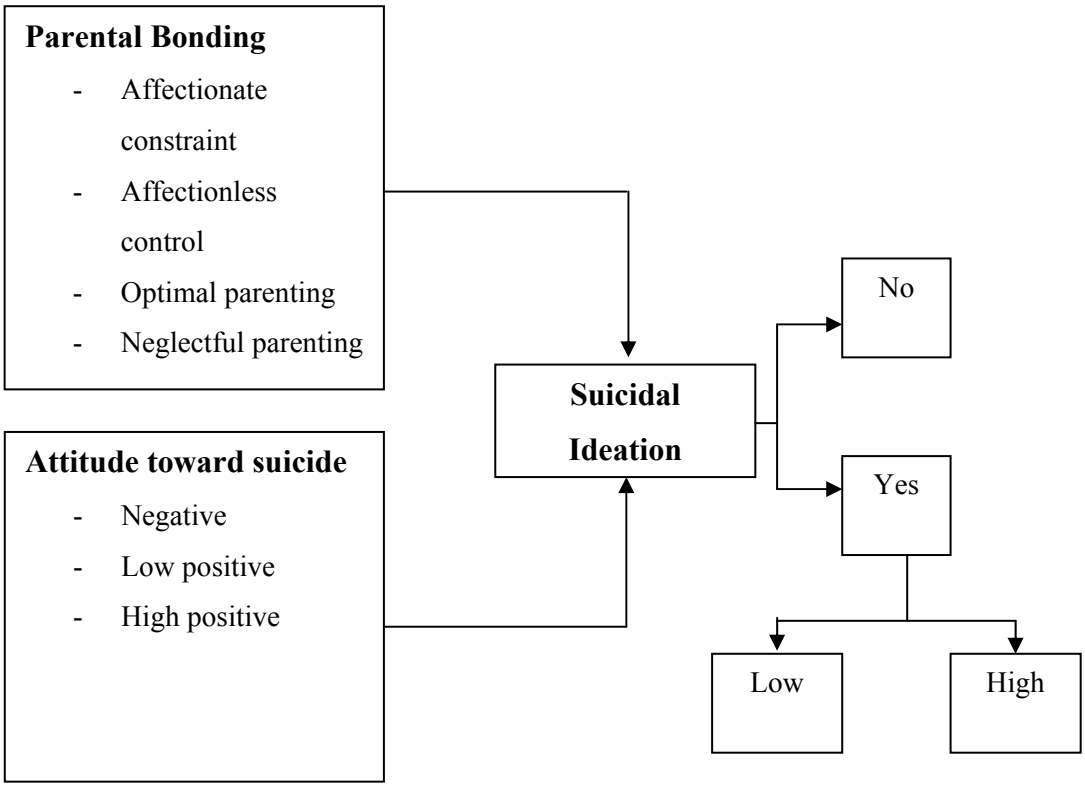

Figure 1.1 Conceptual Framework

1.5 Expected outcome and benefit

The results of this study would be the basis for planning prevention programs and for monitoring of suicide behaviors among undergraduate students located in Ubon Ratchathani province.

CHAPTER II
LITERATURE REVIEW

The following topics are reviewed in this chapter:

2.1 Adolescence

Definition:

Adolescence describes the teenage years during the age of 13 – 19 and can be considered the transitional stage from childhood to adulthood. However the physical and psychological changes that occur in adolescence can start earlier, during the preteen or "tween" years (ages 9 – 12), and the definition of adolescence might extend to the age of 25 years as a person is usually still in the education system before living oneself independently as an adult. Adolescence can be a time of both disorientation and discovery. The transitional period can bring up issues of independence and self-identity. Sometimes adolescents may be experimenting with

drug and alcohol or sexuality. During this time, peer groups and external appearance tend to increase in importance (25).

Adolescence is a critical period of transitions from childhood to adulthood. It is characterized by marked physical, emotional, social and psychological changes. These physical changes represent just a fraction of the developmental processes that adolescents experience (26).

Adolescence is a time of growing up, moving from the immaturity of childhood into the maturity of adulthood. Adolescence is a period of biological, psychological, social, and economic transitions. It is an exciting time of life. Adolescence usually differentiate among three periods: early adolescence (approximately 11 through 14 years of age), middle adolescence (15 through 18), and late adolescence (19 through 21 years). The development of ability to think more capably in hypothetical and abstract terms affects the way adolescents think about themselves, their relationships, and the world around them (27).

2.2 Suicide

2.2.1 Definition

Suicide is the act of deliberately killing oneself (28). The acts of taking one's own life unintentionally, such as mistakenly taking a drug overdose or accidentally shooting oneself are not considered suicide. Self-injury in adolescents, such as cutting their own body as a result of stress, is not a suicide. However, adolescents with self-injury behaviors may eventually progress to committing suicide later (15). Nevertheless, death due to self-injury will be considered a suicide only if there is a clear evidence of an intention to die (29).

Suicide results from a succession of thought and behaviors beginning with suicidal ideation, and followed by suicidal threat, suicide attempt and completed suicide. One or more of these behaviors are predictors of high risk of committing suicide (30).

2.2.2 Adolescence and suicide

Until the last 2 decades, suicide in children and adolescents was rarely reported in medical literature. It has been believed that children and adolescents are not emotionally and intellectually mature enough to think of suicide. Presently, however, the idea and act of suicide can be found in young age groups, although children and adolescents do not clearly understand the meaning and the consequences of suicide (31).

Suicidal ideation and suicide behaviors are rare in pre-adolescents but increase noticeably in adolescents. The rate of suicide attempts among female adolescents is 3 - 7 times higher than that of their male counterpart. Suicidal ideation and suicide attempts are more frequent in adolescents from family with low socioeconomic status. Approximately 30% to 50% of adolescents who attempt suicide truly intend to die or at least do not care whether they will die or not. However, most children and adolescents who attempt suicide feel glad to survive, and deny the actual intention to die. In general, teenagers who attempt suicide may be divided into 2 groups. First are adolescents who are depressed, despondent and desperate. They usually have a strong intention to die and a well-prepared plan to commit suicide. The other group are adolescents without clear depression or desperation, but with adaptation and behavior problems. They may attempt suicide impulsively. Studies found that many teenagers attempting suicide are pessimistic and not flexible in problem solving. They fail to identify various ways of problem solving, and unrealistically expect that the problems disappear by themselves (32).

2.2.3 Suicide behaviors (33)

This can be divided into 3 steps:

1. Suicide idea
2. Suicide attempt
3. Completed suicide

Studies of suicide behavior illustrate 2 groups of subjects. The first group are subjects who injure themselves but fail to die (para - suicide or suicide attempt). The second group are subjects who eventually die of self-injury (completed suicide). These 2 groups are different in some ways. For example, psychiatric illness is more

prevalent in subjects with completed suicide whereas attempted suicide is usually associated with impetuosity.

Statistics of suicide attempt are difficult to determine and are unreliable as they depend on the diagnoses given by attending physicians. Many physicians focus the diagnosis mainly on physical conditions resulting from suicide behavior without mentioning of suicide attempt as the final diagnosis. Statistics of completed suicide, despite being more reliable than those of attempted suicide, are frequently under-reported in most countries. In Thailand, for example, a study found that the reported rate of suicide in Bangkok was, in average, 21.5% lower than the actual rate. Therefore it is more useful to observe the long-term trend of suicide over many years than to focus on data in a particular year (33).

2.2.4 Epidemiology of Suicide in Thailand

In Thailand, the average rate of suicide was 7 per 100,000 population each year. The suicide rates began to increase in 1978 and gradually increased until 1980 to 1981, when it had decreased to the lowest rates in 1986. After 1994 the suicide rates increased again to another peak in 1999 and then began to decline again. In 2007, the suicide rate was 6.0 per 100,000 population (34).

A previous study examining the suicide trend in Thailand according to age and gender reported that the 10-year average suicide rate increased from 6.4 per 100,000 during the decade of 1977 - 1986, to 6.7 per 100,000 during the decade of 1987 – 1996. The rate increased more in male than in female, especially in the age group of 20 – 24 years (21.7 per 100,000 in 1996). In female showed the rate was highest in the age group of 15 - 19 years (6.6 per 100,000 in 1996. The suicide rate was low among the elderly. Hanging was the most commonly used method of suicide in male whereas poisonous substance ingestion was the preferred method in female (35).

The most recently reported rate of suicide in Thailand was 5.9 per 100,000 2010, which represented 10.3 cases per day. The rate was highest in the age group of 20 – 39 years. Provinces with 10 highest suicide rates per 100,000 population included Lamphun (20.2), Chiangrai (15.63), Maehongson (14.45), Nan (13.03), Chiangmai (12.47), Chanthaburi (11.50), Phrae (11.05), Uttaradit (9.94), Rayong (9.85) and

Lampang (9.70). It is noticeable that this list includes 8 provinces in the northern region and 2 provinces in the eastern region of the country (6).

There seems to be seasonal variation in suicide rates in Thailand. During the period of 1996 - 2002, the rates were generally low in the beginning of the year and gradually increased to their peak in April or May and then progressively decreased through the end of the year. The exception of this pattern was in 1997 and 2002, when the rates peaked in July (36).

2.3 Suicidal ideation

Many people experience a flash idea of suicide during extremely stressful situations, during life crises, or when being desolate. have thoughts about how to kill oneself, which occur in stressful life issues, emotional distress, feelings about being reject by a love interest with a friend or think about a new person in whom to become interested (33) .

It has been generally believed that children and adolescents do not experience as many difficulties in life as adults do, and they should not have the idea of suicide. This may result in ignorance of warning signs of suicide when an adolescent is confronting a severely difficult situation and cannot find a solution to the problems.

Common elements usually found in adolescents who have suicidal ideation include (37):

1. A stressful family life.
2. Poor problem solving skills
3. Failure in various aspects of life, especially in school

The prevalence of suicidal ideation among adolescents in different parts of Thailand varies across reported studies, with estimates varying from 8% - 28% (20, 21, 38-41). Suicidal ideation was found to be associated with, unstable financial status of the family, violence in the family, and inappropriate mood expression of parents (38).

2.4 Factors associated with suicidal ideation in adolescents

Determination of factors associated with suicide is very important in order to design strategies to prevent suicide. However, suicide behaviors may still be different even in individuals with similar related factors (19) .

Mental factors

People who have suicidal ideation usually lack self-esteem and have negative attitudes toward their surroundings. They tend to be despondent and depressed. Inadequate life-problem solving skills are also common in these people. People who resolved their problems proactively are less stressful than people avoid facing the problems. Suicide is a way that some people choose to escape from serious problems they cannot resolve (42).

Previous studies found that mental conflicts in daily life may lead to suicide in adolescents. Examples include high expectation by family or peers, feelings of being rejected, loss of love, being lonely, feeling ashamed, felling worthless, feeling inferior to other people, poor emotion, lack of skill for self-control and inability to meet demands of parents or teachers (43-45).

Another mental factor related to committing suicide in adolescents is a need to hurt someone related to them. Adolescents may believe that their death would make their family members or peers sad and recognize their importance. For example, adolescents who feel being rejected by parents may try to commit suicide in order to be accepted after their death (44).

A common factor triggering suicide in adolescents is conflict with other people such as family members or friends. Other triggers include problems in schools, punishment, feeling rejected by friends, being embarrassed, dependence on drugs or alcohol, physical and sexual abuse, loss of loved ones, serious health problems, unwanted pregnancies, and being aware of suicide among closed family members, friends or famous persons. However, no obvious triggers could be determined in about one-third of adolescents who attempted suicide. Many of these adolescents had depression. The rates of depression were 3 to 18 times higher in adolescents who attempted suicide compared to those who did not (32).

There are many family factors associated with suicide in adolescents, such as divorce of parents, absence of parents, having family members with mental disorders, inconsistent discipline in the family, lack of effective communication among family members, child abuse, too high expectations and too much control by parents (32).

Biological/ Medical factors

As many as nine-tenths of people who committed suicide have underlying mental disorders. Depression and alcohol dependence are important disorders associated with suicide. Although depression and alcohol abuse are believed to result from mental, social and environmental factors, studies have found that severe depression or depression accompanied by psychiatric symptoms such as paranoia also have genetic contribution. There are alterations in some biochemical substances in the brains of subjects with depression and alcohol abuse. Depression, especially in severe case or in cases with history of self-injury, contributes about 50% as the cause of suicide. Alcohol dependence contributes about one-fourth of suicide cases, especially among drinkers with problems in health, marriage, work or with legal issues associated with drinking. Mental disorders are major factors associated with suicide. For each particular case of suicide, the cause is usually multifactorial. It is therefore important to understand the interactions between various medical, mental and social factors in order to help and prevent suicide in subjects with suicide thought and behaviors (42).

Sleep deprivation or lack of rest for a long time can result in changes in body and brain functions, hormone and glucose levels, which could affect mental, emotional and behavioral status. Many of these factors are related to suicide (43) .

Decreased levels of serotonin in the brain are associated with suicide. Studies of suicide victims showed low level of serotonin (5-HIAA) in cerebrospinal fluid and in the brain. In addition, low level of serotonin in cerebrospinal fluid is a predictor of suicide behaviors in the future, especially among subjects with depression or with history of previous suicide attempts (46).

Social factors (37)

Social factors that cause stress in teenagers are inappropriate relationship within the family. Lack of effective communication among family members can cause misunderstanding and conflicts. A child may be manipulated as a buffer between parents with chronic family conflicts. Some adolescents have to leave their families too early before they are ready to live independently. Poor relationship or conflicts with friends is another factor causing stress in adolescents. Moreover, self-centered pattern of interpersonal relationships and high competition are currently predominant in the society, causing stress in some teenagers which may lead to suicide.

Adolescents who are prone to suicide usually have a tendency to

1. Have close relationships with just a few people; these relationships tend to be intense and full of passions,
2. Use body action rather than verbal communication to express their emotion,
3. Feel that they cannot control the situation or environment,
4. Be hopeless and be pessimistic about life,
5. Be over reactive to life events, and
6. Be over sensitive.

2.4.1 Interpersonal relationship with parents

Relationship within family is important for child development. Appropriate relationship with parents promotes suitable development in teenagers. When children grow up, experiences from outside of family become gradually more influential than the ones from inside the family, and the importance of parents to adolescents decrease. For example, adolescents prefer to make their own decisions rather than to follow what parents tell them to do. Adolescents do not want parents to put restrictions to their behaviors (47).

Parents usually have childhood experiences that are different from those of their offspring. These differences create a “generation gap”, which is most prominent for adolescents and their parents, and may result in conflicts and misunderstanding between adolescents and parents. Listening and trying to understand each other’s reasons is a way to reduce generation gap and to alleviate the conflicts (48).

Patterns of relationship between parents and children are associated with children's behaviors, personality, development, and maturity. A study in Thailand in 360 youths confined in a detention center due to substance addiction problems reported that 38% had "affectionate constraint" pattern of relationship with their parents, while 18% and 16% had "optimal bonding" relationship with their father and mother respectively. Youths with conduct disorder tend to have weak bonding with parents when compared to those without conduct disorder (49).

Parenting styles can be divided into four patterns: optimal parenting, affectionless control parenting, affectionate constraint parenting and neglectful parenting. Studies found that optimal parenting is associated with the most appropriate development and the least likelihood of deviation from the norm in adolescents. Adolescents with optimal parenting are self-confident, have desirable behaviors and high intelligence and reasoning ability. They can adapt themselves well with the situations, have self-control, and are friendly. Adolescents with affectionate constraint or affectionless control parenting usually have high level of anxiety, lack self-confidence and decision ability, making them dependent on others. They do not adapt well to their environment and society, and lack the ability to evaluate and respond properly to their situations. Adolescents with neglectful parenting have the highest likelihood of behavioral problems and high levels of anxiety (50). An epidemiological study of emotional and behavioral problems among 13,500 children and adolescents aged 6 - 18 in Thailand in 2005 by the Department of Mental Health, Ministry of Public Health of Thailand found that boys usually experienced affectionless control parenting, while girls experienced optimal parenting (48) .

A study in Thailand found that factors associated with suicidal ideation in family members included 1) poor communication and use of inappropriate language in the family, 2) inadequate time given to each other or the lack of opportunity to counsel each other among family members, 3) inappropriate parenting patterns, 4) maladaptation to economic problems and stress, resulting in isolation of family members, and 5) inappropriate role of some of family members, which may cause others to feel worthless (51).

According to the theory of interpersonal relationship, suicide results from instability of relationships. Persons with suicidal ideation lose their relationship, either real or perceived, with others and with their environments (52).

2.4.2 Attitude and Attitude toward suicide

Attitude (53)

Attitude is an important topic of study within the field of sociology and psychology. Attitude and behavior are related to each other.

Psychologists define attitude as a learned tendency to evaluate things in a certain way. Attitude has three components - emotion, cognition and behavior (54).

Attitude develops from 5 conditions:

1. Classical Conditioning:

Consider how advertisers use classical conditioning to influence people's attitude toward a particular product. In a television commercial, the scene of young and beautiful people having fun on a tropical beach while enjoying a sport drink is shown. This attractive and appealing imagery causes people to develop a positive attitude to this particular beverage.

2. Stimulus Generalization:

In conditioning, stimulus generalization is the tendency for the conditioned stimulus to evoke similar responses after the response has been conditioned. For example, if a child has been conditioned to fear a stuffed white rabbit, it will exhibit fear of objects similar to the conditioned stimulus such as a white toy rat.

3. Operant Conditioning:

Operant conditioning can also influence how attitude develops. Imagine a young man who has just started smoking. Whenever he lights up a cigarette, people complain, chastise him and ask him to leave their vicinity. This negative feedback from those around him eventually causes him to develop an unfavorable opinion of smoking and he decides to give up the habit.

4. Observation:

People also develop attitudes by observing others around them, especially those they admire greatly. For example, children spend a great deal of time observing the attitudes of their parents and usually begin to demonstrate similar outlooks.

5. Beliefs Conditioning:

Beliefs can influence the development of attitude. For example, if a child believes that paying respect to a monk will bring happiness, this belief shapes attitude toward monks. Whenever the child sees a monk, he or she will pay respect to the monk.

Attitude development and changes are influenced by 4 main sources.

1. Parents. Parents transfer their beliefs and attitudes to their children either intentionally or unintentionally. A common example is religion practice. Children usually practice the same religion as their parents, although some may change their religion later when they grow up or experience new religion.

2. Other persons influencing a person's life. Apart from parents, other persons may have great influence on a person's attitude. For example, children are closely attached to teachers and friends at school, making them have similar attitudes.

3. Mass media. Any form of mass media such as newspaper, magazines, television, radio, internet, etc., are very influential to the development and changes of attitude in present society.

4. Direct personal experience. A person's direct experience can be a source of attitude development. For example, the improvement of health condition of a patient after trying a herbal medicine will create a positive attitude toward herbal medicine in general for that patient.

Attitude toward suicide

There are several studies of suicide and attitude toward suicide. A study in an audience of 148 persons who attended a lecture on suicide in Thai society found the association between suicidal ideation and attitude toward suicide. Subjects who previously experienced suicidal ideation had negative attitude toward suicide and considered it the way to escape problems, whereas those who were considering suicide viewed that suicide was the solution of the problems (55). Another study in high

school students in a province in northern Thailand found that certain items in the Suicide Opinion Questionnaire were associated with suicidal ideation. These items consisted of "There are some situations in which I might consider suicide", "There are someone situations in which I can understand why people take their own lives" and "People who make suicide attempts do not really want to end their lives-they are just asking for help". In addition the item "Suicide is an option available to people when life becomes too difficult" was associated with suicidal ideation with a higher strength than depression (39). In a study of the prevalence of and factors related to suicide in 229 university students in Bangkok, positive attitude toward suicide was associated with suicidal ideation (41).

People behave in accordance with their attitudes. However, social psychologists have found that attitudes and actual behaviors do not always perfectly align. For example, many people support a particular candidate or political party and yet fail to go out and vote. If the cause-effect relationship between attitude and behaviors is clearly demonstrated, it will be useful. For example, attitude toward suicide can be determined and risk of suicide evaluated, which can lead to appropriate actions for suicide prevention (53).

2.4.3 Other factors associated with suicide

Gender: Studies in western countries showed that most of subjects who attempted were females, with the male to female ratio of 1:4. However, the ratio of male to female in subjects who completed suicide was 3:1. In general attempted suicide was 10 – 20 times more prevalent than completed suicide. A study in Thailand found higher rates of suicide in males than that in females in every age group. In males the highest suicide rate was in the age group of 20 – 24 years old. In females it was in the age group of 15 – 19 years old. It is interesting that, male to female ratio of suicide subjects in Thailand is higher than that in other Asian countries such as China, Japan, Hong-kong and Singapore (33).

In a systematic review on the prevalence of suicide, the prevalence was higher in female in 88 out of 128 studies. The prevalences of suicidal ideation and suicide were at least 1.25 times higher in females than in males (56).

Age: Self-injury was prevalent in adolescents and early adults. In Western countries females aged 15 – 24 and males aged 25 – 34 were frequently admitted into hospitals for the treatment of self-injury (34). A study in Thailand showed high suicide rate in male aged 20 – 24 and in female 15 – 19, which was different from Western countries where suicide rate was high in the elderly (35). In Danes aged 16 – 35, proportions of subjects prone to suicide decreased with increasing age (57).

Exposure to the suicidal behavior of peers or family members: Many studies demonstrated the association between exposure to suicidal behavior of close friends or family members and suicidal ideation. In a study of 396 teenagers in Bangkok, the prevalence of suicidal ideation was significantly higher in adolescents with history of suicide in family members compared to those without (17). The loss of love or of someone loved within 6 - 12 months is a marker of high risk of (58).

Physical or mental illness: Several studies about risk factors of suicide demonstrated that one of the important risk factors was the presence of physical or mental illness. Almost 80% of adolescents who attempted suicide had mental disorders. The presence of mental disorders increased risk of suicide by 9 folds (34). A study from Rajanagarindra Institute of Mental Health in Children and Adolescents found that a major risk factor for suicide was suffering from chronic diseases such as cancer, stroke, AIDS or psychiatric disorders, which was mostly depression (37).

Living arrangement: A study of factors associated with suicidal ideation in adolescents in Bangkok showed that students who lived with both parents had the lowest prevalence of suicidal ideation when compared to those who lived with others (17).

People who attempt or commit suicide may show some warning signs before a suicide attempt. In a survey in the United States of America, about two-thirds of people who completed suicide previously talked about the idea of suicide, and more than one-third took some actions that clearly demonstrate their intention to commit suicide, such as searching the information on suicide in the internet or buying a gun. These warning signs were usually sent out to more than one person. Although these data cannot be directly applied in Thailand because of social and cultural differences, the following points are learnt from previous studies.

- Many people who attempt suicide suffer some mental disorders, which could potentially be treated.

- Many people who attempt suicide send out warning signs as a cry for help before their suicide, such as visiting a health care professional. This represents an opportunity to design appropriate measures for suicide prevention (59).

The followings are important markers or warning signs of suicide.

1. Isolation
2. Family history of suicide
3. Previous suicide attempts
4. Talking about going away or the need to "get my affairs in order" or giving away possessions
5. Having trouble concentrating or thinking clearly
6. Drug or alcohol dependence
7. Suffering with disease and sleepless
8. Talking about the willing to die
9. Stressful life issues, such as serious financial problems, sudden loss of someone loved, acute and severe physical illness or disability
10. Unstable emotion, especially overly relaxed after a long-lasting stress or depression, which may indicate an obvious intention to die

2.5 Beliefs and Facts about suicide

There are many misunderstandings about suicide such as "Asking people about suicide will encourage suicide attempts", or "People with strong intention to die will not mention their intention". These beliefs may prevent a person who is considering suicide from getting the help he or she needs (55).

Rajanagarindra Institute of Mental Health in Children and Adolescents described beliefs and facts about suicide as follows (59, 60).

Beliefs	Facts
1. People who talk about suicide do not commit suicide.	1. People who eventually kill themselves give some hint as a cry for help ahead of time.
2. People considering suicide strongly want to die.	2. People considering suicide usually hesitate between living and dying. They can change their mind right up to the minute before committing suicide.
3. People who commit suicide usually have depression.	3. Many people who commit suicide do not have depression.
4. Suicide has genetic contribution as it can be repeated in a family.	4. Suicide does not have genetic contribution but depression does. Repeated suicide in a family may be the issue of imitation.
5. Asking adolescents about suicide will encourage suicide attempts.	5. Asking adolescents about suicide can help. Adolescents contemplating suicide may be relieved after open communication about suicide and change their mind.
6. People who commit suicide have mental illness.	6. The word “mental illness” is obscure. A retrospective study in person who committed suicide found that some had major depression or a psychiatric disorder. Others experienced the mixture of depression and anxiety, which may be temporary or chronic.
7. Suicide is a call for attention.	7. Suicide is a call for help.
8. Women contemplating suicide do not intend to die.	8. Although more women attempt suicide than men yet fewer are successful, it cannot be concluded that women attempting suicide do not intend to die.

Beliefs	Facts
9. People who have previous nonfatal suicide attempt usually fail to die again in the next suicide attempt.	9. People who survive previous suicide attempt are at high risk of completed suicide on the next attempt.
10. Children aged 12 - 15 years are still too young to consider suicide.	10. Data have shown that many persons who completed suicide are teenagers and this trend is increasing.
11. Person who have risky behaviors do not think about dying.	11. Although risky behaviors may cause accidents, it cannot be concluded that people with risky behaviors are not contemplating suicide.
12. Problems that teenagers face are not severe enough to lead to suicide.	12. The severity of problems teenagers are facing can be similar to those in adults.
13. Only adolescents in low socioeconomic class commit suicide.	13. Adolescents in any socioeconomic class can commit suicide.

CHAPTER III
MATERIALS AND METHODS

3.1 Research design

This study is a cross-sectional study aims to determine the prevalence of suicidal ideation and the relationship between attitude toward suicide, parental bonding and suicidal ideation among undergraduate students located in Ubon Ratchathani province.

3.2 Study population

The study population consisted of undergraduate students who were studying in Rajabhat University and Ubon Ratchathani University located in Ubon Ratchathani, in the academic year of 2012.

Inclusion criteria

Undergraduate students who were studying in the 1st to the 4th year in Rajabhat University and Ubon Ratchathani University located in Ubon Ratchathani in the academic year of 2012 and accept to participate in the study.

3.3 Sampling technique

Sample size

A previous study which aimed to examine prevalence of suicidal ideation and its related factors among 229 university students in Bangkok revealed that the prevalence of suicidal ideation was 9.6% (41). In this study the prevalence of suicidal ideation among undergraduate students was estimated at 10% and the width of the

95% confidence interval (CI) of the estimate was limited at ± 3%. The sample size formula is (61) :

$$n = \frac{Z^2_{\alpha/2}\, P\,(1- P)}{d^2}$$

Where, n = Estimated sample size

P = Proportion of the suicidal ideation among undergraduate students = 0.1

d = Margin of error in estimating proportion of suicidal ideation = 0.03

α = Probability Type I error = 0.05 (2-sides)

$Z_{\alpha/2} = 1.96$

Thus, $n = \frac{(1.96)^2\,(0.1)(0.9)}{(0.03)^2}$

$n = 384.16 \approx 385$

With the expected rate of incomplete data of 20%, the study planned to recruite 480 undergraduate students.

The undergraduate students from the 2 universities in Ubon Ratchathani were selected using a stratified 3 – stage cluster sampling technique. The sampling process was carried out in 3 stages (see figure 3.1)

Stage 1 Each university represented a stratum. Three faculties were randomly selected for each university.

Stage 2 In each faculty, one major program were randomly selected for each year (year 1, 2, 3, and 4).

Stage 3 In each year/major program, 20 students were randomly selected.

If the students in a particular year/major program were below 20, the sample will be randomly selected from other year in that major program.

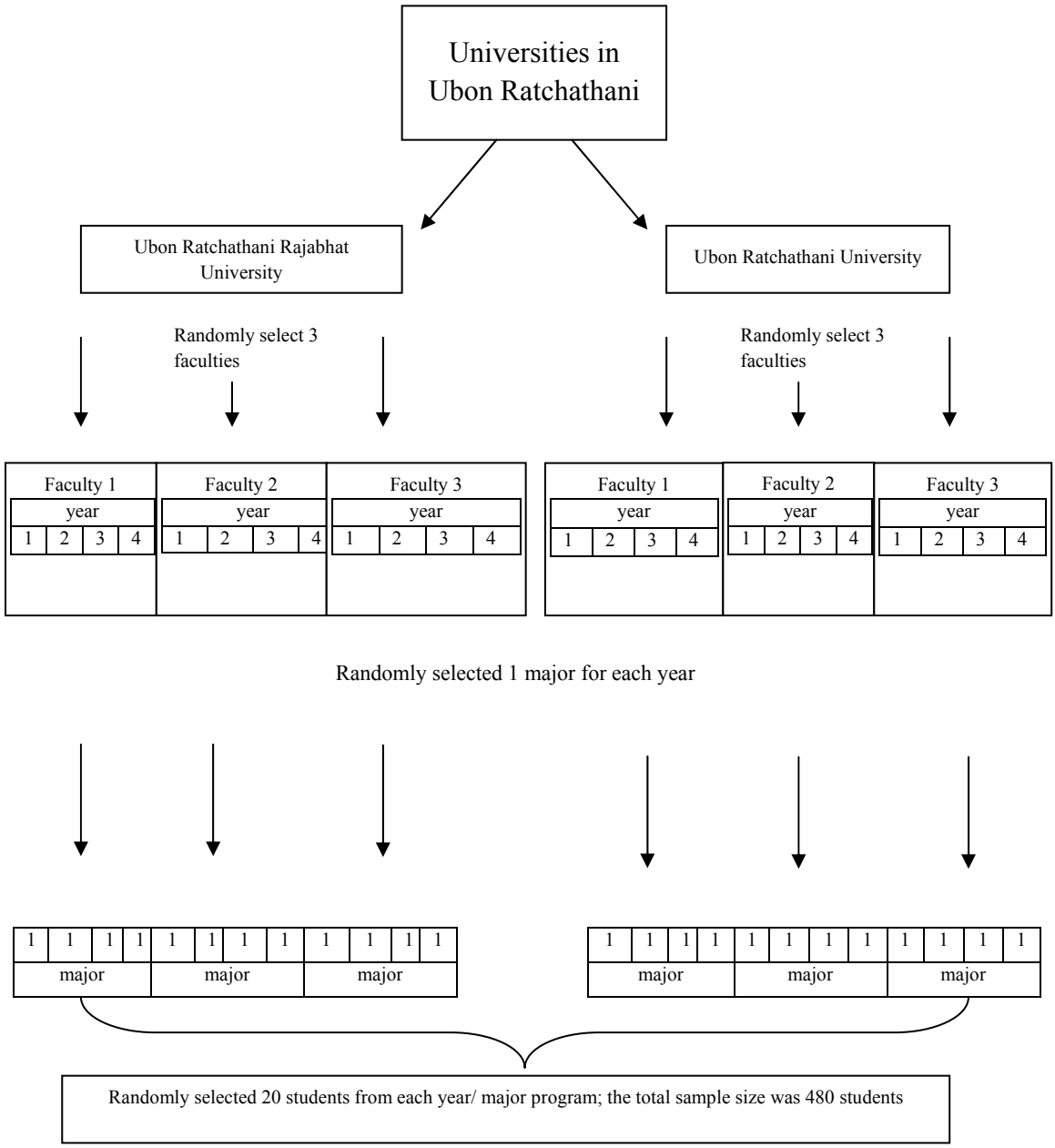

Figure 3.1 Diagram of sampling process

3.4 Data collection period

The data were collected between 31 July and 11 August, 2012.

3.5 Research Instruments

The instruments used for this study are the questionnaires which comprise 4 parts:

Part I: Demographic characteristics

Information regarding demographic characteristics obtained includes gender, age, year of studying, university etc. It comprises 17 items with fill in the blank and tick in the appropriate box ☑ in multiple choices (see appendix).

Part II: Information of suicide (see appendix)

Information regarding suicidal ideation was determined by the modified Suicidal Ideation Scale developed by Rudd (12, 62, 63). This instrument was translated into Thai language by Amornrat Supamat (19). This questionnaire of suicidal ideation assessment consists of 10 items, specifically designed for the purpose of assessing the severity or intensity of suicidal ideation via a self-report. It is a Likert-type scale. For items 1, 3, 4, 5, 6, 7, 9 and 10, which describe suicidal thoughts or behavior, the score ranges from 0 (never or none of the time) to 4 (always or a great many times). For item 2 and 8, the score can be either 0 (never), 2 ("yes, once") or 4 ("yes, two or more"), depending on how often the subject has felt or behaved that way during the past year (12, 62, 63).

Suicidal Ideation Scale, depending on how often the subject has felt or behaved that way during the past year

1. I feel life just isn't worth living.

0	1	2	3	4
Never or none of the time				Always or a great many times

---

2. I have made attempt to kill myself.

4	2	0
Yes (Two or more)	Yes (Once)	Never

---

3. Life is so bad I feel like giving up.

0	1	2	3	4
Never or none of the time				Always or a great many times

---

4. I believe my life will end in suicide.

0	1	2	3	4
Never or none of the time				Always or a great many times

---

5. I just wish my life would end.

0	1	2	3	4
Never or none of the time				Always or a great many times

---

6. I have told someone I want to kill myself.

0	1	2	3	4
Never or none of the time				Always or a great many times

---

7. I have been thinking of way to kill myself.

0	1	2	3	4
Never or none of the time				Always or a great many times

---

8. I have come close to taking to my own life.

4	2	0
Yes (Two or more)	Yes (Once)	Never

---

9. It would be better for everyone involved if I were to die.

0 1 2 3 4

Never or none of the time Always or a great many times

---

10. I feel there is no solution to my problems other than taking my own life.

0 1 2 3 4

Never or none of the time Always or a great many times

Based on the responses to the questionnaire, subjects can be differentiated into five exclusive categories as follows (12, 62, 63):

Category	Description	Condition
0	No suicidal ideation or behavior	No positive responses on any items
1	Minimal level of suicidal ideation	Positive responses to either items 1 and/or 3 and negative responses to all other items
2	High level of suicidal ideation	Positive responses to item 5 and/or 7 and negative responses to items 2, 6 and 8
3	Suicide-related behavior	Positive responses to items 6 and/or 8 and negative response to item 2
4	Reported suicidal attempt	Positive responses to item 2

If the response cannot be straightforwardly assigned to any specific category, i.e. the response to question 1 and 5 are positive, whereas perverse answers are replied to the rest of questions, the response will be identified as a category-2 answer, according to a worst score it has been replied (12, 62, 63).

Measurement properties of the Instrument

The Suicidal Ideation Scale (SIS) was shown to have a good internal consistency (62, 63). In a group of college students aged 16 – 30 years, of which 93% were less than 22 years old, who received credit toward completion of an introductory

psychology course, the SIS had a high level of internal consistency (Cronbach's alpha coefficient = 0.86) as well as adequate item-total correlations (r = 0.45 - 0.74). Concerning validity of the scale, the SIS was moderately correlated with the Center for Epidemiologic Studies - Depression scale (r = 0.55) and with the Beck Hopelessness Scale (r = 0.49). Students who had attempted suicide scored higher than students who had not done so.

The modified Suicidal Ideation Scale was translated into Thai language by Amornrat Supamat and was shown to have acceptable internal consistency. In a study among senior high school students grade 11 in Bangkok, the Cronbach's alpha coefficient was 0.88 and the item-total correlations were between 0.44 and 0.84 (19).

Part III: Attitude toward suicide

Attitude toward suicide was determined by the Suicide Opinion Questionnaire (64, 65) This questionnaire was translated into Thai language by Preeyaprat Treepravat (39). It consists of 10 self-report items that assess the attitudes about suicide. Each item is rated on a Likert scale ranging from "Strongly agree" to "Strongly disagree". For items 1, 2, 5, 8, and 9, positive responses ("strongly agree" and "agree") are scored 0 and negative responses ("strongly disagree" and "disagree" are scored 1. For other items the scoring system is reversed. This gave a total score which could theoretically range from 0 (extremely conservative) to 10 (extremely liberal) (66) (see appendix). Subjects were categorized according to their total scores as follows (67):

Attitude toward suicide

Items	Strongly agree	Agree	Disagree	Strongly disagree
1. No matter how bad things are they are never bad enough for suicide				
2. Suicide is a sin				
3. I am in favour of euthanasia (mercy killing) under certain circumstances				
4. There are some situations in which I might consider suicide				
5. Suicide is unacceptable to me because of my religious beliefs				
6. There are someone situations in which I can understand why people take their own lives				
7. Suicide is an option available to people when life becomes too difficult				
8. People who make suicide attempts do not really want to end their lives-they are just asking for help				
9. People who want to take their own lives should be stopped from doing so at all costs				
10. Suicide is justifiable under certain circumstances				

0 – 2.67	Negative attitude toward suicide
2.68 – 5.33	Low positive attitude toward suicide
> 5.34	High positive attitude toward suicide

Measurement properties of the Instrument

The internal consistency of the questionnaire was low (Cronbach's alpha coefficient = 0.41) (64, 65) In a study among Thai high school students, the Cronbach's alpha coefficient was 0.56 (39).

The Suicide Opinion Questionnaire (SOQ) has been administered using a wide variety of national and international samples. In addition, it has also been used in high school students, college students and graduate students. The estimates of test-retest reliability range from 0.73 to 0.96. The SOQ was significantly correlated with the Suicide Potential Rating Scale in mental health professionals. In a study of undergraduate college students, Limbacher and Domino reported that the SOQ could discriminate students who had contemplated or attempted suicide from those who had not (66).

Part IV: Relationship with Parents

Relationship with parents was assessed using Parental Bonding Instrument (PBI) (68), which was translated into Thai language by the Department of Mental Health, Ministry of Public Health, Thailand (48). The instrument comprises two scales termed "care" and "overprotection or control". It was designed to measure fundamental parental styles as perceived by the child. The measure is retrospective, meaning that adults (over 16 years) complete the measure for how they remember their parents during their first 16 years. The measure is to be completed for both mothers and fathers separately. There are 25 self-report items, including 12 "care" items and 13 "overprotection" items (68). Each item is rated on a Likert scale as "Very unlike", "Moderately like", "Like" and "Very like".

Parental Bonding Instrument

4.1 Attitudes and behavior of Father	Very unlike	Moderately like	Like	Very like
1. Spoke to me in a warm and friendly voice				
2. Did not help me as much as I needed				
3. Let me do those things I liked doing				
4. Seemed emotionally cold to me				
5. Appeared to understand my problems and worries				
6. Was affectionate to me				
7. Like me to make my own decisions				
8. Did not want me to grow up				
9. Tried to control everything I did				
10. Invaded my privacy				
11. Enjoyed talking thing over with me				
12. Frequently smiled at me				
13. Tended to baby me				
14. Did not seem to understand what I needed or wanted				
15. Let me decide things for myself				
16. Made me feel I wasn't wanted				
17. Could make me feel better when I was upset				
18. Did not talk with me very much				
19. Tried to make me feel dependent on her/him				
20. Felt I could not look after myself unless she/he was around				
21. Gave me as much freedom as I wanted				

4.1 Attitudes and behavior of Father	Very unlike	Moderately like	Like	Very like
22. Let me go out as often as I wanted				
23. Was overprotective of me				
24. Did not praise me				
25. Let me dress in any way I pleased				

4.2 Attitudes and behavior of Mother	Very unlike	Moderately like	Like	Very like
1. Spoke to me in a warm and friendly voice				
2. Did not help me as much as I needed				
3. Let me do those things I liked doing				
4. Seemed emotionally cold to me				
5. Appeared to understand my problems and worries				
6. Was affectionate to me				
7. Like me to make my own decisions				
8. Did not want me to grow up				
9. Tried to control everything I did				
10. Invaded my privacy				
11. Enjoyed talking thing over with me				
12. Frequently smiled at me				
13. Tended to baby me				
14. Did not seem to understand what I needed or wanted				
15. Let me decide things for myself				
16. Made me feel I wasn't wanted				
17. Could make me feel better when I was upset				

4.2 Attitudes and behavior of Mother	Very unlike	Moderately like	Like	Very like
18. Did not talk with me very much				
19. Tried to make me feel dependent on her/him				
20. Felt I could not look after myself unless she/he was around				
21. Gave me as much freedom as I wanted				
22. Let me go out as often as I wanted				
23. Was overprotective of me				
24. Did not praise me				
25. Let me dress in any way I pleased				

Scoring instructions can be divided into 2 groups (48, 68) as follows:

Care	Overprotection	Score
Items 1, 5, 6, 11, 12, 17	Items 8, 9, 10, 13, 19, 20, 23	Very like = 3 Like = 2 Moderately like = 1 Very unlike = 0
Items 2, 4, 14, 16, 18, 24	Items 3, 7, 15, 21, 22, 25	Very like = 0 Like = 1 Moderately like = 2 Very unlike = 3

This gave total scored 12 “care” items were 36 and 39 for 13 “overprotection” items. Assign to “high; equal or higher than mean score” or “low; lower than mean score” categories is based on those means the following cut-off scores (48, 68):

- For mothers, a care score of 27.0 and a protection score of 13.5.
- For fathers, a care score of 24.0 and a protection score of 12.5.

In addition to generating care and protection scores for each scale, parents can be effectively "assigned" to one of four quadrants (48, 68):

1. "Affectionate constraint" = high care and high protection
2. "Affectionless control" = low care and high protection
3. "Optimal parenting" = high care and low protection
4. "Neglectful parenting" = low care and low protection

Measurement of Instrument

The PBI possessed good internal consistency, split-half reliability was 0.88 for the care items and 0.74 for the overprotection items and test-reliability agreement was 0.76 for care items and 0.63 for overprotection items, over a three-week interval (48, 68).

3.6 Data collection

This study was approved by the Siriraj Institutional Review Board, Mahidol University (see appendix).

Data collection was from undergraduate students by self-report questionnaires. The study was conducted in the following steps:

1. The researcher contacted the Presidents of Ubon Ratchathani Rajabhat University and Ubon Ratchathani University to describe aims of the study and to ask for permission to collect data. In addition, the researcher contacted guidance teachers and classroom advisor to help coordinate data collection.

2. The researcher introduced and explained to the undergraduate students about the broad aims of the study. Before the administration of the questionnaires, participants were informed of the consent form and participants information sheet.

3. Returned questionnaires were checked for completeness and prepared for data analysis.

3.7 Data Analysis

Data Analysis

1. The prevalence of suicidal ideation was expressed as the number, percentage and 95% CI.

2. The demographic characteristics were described using descriptive statistic, where:

- Qualitative data such as gender, university, close relative loss, illness, living arrangement, parental marital status, father's-mother's education, father's-mother's occupation and family suicidal history were expressed as frequency and percentage.

- Quantitative data such as age, grade point average and income were presented as mean (SD).

3. The categories of suicidal ideations were described with descriptive statistic such as frequency and percentage.

4. To examine the factors associated with suicidal ideation, the following statistical techniques were followed:

4.1 The relationship between demographic characteristics and suicidal ideation categories: Chi-square test or Fisher exact test

4.2 Comparing mean attitude toward suicide score: 1- way ANOVA test with post-hoc Bonferroni test

4.3 The relationship between parental bonding and suicidal ideation (yes/ no): Chi-square test or Fisher exact test

5. To determine the strength of association between parental bonding, attitude toward suicide and suicidal ideation (yes/ no): Logistic regression

Logistic regression was used to control potential confounders. The factors used in the multivariate analysis were the ones with significant association with suicidal ideation in the univariate analysis.

CHAPTER IV
RESULTS

The results of this study are presented as follows:

4.1 Demographic characteristics of the study subjects

4.2 Prevalence and levels of suicidal ideation

4.3 Attitude toward suicide

4.4 Parental bonding

4.5 The relationship between factors and suicidal ideation

4.6 The strength of association between attitude toward suicide, parental bonding and suicidal ideation

4.1 Demographic characteristics of the study subjects

This study comprises 485 undergraduate students, 245 students from Ubon Ratchathani Rajabhat University (Faculty of Humanities and Social Sciences, Faculty of Public Health and Faculty of Computer Science [Project Initiative]), and 240 students from Ubon Ratchathani University (Faculty of Engineering, Faculty of Agriculture and Faculty of Management Science). The demographic characteristics of study subjects are shown in table 4.1. Most are female (80.8%). The mean (SD) age was 20.2 (1.2) years, with age range between 18 and 24 years. The mean (SD) grade point average was 2.79 (0.42). Most undergraduate students had the grade point average between 2.00 and 2.99. The mean (SD) income per month from their parents or guardian was 4,808.99 (2,873.95) baht. About 30% of the students lived with their parents, 28% living alone, and 26% with their friends. About one-third of the students had a history of loss of a close person within the previous year, mostly the loss of close relatives. Only 1% of the students reported exposure to the suicide behavior of peers or family members. History of self-reported diseases in previous year, mainly anxiety and depression, was present in 11.1% of the students. Some students (13.6%)

reported dependence on drug or alcohol, mostly alcohol (12.4%). The most common marital status of the parents was married/couple. More than half of students' parents (54.0% in father and 62.4% in mother) had elementary level of education. Approximately 60% of the students' parents work in agricultural sector.

Table 4.1 Demographic characteristic of 485 undergraduate students

Characteristics	Number	Percentage
Gender		
Female	392	80.8
Male	93	19.2
Age		
Mean (SD) = 20.24 (1.25), Min-max = 18-24		
Grade point average		
Mean (SD) = 2.79 (0.42), Min-max = 1.58 – 4.00		
Income per month from parents or guardians		
Mean (SD) = 4,808.99 (2,873.95), Min-max = 1,000- 30,000		
Year of study		
1st year	86	17.7
2nd year	148	30.5
3rd year	110	22.7
4th year	141	29.1
University		
Ubon Ratchathani Rajabhat University	245	50.5
Ubon Ratchathani University	240	49.5
Living arrangement		
Father and mother	144	29.7
Alone	136	28.0
Friends	127	26.2
Relatives	32	6.6
Father or mother	29	6.0
Others	17	3.5

Table 4.1 Demographic characteristics of 485 undergraduate students (cont.)

Characteristics	Number	Percentage
History of loss of close persons in the previous year		
No	**327**	**67.4**
Yes	**158**	**32.6**
Relatives	112	23.1
Friends	10	2.1
Father	8	1.6
Others	28	5.8
Exposure to the suicide behavior of peers or family members in the previous year		
No	**480**	**99.0**
Yes	**5**	**1.0**
Relatives	3	0.6
Others (guardian, friend)	2	0.4
History of self-reported disease in the previous year		
No	**431**	**88.9**
Yes	**54**	**11.1**
Depression and anxiety	18	3.7
Anxiety	15	3.1
Depression	14	2.9
Dependence on drugs or alcohol		
No	**419**	**86.4**
Yes	**66**	**13.6**
Alcohol	60	12.4
Antidepressant	4	0.8
Others	2	0.4

Table 4.1 Demographic characteristics of 485 undergraduate students (cont.)

Characteristics	Number	Percentage
Parental marital status		
Married/ Couple	399	83.1
Divorced/ Separate	43	9.0
Widowed	38	7.9
Father's education		
Illiterate	2	0.4
Elementary education	262	54.0
Secondary/ High school education	140	28.9
Diploma/ Bachelor's degree	70	14.4
Master's degree/ Doctorate	11	2.3
Mother's education		
Illiterate	2	0.4
Elementary education	302	62.4
Secondary/ High school education	115	23.8
Diploma/ Bachelor's degree	62	12.8
Master's degree/ Doctorate	3	0.6
Father's occupation		
Agriculture	291	60.2
Government Officer/ State Enterprise Officer	74	15.3
Self-employed	58	12.0
Employee	56	11.6
Unemployed	4	0.8
Mother's occupation		
Agriculture	306	63.4
Self-employed	71	14.7
Employee	47	9.7
Government Officer/ State Enterprise Officer	40	8.3
Unemployed	19	3.9

4.2 Prevalence and levels of suicidal ideation

The prevalence of suicidal ideation, as determined by a positive answer to any item on the Suicidal Ideation Scale, among undergraduate students in this study was 45.2% (95% CI 41% to 50%). While 23.9% (95% CI 20% to 28%) of the subjects had minimal level of suicidal ideation, 11.8% (95% CI 9% to 15%) of them had high level of suicidal ideation. In addition, 9.3% (95% CI 7% to 12%) of these students had suicide-related behavior, and only 0.2% (95% CI 0% to 1%) reported previous suicide attempt.

Table 4.2 Prevalence and level of suicidal ideation among 485 undergraduate students

Suicidal ideation level	Number (n = 485)	Percentage	95% CI
No	**266**	**54.8**	50 – 59
Yes	**219**	**45.2**	41 – 50
1: Minimal level of suicide ideation	116	23.9	20 – 28
2: High level of suicide ideation	57	11.8	9 – 15
3: Suicide-related behavior	45	9.3	7 – 12
4: Reported suicide attempt	1	0.2	0 – 1

4.3 Attitude toward suicide

Table 4.3 shows the percentage of the undergraduate students who agreed with each response for each item of the Suicide Opinion Questionnaire. There are 2 items in which more than 50% of the subjects responded with positive attitude toward suicide; 67.9% agreed with “there are some situations in which I can understand why people take their own lives” and 52.5% disagreed with “people who make suicide attempts do not really want to end their lives – they are just asking for help”.

Table 4.4 shows percentage and 95% CI of 485 undergraduate student’s attitude. The percentage for negative attitude toward suicide was 28.7% (95% CI 25% to 33%), and the figure for positive attitude toward suicide was 71.3% (95% CI 67% to

75%). For those who had positive attitude toward suicide, 62.1% (95% CI 57% to 66%) had low positive attitude toward suicide, and 9.2% (95% CI 7% to 12%) had high positive attitude toward suicide.

Table 4.3 Percentage of response for each item of the Suicide Opinion Questionnaire

Attitude toward suicide (n = 485)	Percentage			
	Strongly agree	Agree	Disagree	Strongly disagree
1. No matter how bad things are they are never bad enough for suicide	80.8	16.5	0.4	2.3
2. Suicide is a sin	88.5	10.7	0.6	0.2
3. I am in favour of euthanasia (mercy killing) under certain circumstances	8.5	22.9	35.9	32.8
4. There are some situations in which I might consider suicide	1.4	10.1	27.8	60.6
5. Suicide is unacceptable to me because of my religious beliefs	41.2	37.7	11.3	9.7
6. There are some situations in which I can understand why people take their own lives	12.2	55.7	20.0	12.2
7. Suicide is an option available to people when life becomes too difficult	2.9	10.9	33.8	52.4
8. People who make suicide attempts don't really want to end their lives- they are just asking for help	8.9	38.6	34.8	17.7
9. People who want to take their own lives should be stopped from doing so at all cost	31.1	48.2	14.2	6.4
10. Suicide is justifiable under certain circumstances	1.2	12.0	38.1	48.7

Table 4.4 The number and percentage of attitude toward suicide of 485 undergraduate students

Attitude toward suicide	Number (n = 485)	Percentage	95% CI
Negative	139	28.7	25 – 33
Low positive attitude	301	62.1	57 – 66
High positive attitude	45	9.2	7 – 12

4.4 Parental bonding

The majority of students had "affectionless control" type of parental bonding with their parents. The percentage of "affectionless control" was 83.0% (95% CI 79% to 86%) for father and 93.8% (95% CI 91% to 96%) for mother. On the contrary, "optimal parenting" was not found in any student, either for father or mother (Table 4.5 - 4.6).

Table 4.5 Relationship between Father and undergraduate students

Father bonding (n = 478)	Number	Percentage	95% CI
Affectionless control	397	83.0	79 – 86
Affectionate constraint	75	15.7	13 – 19
Neglectful parenting	6	1.3	1 – 3
Optimal parenting	-	-	-

Table 4.6 Relationship between Mother and undergraduate students

Mother bonding (n = 480)	Number	Percentage	95% CI
Affectionless control	450	93.8	91 – 96
Affectionate constraint	3	0.6	0 – 2
Neglectful parenting	27	5.6	4 – 8
Optimal parenting	-	-	-

4.5 The relationship between factors and suicidal ideation

Table 4.7 shows the association between demographic characteristics and suicidal ideation. Factors associated with suicidal ideation were grade point average ($p = 0.009$), year of study ($p = 0.026$), income per month from parents or guardians ($p = 0.034$), history of self-reported disease within 1 year ($p = 0.014$) and dependence on drugs or alcohol ($p < 0.0001$). On the contrary, gender ($p = 0.486$), age ($p = 0.784$), university ($p = 0.802$), living arrangement ($p = 0.306$), history of loss of close persons in the previous year ($p = 0.365$), exposure to the suicide behavior of peers or family members in the previous year ($p = 0.284$), parental marital status ($p = 0.144$), father's education ($p = 0.133$), mother's education ($p = 0.709$), father's occupation ($p = 0.875$) and mother's occupation ($p = 0.440$) were not statistically significantly associated with suicidal ideation.

Table 4.8 shows the association between attitude toward suicide score and levels of suicidal ideation. Attitude toward suicide score appeared as a highly significant factor for discriminating undergraduate students on suicidal ideation level ($F(3, 481) = 33.19$, $p < 0.0001$). There was a significant linear trend, ($F(1,481) = 57.40$, $p < 0.0001$), indicating that as the mean attitude toward suicide score increased, level of suicidal ideation increased proportionately. Multiple comparisons between mean attitude toward suicide scores in 4 levels found that the mean score of students who had no suicidal ideation significantly differed from that of students with high level of suicidal ideation ($p < 0.0001$) and that of students with suicide related behavior or reported suicide attempt ($p < 0.0001$). In addition, the mean score of students with minimal level of suicidal ideation differed significantly from that of students with high level of suicidal ideation ($p < 0.0001$) and suicide related behavior or reported suicide attempt ($p = 0.001$) (Post-hoc Bonferroni test, at the 0.05 level).

In terms of the categories of attitude toward suicide (negative, low positive, high positive), it was also associated with suicidal ideation ($p < 0.0001$) (Table 4.9).

Suicidal ideation was not significantly associated with parental bonding (father bonding $p = 0.618$, mother bonding $p = 0.590$). However, the highest proportion of parenting pattern was "affectionless control" for both father and mother (Table 4.10).

Table 4.7 The relationship between demographic characteristics and suicidal ideation of 485 undergraduate students

Characteristics	Suicidal ideation, n (%)		Crude OR (95%CI)	p-value
	No	Yes		
Gender				**0.486**
Female	218 (55.6)	174 (44.4)	0.85 (0.54 - 1.34)	0.486
Male	48 (51.6)	45 (48.4)	Reference	-
Age				**0.784**
18 – 19 years	83 (56.5)	64 (43.5)	Reference	-
20 – 21 years	130 (53.3)	114 (46.7)	1.13 (0.75 – 1.71)	0.540
22 – 23 years	53 (56.4)	41 (43.6)	1.00 (0.60 – 1.69)	0.990
Grade point average				**0.009**
1.00 – 1.99	1 (25.0)	3 (75.0)	5.47 (0.55–53.95)	0.146
2.00 – 2.99	151 (50.2)	150 (49.8)	1.81 (1.20 – 2.73)	0.004
3.00 – 4.00	93 (64.6)	51 (35.4)	Reference	-
Income per month from parents orguardians				**0.034**
<= 5,000	195 (57.9)	142 (42.1)	1.67 (0.43 – 6.68)	0.448
5,001 – 10,000	53 (44.9)	65 (55.1)	2.86 (0.71–11.61)	0.141
>=10,001	7 (70.0)	3 (30.0)	Reference	-
Year of study				**0.026**
1st year	57 (66.3)	29 (33.7)	Reference	-
2nd year	69 (46.6)	79 (53.4)	1.51 (0.78 – 2.94)	0.218
3rd year	58 (52.7)	52 (47.3)	1.22 (0.60 – 2.48)	0.580
4th year	82 (58.2)	59 (41.8)	0.94 (0.47– 1.89)	0.870
University				**0.802**
Ubon Ratchathani Rajabhat University	133 (54.3)	112 (45.7)	1.00 (0.67 – 1.37)	0.802
Ubon Ratchathani University	133 (55.4)	107 (44.6)	Reference	-

Table 4.7 The relationship between demographic characteristics and suicidal ideation of 485 undergraduate students (cont.)

Characteristics	Suicidal ideation, n (%)		Crude OR (95%CI)	p-value
	No	Yes		
Living arrangement				**0.306**
Father and mother	84 (58.3)	60 (41.7)	Reference	-
Alone	74 (54.4)	62 (45.6)	1.17 (0.73 – 1.88)	0.508
Friends	70 (55.1)	57 (44.9)	1.14 (0.70 – 1.85)	0.594
Father or mother	10 (34.5)	19 (65.5)	2.66 (1.16 – 6.13)	0.022
Relatives	17 (53.1)	15 (46.9)	1.24 (0.57 – 2.67)	0.590
Others	11 (64.7)	6 (35.3)	0.76 (0.27 – 2.18)	0.614
History of loss of close persons in the previous year				**0.365**
No	184 (56.3)	143 (43.7)	Reference	-
Yes	82 (51.9)	76 (48.1)	1.19 (0.82 – 1.75)	0.365
Exposure to suicide behavior of peers or family members in the previous year				**0.284**
No	262 (54.6)	218 (45.4)	Reference	-
Yes	4 (80.0)	1 (20.0)	0.30 (0.03 – 2.70)	0.284
History of self-reported disease within 1 year				**0.014**
No	245 (56.8)	186 (38.4)	Reference	-
Yes	21 (38.9)	33 (61.1)	2.07 (1.16 – 3.70)	0.014
Dependence on drugs or alcohol				**<0.0001**
No	245 (58.5)	174 (41.5)	Reference	-
Yes	21 (31.8)	45 (68.2)	3.02 (1.74 – 5.25)	<0.0001
Parental marital status				**0.144**
Married/ couple	223 (55.9)	176 (44.1)	Reference	-
Divorced/ separated	25 (58.1)	17 (41.9)	0.91 (0.48 – 1.73)	0.778
Widowed	15 (39.5)	23 (60.5)	1.94 (0.98 – 3.83)	0.056

Table 4.7 The relationship between demographic characteristic and suicidal ideation of 485 undergraduate students (cont.)

Characteristics	Suicidal ideation, n (%)		Crude OR (95%CI)	p-value
	No	Yes		
Father's education				**0.113**
Illiterate	1 (50.0)	1 (50.0)	2.66 (0.12–57.62)	0.532
Elementary education	152 (58.0)	110 (42.0)	1.93 (0.50–7.44)	0.340
Secondary/ High school education	64 (45.7)	76 (54.3)	3.17 (0.81–12.44)	0.099
Diploma/ Bachelor's degree	41 (58.6)	29 (41.4)	1.89 (0.46–7.72)	0.378
Master's degree/ Doctorate	8 (72.7)	3 (27.3)	Reference	-
Mother's education				**0.709**
Illiterate	1 (50.0)	1 (50.0)	2.00 (0.05–78.25)	0.711
Elementary education	167 (55.3)	135 (44.7)	1.62 (0.15–18.02)	0.696
Secondary/ High school education	58 (50.4)	57 (49.6)	1.97 (0.17– 22.3)	0.585
Diploma/ Bachelor's degree	38 (61.3)	24 (38.7)	1.26 (0.11– 14.7)	0.852
Master's degree/ Doctorate	2 (66.7)	1 (33.3)	Reference	-
Father's occupation				**0.875**
Agriculture	163 (56.0)	128 (44.0)	0.92 (0.55–1.54)	0.762
Government Officer/ State Enterprise Officer	40 (54.1)	34 (45.9)	Reference	-
Self-employed	28 (48.3)	30 (51.7)	1.26 (0.63–2.51)	0.510
Employee	31 (55.4)	25 (44.6)	0.95 (0.47–1.91)	0.883
Unemployed	2 (50.0)	2 (50.0)	1.18 (0.16–8.80)	0.874
Mother's occupation				**0.440**
Agriculture	169 (55.2)	137 (44.8)	0.81 (0.42–1.57)	0.345
Self-employed	43 (60.6)	28 (39.4)	0.65 (0.30–1.42)	0.282
Employee	25 (53.2)	22 (46.8)	0.88 (0.38–2.05)	0.767
Government Officer/ State Enterprise Officer	20 (50.0)	20 (50.0)	Reference	-
Unemployed	7 (36.8)	12 (63.2)	1.71 (0.56 – 5.25)	0.345

Table 4.8 The relationship between attitude toward suicide score and suicidal ideation of 485 undergraduate students

Suicidal ideation level	n	Attitude toward suicide score				
		Min - max	Mean	SD	95% CI for mean	
					Lower bound	Upper bound
No suicide ideation or behavior	266	0 – 8	3.01	1.45	2.84	3.19
Minimal level of suicide ideation	116	0 – 8	3.41	1.51	3.14	3.69
High level of suicide ideation	57	2 – 8	4.96	1.60	4.54	5.39
Suicide related behavior or reported suicide attempt	46	1 – 8	4.41	1.68	3.91	4.91

ANOVA test; $F(3, 481) = 33.19$, $p < 0.0001$, linear trend $F(1,481) = 57.4$, $p < 0.0001$

Table 4.9 The relationship between categories of attitude toward suicide and suicidal ideation of 485 undergraduate students

Category	Suicidal ideation, n (%)		Crude OR (95%CI)	p-value
	No	Yes		
Attitude toward suicide				**< 0.0001**
Negative	100 (71.9)	39 (28.1)	Reference	-
Low positive attitude	158 (52.5)	143 (47.5)	3.97 (1.92 – 8.25)	< 0.0001
High positive attitude	8 (17.8)	37 (82.2)	26.18 (10.53- 65.07)	< 0.0001

Table 4.10 The relationship between parental bonding and suicidal ideation of 485 undergraduate students

Parental bonding	Suicidal ideation, n (%)		Crude OR (95%CI)	p-value
	No	Yes		
Father				0.618
Affectionless control	221 (55.7)	176 (44.3)	Reference	-
Affectionate constraint	38 (50.7)	37 (49.3)	1.22 (0.75 – 2.00)	0.425
Neglectful parenting	4 (66.7)	2 (33.3)	0.63 (0.11 – 3.47)	0.593
Mother				0.572
Affectionless control	249 (55.3)	201 (44.7)	Reference	-
Affectionate constraint	1 (33.3)	2 (66.7)	2.48 (0.22– 27.52)	0.460
Neglectful parenting	13 (48.1)	14 (51.9)	1.33 (0.61 – 2.90)	0.467

4.6 The strength of association between attitude toward suicide, parental bonding and suicidal ideation

Table 4.11 shows the association between attitude toward suicide, parental bonding and suicidal ideation after using logistic regression analysis to control for other factors with significant association with suicidal ideation in the univariate analysis. The significant factors in univariate analysis were grade point average, income per month from parents or guardians, year of study, history of self-reported disease, and dependence on drug or alcohol. Logistic regression analysis revealed statistically strong association between attitude towards suicide and suicidal ideation. Compared to those with negative attitude toward suicide, the risk of suicidal ideation were higher in students with low and high levels of attitude toward suicide (adjusted OR 3.73, 95% CI 1.74 to 8.01, p 0.001, and 26.00, 95% CI 9.69 to 69.77, $p < 0.0001$, respectively). On the contrary, parental bonding was not statistically significantly associated with suicidal ideation.

Other factors which are not variable of primary interest but are found to be associated with suicidal ideation included grade point average (2.00 – 2.99 points: adjusted OR 1.65, 95% CI 1.05 to 2.63, p 0.029) and dependence on drug or alcohol (adjusted OR 2.48, 95% CI 1.31 to 4.68, p 0.005) (Table 4.11).

Table 4.11 The strength of association between factors and suicidal ideation of 485 undergraduate students analyzed using multiple logistic regression analysis

Variables	Suicidal ideation, n (%)		Adjusted OR*	95% CI	p-value
	No	Yes			
Grade point average					
1.00 – 1.99	1 (25.0)	3 (75.0)	4.03	0.29 – 56.11	0.300
2.00 – 2.99	151 (50.2)	150 (49.8)	1.67	1.05 – 2.63	**0.029**
3.00 – 4.00	93 (64.6)	51 (35.4)	Reference	-	-
Income per month from parents or guardians					
<= 5,000	195 (57.9)	142 (42.1)	5.19	0.38 – 71.54	0.219
5,001 – 10,000	53 (44.9)	65 (55.1)	11.63	0.82–164.98	0.070
>=10,001	7 (70.0)	3 (30.0)	Reference	-	-
Year of study					
1st year	57 (66.3)	29 (33.7)	Reference	-	-
2nd year	69 (46.6)	79 (53.4)	0.72	0.28 – 1.82	0.493
3rd year	58 (52.7)	52 (47.3)	0.41	0.11 - 1.51	0.180
4th year	82 (58.2)	59 (41.8)	0.23	0.04 – 1.24	0.090
History of self-reported disease in the previous year					
No	245 (56.8)	186 (38.4)	Reference	-	-
Yes	21 (38.9)	33 (61.1)	1.51	0.74 – 3.07	0.259
Dependence on drugs/ alcohol					
No	245 (58.5)	174 (41.5)	Reference	-	-
Yes	21 (31.8)	45 (68.2)	2.48	1.31 – 4.68	**0.005**
Attitude toward suicide					
Negative	100 (71.9)	39 (28.1)	Reference	-	-
Low positive	158 (52.5)	143 (47.5)	3.73	1.74 – 8.01	**0.001**
High positive	8 (17.8)	37 (82.2)	26.00	9.69– 69.77	**< 0.0001**

Table 4.11 The strength of association between factors and suicidal ideation of 485 undergraduate students analyzed using multiple logistic regression analysis (cont.)

Variables	Suicidal ideation, n (%)		Adjusted OR*	95% CI	p-value
	No	Yes			
Parental Bonding					
Father					
Affectionless control	221 (55.7)	176 (44.3)	Reference	-	-
Affectionate constraint	38 (50.7)	37 (49.3)	1.21	0.69 – 2.11	0.510
Neglectful parenting	4 (66.7)	2 (33.3)	0.74	0.09 – 6.48	0.789
Mother					
Affectionless control	249 (55.3)	201 (44.7)	Reference	-	-
Neglectful parenting	13 (48.1)	14 (51.9)	0.84	0.29 – 2.40	0.745
Affectionate constraint	1 (33.3)	2 (66.7)	3.43	0.20 – 59.85	0.397

*Adjusted for grade point average, income per month from parents or guardians, year of study, history of self-reported disease and dependence on drugs or alcohol.

CHAPTER V
DISCUSSION

This discussion is on the finding from the study about prevalence and related factors of suicidal ideation among undergraduate students in two universities located in Ubon Ratchathani province. It can be followed as:

5.1 Discussion of the research results

5.2 Discussion of the research methodology

5.1 Discussion of the research results

5.1.1 Prevalence of suicidal ideation

This study showed that the prevalence of suicidal ideation within the past year was approximately 45% among undergraduate students, comprising 23.9% low level of suicidal ideation, 11.8% high level of suicidal ideation, 9.3% suicidal-related behavior, and 0.2% attempted suicide. The result of this study supported that of another study conducted in 2003. In that study, the prevalence of suicidal ideation among adolescent students was 40.59%. Of those who reported some suicidal ideation, 20.90% had low level of suicidal ideation and 19.69% had high level of suicidal ideation (19). However, there is a large variation across other studies. For example, a previous study examining the prevalence of suicidal ideation among undergraduate students in Bangkok in 2005 reported the prevalence of 9.6% (41). Another studies conducted in adolescents who were high school students found the prevalence of suicidal ideation during the past year to be 27.8% in this group (39). In addition, approximately 12% of high school students had suicidal ideation during the past one week in another study (40). The differences of results among these studies may be partly explained by the differences in tools used to define suicidal ideation and the period of studies.

Considering the effect of tool on the results of the studies, the prevalence of suicidal ideation among adolescents in this study to that of a study conducted in Bangkok in 2003 as these 2 studies used the same tool to measure suicidal ideation, the modified Suicidal Ideation Scale, consisting of 10 questions. For other studies with different prevalence rates mentioned in the previous paragraph (39-41), different sets of tool were used. A study used a simplistic questionnaire consisting of one question regarding suicidal ideation. There were only two extreme responses (yes: the subject has suicidal ideation/ no: the subject does not have suicidal ideation). Another 2 studies conducted in Tak province also used the questionnaire with only 1 question of suicide ideation but with five alternative answers (39, 40). The prevalence of suicidal ideation tended to be higher for question with multiple alternatives than for question with only extreme choices.

The prevalence of suicidal ideation among undergraduate students in this study was higher than that of several previous studies. Today's adolescents may be exposed to higher levels of stress in their lives compared to those in the past. Stress can result from many factors, e.g. the perceived pressure of expectations from self and others; pressure at school from teachers, coaches, grades and homework; financial pressures, etc. Many adolescents appear confused and frightened about the future. Feelings of anonymity and alienation, insecurity, and pressure to grow up too soon or to become popular and successful overnight are widely expressed by young adults. Many of these adolescents may reach a point at which they feel that nothing is no longer fun; that they are loved by no one and must reciprocate by loving no one and nothing. The failure to live up to parental expectations and the resulting loss of feelings of belongings and self-esteem act as predisposing conditions for anger and depression. Then the danger signals of potential suicide begin to appear. In addition, adolescents have a more approving attitude towards suicide than do their parents, suggesting that the rising prevalence of suicidal ideation among youth today may in part be attributable to the fact that, as a subculture group, they are more tolerant of suicide and less fearful of its consequences (37).

5.1.2 The factors related to suicidal ideation

The factors related to suicidal ideation were evaluated using logistic regression analysis which controls the effects of confounding factors. Attitude toward suicide showed strong association with suicidal ideation. On the other hand, parental bonding was not statistically associated with suicidal ideation.

5.1.2.1 Attitude toward suicide

In this study, students with low positive attitude toward suicide and high positive attitude toward suicide were 3.73 and 26 times, respectively, more likely to have suicidal ideation than student with negative attitude toward suicide. There were 2 items that more than 50% of the students responded in a way that supported suicide; “there are some situations in which I can understand why people take their own lives” and “people who make suicide attempts do not really want to end their lives – they are just asking for help”. This result was similar to that of other three studies in Thailand (39, 41, 55). For undergraduate students who have been exposed to wide and repeated media coverage on the issue of suicide, the attitude toward suicide may be more positive; suicide is no longer a terrible act or a sin. It might be explained that the undergraduate students who have grown up during the last decade would be relatively well informed about suicide (41).

However, attitudes form directly as a result of experience. The undergraduate students’ attitude toward suicide may emerge due to direct personal experience, or it may result from observation. Social roles and social norms can have a strong influence on attitudes. Social roles relate to how people are expected to behave in a particular role or context. Social norms involve society's rules for what behaviors are considered appropriate. According to this fact, the positive attitudes towards suicide in students can be changed in a variety of way (54).

For other items in the Suicide Opinion Questionnaire, which was used to assess the attitude toward suicide in this study, the majority of the students responded in the direction of disagreement with suicide. The majority of undergraduate students believed that “suicide is a sin”, “no matter how bad things are they are never bad enough for suicide”, “people who want to take their own lives should be stopped from doing so at all cost” and “suicide is unacceptable to me because of my religious beliefs”. This result was similar to the three other studies

across provinces in Thailand. These attitudes toward suicide may develop from religious aspects, as the majority of Thai people are Buddhist. According to Buddhism, life in the past heavily influences the present life. Furthermore, what an individual does in the present moment influences his or her future, in this life or the next. Otherwise known as karma, intentional action by mind, body or speech has a reaction and its repercussion is the reason behind the conditions and differences people come across in the world. For Buddhists, since the first precept is to refrain from the destruction of life (including oneself), suicide is clearly considered a negative form of action according to the principle of Buddhism (69).

5.1.2.2 Parental bonding

Parental bonding was not significantly associated with suicidal ideation in this study. A possible explanation may be the absence of "optimal parenting" pattern, which should enable adolescents to adapt well to their environments, cope with their problems appropriately, and think optimistically regarding life. It should be regarded as the most appropriate reference with which other types of parenting pattern are compared. Other 3 types of parenting pattern, which were present in all subjects in this study, may cause adolescents to have conflicts and stress easily, leading to some degree of suicidal ideation. When comparison was made among these three problematic patterns of parenting regarding suicidal ideation, no association could be found as none could be regarded as an appropriate reference group.

This study showed that the most common pattern of parental bonding between the undergraduate students and their parents was "affectionless control". This result was similar to the study examining the epidemiology of emotional and behavioral problems among children and adolescents in 2003 (48). Another study about juveniles who had dependence on drug reported "affectionate constraint" as the major pattern of relationship with their parents, which was different from this study (49). It is interesting to observe that "optimal parenting" pattern, which is the most appropriate pattern of parental bonding, were totally absent among subjects in this study.

Some factors, which were not the variables of primary interest, were found to be significantly associated with suicidal ideation. Dependence on drug or alcohol showed statistically significantly strong association with suicidal ideation. Many teenagers, especially those who are subject to depression, perceive that they only feel "normal" when taking alcohol. However, the changes that the body experiences during the effect of alcohol are of a limited duration. When the "buzz" wears off, teenagers might feel even more depressed than they did before. These feelings can lead to suicidal thoughts, and even suicide attempts. Adolescents who recognize that they have a dependency can begin to feel helpless, as though they will never escape their alcohol abuse. These feelings of hopelessness and increased depression can also lead to suicide. Alcohol abuse is one of the risk factors of suicide in adolescents, and it is important to recognize the problems that alcohol addiction can cause (70). Drug or substance abuse can affect the chemical balance in the brain, intensifying feelings of depression and sadness. Added to that, however, are the withdrawal symptoms that come with drug abuse. Dependency on drugs, both legal and illegal, can lead to feelings of helplessness and hopelessness. The drug becomes increasingly necessary, both physically and mentally, and this can lead to unpleasant feelings associated with being out of control. Other problems arise when one is not on the drugs. Physical sickness, and feelings of lowness (or "crashing" or "coming down") are usually very unpleasant and can contribute to feelings of depression and suicidal thoughts (71).

5.2 Discussion of the research methodology

5.2.1 Bias

The instrument of this study was the set of questionnaires which were self-reported by the undergraduate students and may result in by information bias. The resulting bias could possibly under- or overestimate the results of the study. In addition, students who held a more permissive suicidal ideation might as well be more likely to report of their own suicide behavior, which could also bias the findings.

Moreover, 2 out of 3 questionnaires used in this study ask the experience of the subjects in the distant past, which could result in recall bias.

The duration of the study was not long and completeness of data was not of great concern. The sample size of 480 undergraduate students was sufficient for the control of sampling error. According to formulation of Levy and Lemeshow (61), the exact sample size was 385, and it was inflated to 480 to compensate for expected 20% loss of data; the actual loss was much less than 20%. Considering the heterogeneity of the undergraduate students, samples were collected from various settings using a stratified 3 – stage cluster sampling technique, a standard technique of probability sampling. Thus, the sample should be a good representative sample of the undergraduate students in this study.

Regarding limitation of the study, this study showed result among undergraduate students in universities located in Ubon Ratchathani province only, which may be different from adolescents in other parts of the country. Accordingly, it can be considered that the prevalence of suicidal ideation in undergraduate students were a view from a specific group and area. The results of suicidal ideation in adolescents in universities were not performed nationwide while adolescents in different parts of Thailand may have different culture and lifestyles. However, this research design was appropriate for the objective of this study.

CHAPTER VI
CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This cross-sectional research aimed to determine the prevalence of suicidal ideation, relationship between attitude toward suicide and suicidal ideation, and association of parental bonding and suicidal ideation. The selected population in this study was undergraduate students in two universities located in Ubon Ratchathani province. Four hundreds and eighty five participants were recruited and classified using stratified three–stage cluster sampling. Questionnaires were utilized as a tool for data collection. The study results show that the prevalence of suicidal ideation in previous year were 45.2% among the undergraduate students.

Logistic regression analysis revealed statistically strong association between attitude toward suicide and suicidal ideation. Compared to students with negative attitude toward suicide, those with low- and high-levels of positive attitude toward suicide were 3.73 time (95% CI 1.74 to 8.01) and 26 times (95% CI 9.69 to 69.77) more likely to have suicidal ideation. On the other hand, parental bonding was not statistically significantly associated with suicidal ideation.

6.2 Recommendation

6.2.1 Recommendations based on study result

1. This study found strong association between attitude toward suicide and suicidal ideation. It is recommended to provide education program for changing attitude, i.e. self-monitoring consists of attending to and thus becoming more aware of one's thoughts and behaviors and how they are interpreted by other people. The very process of attending to what one is thinking and doing can help to change negative thought and behaviors.

2. Young people will have problems and will learn, at their own rate, to struggle and deal with them. But it is critical for parents and helping adults to be aware of the factors that put a youth at particular risk, especially when stressful events begin to accumulate for these vulnerable individuals. A good starting point for identifying and intervening with highly troubled and depressed young people is the careful study of suicidal adolescents.

3. The undergraduate students who are thinking about suicide usually fail to realize that they need help and therefore do not seek it. Interested family members, friends, and associates must be aware of and alert for the danger signs of potentially suicidal behavior. Because prediction facilitates prevention, much attention is given by psychiatrists to symptoms of suicide potential.

6.2.2 Recommendations for future study

Suicidal behavior is complex and some risk factors of suicide vary with age, gender, or area and occur in combination or change over time. Improving public understanding of suicide may help reduce stigma and increase help-seeking.

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APPENDIX

เครื่องมือที่ใช้ในการวิจัย

เลขที่.....
วันที่.....

คำชี้แจงในการตอบแบบสอบถาม

1. แบบสอบถามชุดนี้เป็นแบบสอบถามเพื่อการศึกษาวิจัยเรื่อง “ความชุกและปัจจัยที่เกี่ยวข้องกับความคิดฆ่าตัวตายของนักศึกษาระดับปริญญาตรีในมหาวิทยาลัย 2 แห่ง ทางภาคตะวันออกเฉียงเหนือ”

2. กรุณาอ่านคำชี้แจงในการตอบแบบสอบถามแต่ละส่วนให้เข้าใจก่อนตอบ

3. ข้อมูลของผู้ตอบแบบสอบถามจะถือเป็นความลับข้อมูลจะถูกวิเคราะห์และนำเสนอในภาพรวมโดยไม่นำข้อมูลหรือความลับของท่านมาเปิดเผย หรือเสนอผลการวิจัยเป็นรายบุคคล ข้อมูลของท่านจะนำมาใช้เพื่อการศึกษาวิจัยเท่านั้น โดยไม่มีผลกระทบใดๆ ต่อการเรียนและการดำเนินชีวิตประจำวันของท่าน จึงขอความกรุณาให้ท่านตอบแบบสอบถามตามความเป็นจริง

รายละเอียดของแบบสอบถาม

แบบสอบถามประกอบด้วย 4 ส่วน

ส่วนที่ 1 ข้อมูลด้านปัจจัยส่วนบุคคล	จำนวน	17	ข้อ
ส่วนที่ 2 ข้อมูลด้านความคิดฆ่าตัวตาย	จำนวน	10	ข้อ
ส่วนที่ 3 ข้อมูลด้านทัศนคติต่อการฆ่าตัวตาย	จำนวน	10	ข้อ
ส่วนที่ 4 ข้อมูลด้านสัมพันธภาพกับพ่อ	จำนวน	25	ข้อ
ข้อมูลด้านสัมพันธภาพกับแม่	จำนวน	25	ข้อ

ผู้วิจัยขอขอบพระคุณทุกท่านที่ให้ความอนุเคราะห์ในการตอบแบบสอบถามและให้ความร่วมมือในการวิจัยครั้งนี้เป็นอย่างดียิ่งมา ณ โอกาสนี้

นางสาวมนฤดี แสงวงษ์
นักศึกษาปริญญาโท สาขาวิทยาการระบาด
คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

ส่วนที่ 1 ข้อมูลด้านปัจจัยส่วนบุคคล

<u>คำชี้แจง</u> โปรดทำเครื่องหมาย (✓) ลงใน ☐ หน้าข้อความที่เป็นจริงเกี่ยวกับตัวท่านและเติมข้อความในช่องว่างที่เว้นไว้

1. เพศ

☐ 1. ชาย ☐ 2. หญิง

2. ปัจจุบันท่านอายุ _____ปี (จำนวนปีบริบูรณ์ ถ้าอายุเศษเดือนตั้งแต่ 6 เดือนขึ้นไป นับเพิ่มอีก 1 ปี)

3. ชั้นปีที่ปัจจุบันท่านกำลังศึกษาอยู่

☐ 1. ชั้นปีที่ 1 ☐ 2. ชั้นปีที่ 2

☐ 3. ชั้นปีที่ 3 ☐ 4. ชั้นปีที่ 4

4. มหาวิทยาลัยที่ท่านกำลังศึกษาอยู่ในปัจจุบัน

☐ 1. มหาวิทยาลัยราชภัฏอุบลราชธานี ☐ 2. มหาวิทยาลัยอุบลราชธานี

5. เกรดเฉลี่ยภาคการศึกษาล่าสุดที่ผ่านมา (**<u>ไม่ใช่</u>** คะแนน GPA) _____

6 .รายได้ต่อเดือนที่ท่านได้รับจากบิดา-มารดาหรือผู้ปกครอง _____บาท

7. ปัจจุบันท่านพักอยู่กับใคร (ภายในระยะเวลา 1 ปีที่ผ่านมาจนถึงวันที่ทำแบบสอบถามนี้)

☐ 1. บิดา - มารดา ☐ 2. บิดา ☐ 3. มารดา

☐ 4. ญาติ ☐ 5. ผู้ปกครองอื่นที่ไม่ใช่ญาติ ☐ 6. เพื่อน

☐ 7. แฟน คนรัก ☐ 8. อยู่คนเดียว

☐ 9. อื่นๆ (โปรดระบุ) _____

8. ภายในระยะเวลา 1 ปีที่ผ่านมาท่านเคยสูญเสียบุคคลดังนี้หรือไม่ (สูญเสีย หมายถึง เสียชีวิต)

☐ **1. มี (ใคร โปรดระบุ ตอบได้มากกว่า 1 ข้อ)**

☐ 1.1 บิดา ☐ 1.2 มารดา ☐ 1.3 พี่-น้อง

☐ 1.4 ญาติ ☐ 1.5 ผู้ปกครองอื่นที่ไม่ใช่ญาติ ☐ 1.6 เพื่อน

☐ 1.7 แฟน คนรัก

☐ 1.8 อื่นๆ (โปรดระบุ) _____

☐ **2. ไม่มี**

9. ภายในระยะเวลา 1 ปีที่ผ่านมาในครอบครัวของท่านเคยมีบุคคลเหล่านี้ฆ่าตัวตายหรือไม่

☐ **1. มี (ใคร โปรดระบุ ตอบได้มากกว่า 1 ข้อ)**

☐ 1.1 บิดา ☐ 1.2 มารดา ☐ 1.3 พี่-น้อง

☐ 1.4 ญาติ ☐ 1.5 ผู้ปกครองอื่นที่ไม่ใช่ญาติ

☐ 1.6 อื่นๆ (โปรดระบุ) _____

☐ **2. ไม่มี**

10. ภายในระยะเวลา 1 ปีที่ผ่านมาท่านป่วยเป็นโรคดังต่อไปนี้หรือไม่

☐ **1. มี (โปรดระบุ ตอบได้มากกว่า 1 ข้อ)**

☐ 1.1 ซึมเศร้า ☐ 1.2 วิตกกังวล ☐ 1.3 เอดส์

☐ 1.4 ลมชัก ☐ 1.5 ติดสุรา ☐ 1.6 มะเร็ง

☐ 1.6 อื่นๆ (โปรดระบุ) _____

☐ **2. ไม่มี**

11. ภายในระยะเวลา 1 ปีที่ผ่าน ท่านเคยใช้สารเสพติดดังต่อไปนี้หรือไม่

☐ **1. ใช้ (โปรดระบุ ตอบได้มากกว่า 1 ข้อ)**

☐ 1.1 ยาบ้า ☐ 1.2 ยาอี ☐ 1.3 ยาเลิฟ

☐ 1.4 โคเคน ☐ 1.5 กระท่อม ☐ 1.6 เหล้า

☐ 1.7 ยากล่อมประสาท/ ยานอนหลับ

☐ 1.8 อื่นๆ (โปรดระบุ) _____

12. สถานภาพสมรสของบิดา – มารดา

☐ 1. อยู่ด้วยกัน (จดทะเบียนสมรส) ☐ 2. อยู่ด้วยกัน (แต่ไม่ได้จดทะเบียนสมรส)

☐ 3. หย่า (แต่ยังอยู่ด้วยกัน) ☐ 4. หย่า (แยกกันอยู่)

☐ 5. ไม่ได้หย่า (แต่แยกกันอยู่) ☐ 6. หม้าย (คู่สมรสเสียชีวิต)

☐ 7. ไม่ทราบ

13. ระดับการศึกษาของบิดา

☐ 1. ไม่ได้เข้ารับการศึกษา ☐ 2. ประถมศึกษา

☐ 3. มัธยมศึกษาตอนต้น ☐ 4. มัธยมศึกษาตอนปลาย

☐ 5. อนุปริญญาหรือเทียบเท่า ☐ 6. ปริญญาตรี

☐ 7. สูงกว่าปริญญาตรี (โปรดระบุ) _____

☐ 8. อื่นๆ (โปรดระบุ) _____

☐ 9. ไม่ทราบ

14. ระดับการศึกษาของมารดา

☐ 1. ไม่ได้เข้ารับการศึกษา ☐ 2. ประถมศึกษา
☐ 3. มัธยมศึกษาตอนต้น ☐ 4. มัธยมศึกษาตอนปลาย
☐ 5. อนุปริญญาหรือเทียบเท่า ☐ 6. ปริญญาตรี
☐ 7. สูงกว่าปริญญาตรี (โปรดระบุ) _____
☐ 8. อื่นๆ (โปรดระบุ) _____ ☐ 9. ไม่ทราบ

15. อาชีพของบิดา

☐ 1. ไม่ได้ประกอบอาชีพ ☐ 2. เกษตรกรรม
☐ 3. รับจ้างทั่วไป ☐ 4. ธุรกิจส่วนตัว
☐ 5. รับราชการ ☐ 6. ลูกจ้างส่วนราชการ
☐ 7. ค้าขาย ☐ 8. พนักงานบริษัท
☐ 9. พนักงานรัฐวิสาหกิจ
☐ 10. อื่นๆ (โปรดระบุ) _____
☐ 11. ไม่ทราบ

16. อาชีพของมารดา

☐ 1. ไม่ได้ประกอบอาชีพ ☐ 2. เกษตรกรรม
☐ 3. รับจ้างทั่วไป ☐ 4. ธุรกิจส่วนตัว
☐ 5. รับราชการ ☐ 6. ลูกจ้างส่วนราชการ
☐ 7. ค้าขาย ☐ 8. พนักงานบริษัท
☐ 9. พนักงานรัฐวิสาหกิจ
☐ 10. อื่นๆ (โปรดระบุ) _____
☐ 11. ไม่ทราบ

17. อาชีพของผู้ปกครอง

☐ 1. ไม่ได้ประกอบอาชีพ ☐ 2. เกษตรกรรม
☐ 3. รับจ้างทั่วไป ☐ 4. ธุรกิจส่วนตัว
☐ 5. รับราชการ ☐ 6. ลูกจ้างส่วนราชการ
☐ 7. ค้าขาย ☐ 8. พนักงานบริษัท
☐ 9. พนักงานรัฐวิสาหกิจ
☐ 10. อื่นๆ (โปรดระบุ) _____
☐ 11. ไม่ทราบ

ส่วนที่ 2 แบบสอบถามข้อมูลด้านความคิดฆ่าตัวตาย

<u>คำชี้แจง</u> ต่อไปนี้เป็นคำถามเกี่ยวกับความคิด ความรู้สึก หรือการกระทำเกี่ยวกับการฆ่าตัวตายในช่วงเวลา 1 ปีที่ผ่านมา ของท่าน โปรดทำเครื่องหมายวงกลม (◯) ล้อมรอบข้อที่ตรงกับความคิด ความรู้สึก หรือการกระทำที่ตรงกับตัวท่านมากที่สุด

1. ฉันรู้สึกชีวิตฉันไม่มีค่าพอที่จะอยู่ต่อไป

0	1	2	3	4
ไม่เคยรู้สึกแม้แต่ครั้งเดียว				รู้สึกบ่อยมากหรือตลอดเวลา

2. ฉันเคยลงมือฆ่าตัวตาย

4	2	0
เคย (2 ครั้งหรือมากกว่า)	เคย (1 ครั้ง)	ไม่เคย

3. ชีวิตที่เป็นอยู่มันแย่มากและฉันอยากให้มันจบสิ้นลงเสียที

0	1	2	3	4
ไม่เคยรู้สึกแม้แต่ครั้งเดียว				รู้สึกบ่อยมากหรือตลอดเวลา

4. ฉันเชื่อว่าชีวิตฉันจะต้องจบลงด้วยการฆ่าตัวตาย

0	1	2	3	4
ไม่เคยคิดแม้แต่ครั้งเดียว				คิดบ่อยมากหรือตลอดเวลา

5. ฉันปรารถนาให้ชีวิตฉันจบสิ้นลง

4	3	2	1	0
คิดบ่อยมากหรือตลอดเวลา				ไม่เคยคิดแม้แต่ครั้งเดียว

6. ฉันเคยบอกกับคนบางคนว่าฉันจะฆ่าตัวตาย

0	1	2	3	4
ไม่เคยบอกแม้แต่ครั้งเดียว				บอกบ่อยมากหรือตลอดเวลา

7. ฉันเคยคิดหาวิธีการฆ่าตัวตายแบบต่างๆ

0	1	2	3	4
ไม่เคยคิดแม้แต่ครั้งเดียว				คิดบ่อยมากหรือตลอดเวลา

8. ฉันเคยเกือบจะลงมือฆ่าตัวตาย

4	2	0
เคย (2 ครั้งหรือมากกว่า)	เคย (1 ครั้ง)	ไม่เคย

9. ฉันคิดว่าน่าจะเป็นการดีกับทุกคนถ้าฉันตายไปเสียได้

0	1	2	3	4
ไม่เคยคิดแม้แต่ครั้งเดียว				คิดบ่อยมากหรือตลอดเวลา

10. ฉันรู้สึกว่าไม่มีวิธีอื่นที่จะแก้ปัญหาของตัวฉันเองได้ดีไปกว่าการฆ่าตัวตาย

0	1	2	3	4
ไม่เคยรู้สึกแม้แต่ครั้งเดียว				รู้สึกบ่อยมากหรือตลอดเวลา

ส่วนที่ 3 ข้อมูลด้านทัศนคติต่อการฆ่าตัวตาย

<u>คำชี้แจง</u> ต่อไปนี้เป็นคำถามเกี่ยวกับความคิดเห็นเกี่ยวกับการฆ่าตัวตายในช่วงเวลา 1 ปีที่ผ่านมาของท่าน กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด โดยเลือกได้เพียงข้อเดียว

ความคิดเห็น	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
1. ไม่ว่าอะไรจะแย่แค่ไหนก็ตาม มันไม่เคยแย่ขนาดต้องฆ่าตัวตาย				
2. การฆ่าตัวตายเป็นบาป				
3. ในบางสถานการณ์ฉันเห็นด้วยกับการทำให้ตายอย่างสงบ				
4. มีบางสถานการณ์ที่ฉันอาจจะคิดฆ่าตัวตาย				
5. ฉันยอมรับการฆ่าตัวตายไม่ได้เพราะขัดกับหลักความเชื่อทางศาสนาของฉัน				
6. มีบางสถานการณ์ที่ฉันเข้าใจได้ว่าทำไมคนถึงฆ่าตัวตาย				
7. การฆ่าตัวตายเป็นทางออกหนึ่งของคนเรา การมีชีวิตมีปัญหายุ่งยากเกินไป				
8. คนที่พยายามฆ่าตัวตายนั้นไม่ได้ต้องการจบชีวิตตัวเองจริงๆ เขาเพียงแต่ร้องขอความช่วยเหลือ				
9. คนที่ต้องการฆ่าตัวตายควรถูกยับยั้งจากการกระทำ ไม่ว่าจะต้องทุ่มเทแค่ไหนก็ตาม				
10. การฆ่าตัวตายเป็นสิ่งที่สมเหตุสมผลภายใต้บางสถานการณ์				

ส่วนที่ 4 ข้อมูลด้านสัมพันธภาพกับพ่อ-แม่

<u>คำชี้แจง</u> ต่อไปนี้เป็นคำถามเกี่ยวกับทัศนคติและพฤติกรรมของพ่อและแม่ที่มีต่อท่าน **ในช่วงอายุ 16 ปีแรก ของท่าน** กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับลักษณะของพ่อและแม่ตามความคิดหรือความรู้สึกของท่าน

4.1 พฤติกรรมหรือทัศนคติของ **<u>พ่อ</u>**	ความคิดความรู้สึกของท่าน			
	ไม่ตรงเลย	ตรงบ้าง	ตรง	ตรงมาก
1. พูดกับฉันด้วยน้ำเสียงที่อบอุ่น และเป็นมิตร				
2. ไม่ค่อยช่วยเหลือฉันมากเท่าที่ฉันต้องการ				
3. ยอมให้ฉันทำสิ่งที่ฉันชอบ				
4. เย็นชากับฉัน				
5. เข้าใจปัญหาและความกังวลของฉัน				
6. รักฉัน				
7. ชอบให้ฉันตัดสินใจด้วยตัวเอง				
8. ไม่ต้องการให้ฉันโตเป็นผู้ใหญ่				
9. พยายามที่จะควบคุมทุกสิ่งทุกอย่างที่ฉันทำ				
10. ชอบลุกล้ำความเป็นส่วนตัวของฉัน				
11. ชอบคุยเรื่องต่างๆ กับฉัน				
12. ยิ้มกับฉันบ่อยๆ				
13. ชอบทำเสมือนกับว่าฉันเป็นเด็กเล็ก				
14. ดูเหมือนจะไม่ค่อยเข้าใจว่าฉันต้องการอะไรบ้าง				
15. ยอมให้ฉันตัดสินใจสิ่งต่างๆ สำหรับตัวฉันเอง				
16. ทำให้ฉันรู้สึกว่าฉันไม่เป็นที่ต้องการของท่าน				
17. ทำให้ฉันรู้สึกดีขึ้นเวลาที่ฉันเสียใจ ผิดหวัง				
18. ไม่ค่อยพูดกับฉัน				
19. พยายามที่จะทำให้ฉันต้องพึ่งพิงท่าน				
20. คิดว่าฉันคงไม่สามารถดูแลตนเองได้ ถ้าท่านไม่อยู่				
21. ให้อิสระแก่ฉันมากเท่าที่ฉันต้องการ				
22. ยอมให้ฉันออกไปข้างนอกบ่อยเท่าที่ฉันต้องการ				
23. ปกป้องฉันมากเกินไป				
24. ไม่ค่อยจะพูดชมฉัน				
25. ยอมให้ฉันแต่งตัวได้ในแบบที่ฉันต้องการ				

กรุณาตอบพฤติกรรมหรือทัศนคติของ **แม่ หน้าถัดไป** ➔

ส่วนที่ 4 ข้อมูลด้านสัมพันธภาพกับพ่อ-แม่ (ต่อ)

4.2 พฤติกรรมหรือทัศนคติของ **แม่**	ความคิดความรู้สึกของท่าน			
	ไม่ตรงเลย	ตรงบ้าง	ตรง	ตรงมาก
1. พูดกับฉันด้วยน้ำเสียงที่อบอุ่น และเป็นมิตร				
2. ไม่ค่อยช่วยเหลือฉันมากเท่าที่ฉันต้องการ				
3. ยอมให้ฉันทำสิ่งที่ฉันชอบ				
4. เย็นชากับฉัน				
5. เข้าใจปัญหาและความกังวลของฉัน				
6. รักฉัน				
7. ชอบให้ฉันตัดสินใจด้วยตัวเอง				
8. ไม่ต้องการให้ฉันโตเป็นผู้ใหญ่				
9. พยายามที่จะควบคุมทุกสิ่งทุกอย่างที่ฉันทำ				
10. ชอบลุกล้ำความเป็นส่วนตัวของฉัน				
11. ชอบคุยเรื่องต่างๆ กับฉัน				
12. ยิ้มกับฉันบ่อยๆ				
13. ชอบทำเสมือนกับว่าฉันเป็นเด็กเล็ก				
14. ดูเหมือนจะไม่ค่อยเข้าใจว่าฉันต้องการอะไรบ้าง				
15. ยอมให้ฉันตัดสินใจสิ่งต่างๆ สำหรับตัวฉันเอง				
16. ทำให้ฉันรู้สึกว่าฉันไม่เป็นที่ต้องการของท่าน				
17. ทำให้ฉันรู้สึกดีขึ้นเวลาที่ฉันเสียใจ ผิดหวัง				
18. ไม่ค่อยพูดกับฉัน				
19. พยายามที่จะทำให้ฉันต้องพึ่งพิงท่าน				
20. คิดว่าฉันคงไม่สามารถดูแลตนเองได้ ถ้าท่านไม่อยู่				
21. ให้อิสระแก่ฉันมากเท่าที่ฉันต้องการ				
22. ยอมให้ฉันออกไปข้างนอกบ่อยเท่าที่ฉันต้องการ				
23. ปกป้องฉันมากเกินไป				
24. ไม่ค่อยจะพูดชมฉัน				
25. ยอมให้ฉันแต่งตัวได้ในแบบที่ฉันต้องการ				

2 ถนนพรานนก บางกอกน้อย
กรุงเทพฯ 10700

โทร (662) 4196405-6
โทรสาร (662) 4196405

คณะกรรมการจริยธรรมการวิจัยในคน คณะแพทยศาสตร์ศิริราชพยาบาล

เอกสารรับรองโครงการวิจัย

หมายเลข Si 298/2012

ชื่อโครงการภาษาไทย : ความชุกและปัจจัยที่เกี่ยวข้องกับความคิดฆ่าตัวตายของนักศึกษาระดับปริญญาตรี ในมหาวิทยาลัย 2 แห่ง ทางภาคตะวันออกเฉียงเหนือ

รหัสโครงการ : 251/2555(EC3)

หัวหน้าโครงการ / หน่วยงานที่สังกัด : นางสาวมนฤดี แสงวงษ์ / ภาควิชาเวชศาสตร์ป้องกันและสังคม คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

สถานที่ทำวิจัย : คณะแพทยศาสตร์ศิริราชพยาบาล

เอกสารที่รับรอง :

1. แบบเสนอโครงการวิจัย เพื่อขอรับการพิจารณาจากคณะกรรมการจริยธรรมการวิจัยในคน
2. โครงร่างการวิจัย
3. เอกสารชี้แจงผู้เข้าร่วมโครงการวิจัย/อาสาสมัคร
4. หนังสือแสดงเจตนายินยอมเข้าร่วมการวิจัย
5. แบบสอบถาม
6. ประวัติผู้วิจัย

วันที่รับรอง : 5 มิถุนายน 2555

วันหมดอายุ : 4 มิถุนายน 2556

คณะกรรมการจริยธรรมการวิจัยในคน คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล ดำเนินการให้การรับรองโครงการวิจัยตามแนวทางหลักจริยธรรมการวิจัยในคนที่เป็นสากล ได้แก่ Declaration of Helsinki, the Belmont Report, CIOMS Guidelines และ the International Conference on Harmonization in Good Clinical Practice (ICH-GCP).

ลงนาม .....
(ศาสตราจารย์แพทย์หญิงจารุพิมพ์ สูงสว่าง)
ประธานคณะกรรมการจริยธรรมการวิจัยในคน

8 มิถุนายน 2555
วันที่

ลงนาม .....
(ศาสตราจารย์คลินิกนายแพทย์อุดม คชินทร)
คณบดี คณะแพทยศาสตร์ศิริราชพยาบาล

13 ธ.ค. 2555
วันที่

หน่วยพิมพ์โรงพยาบาลศิริราช 2342 / 3,000 แผ่น / ก.ย 51 / Mat. 10023253

2 PRANNOK Rd. BANGKOKNOI
BANGKOK 10700

Tel. (662) 4196405-6
FAX (662) 4196405

MAHIDOL UNIVERSITY
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Siriraj Institutional Review Board

Certificate of Approval

COA no. Si 298/2012

Protocol Title : PREVALENCE AND RELATED FACTORS OF SUICIDAL IDEATION AMONG UNDERGRADUATE STUDENTS IN 2 UNIVERSITIES OF THE NORTHEAST

Protocol number : 251/2555(EC3)

Principal Investigator/Affiliation : Miss Monruedee Sangwong / Department of Preventive and Social Medicine
Faculty of Medicine Siriraj Hospital, Mahidol University

Research site : Faculty of Medicine Siriraj Hospital

Approval includes :

1. SIRB Submission Form
2. Proposal
3. Participation Information Sheet
4. Informed Consent Form
5. Questionnaire
6. Principle Investigator's curriculum vitae

Approval date : June 5, 2012

Expired date : June 4, 2013

This is to certify that Siriraj Institutional Review Board is in full Compliance with international guidelines for human research protection such as the Declaration of Helsinki, the Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP).

Jarupim Soongswang

(Prof. Jarupim Soongswang, M.D.)
Chairperson

June 8, 2012
date

Udom K

(Clin. Prof. Udom Kachintorn, M.D.)
Dean of Faculty of Medicine Siriraj Hospital

13 JUN 2012
date

หน่วยพิมพ์โรงพยาบาลศิริราช 2341 / 3,000 แผ่น / ก.ค 51 / Mat. 10023252

ที่ ศธ ๖๖๐๐/๐๓๖๑

มหาวิทยาลัยบูรพา
ตำบลแสนสุข อำเภอเมือง
จังหวัดชลบุรี ๒๐๑๓๑

๑ กุมภาพันธ์ ๒๕๕๖

เรื่อง แบบตอบรับการนำเสนอผลงานวิจัยและตีพิมพ์บทความวิจัย การประชุมวิชาการระดับชาติ เครือข่ายวิจัยสถาบันอุดมศึกษาทั่วประเทศ ประจำปี ๒๕๕๖

เรียน นางสาวมนฤดี แสงวงษ์

ตามที่ท่านได้ส่งบทความวิจัย **เรื่อง ความชุกและปัจจัยที่เกี่ยวข้องกับความคิดฆ่าตัวตายของนักศึกษาปริญญาตรี ในมหาวิทยาลัย ๒ แห่ง ทางภาคตะวันออกเฉียงเหนือ** เพื่อนำเสนอผลงานวิจัยและตีพิมพ์บทความวิจัย ในการจัดประชุมวิชาการระดับชาติเครือข่ายวิจัยสถาบันอุดมศึกษาทั่วประเทศ ประจำปี ๒๕๕๖ ในวันที่ ๒๗-๒๘ กุมภาพันธ์ พ.ศ. ๒๕๕๖ ณ โรงแรมโรสการ์เด้นท์ อำเภอสามพราน จังหวัดนครปฐม นั้น

บัดนี้คณะกรรมการดำเนินงานได้พิจารณาแล้วเห็นว่าบทความวิจัยของท่านมีคุณภาพเหมาะสม ได้รับการนำเสนอในรูปแบบโปสเตอร์ และตีพิมพ์เผยแพร่ใน Proceedings การประชุมวิชาการระดับชาติเครือข่ายวิจัยสถาบันอุดมศึกษาทั่วประเทศ ประจำปี ๒๕๕๖

จึงเรียนมาเพื่อโปรดทราบ

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สมถวิล จริตควร)
ผู้ช่วยอธิการบดีฝ่ายวิชาการ ปฏิบัติการแทน
อธิการบดีมหาวิทยาลัยบูรพา

สำนักงานอธิการบดี กองบริการการศึกษา งานส่งเสริมการวิจัย
โทรศัพท์ ๐๓๘-๑๐๒๕๖๑-๒
โทรสาร ๐๓๘-๗๔๕๗๙๙

BIOGRAPHY

NAME	Miss Monruedee Sangwong
DATE OF BIRTH	13 January 1980
PLACE OF BIRTH	Ubon Ratchathani, Thailand
INSTITUETIONS ATTEND	Sukhothai Thammathirat Open University, 2002 - 2006 Bachelor of Public Health Mahidol University, 2010 - 2013 Master of Science (Epidemiology)
RESEARCH GRANT	Supported in part the Thesis Grant, Regional Health Promotion Center 7th
HOME ADDRESS	7 Moo.11, Nakhay, Tansum, Ubon Ratchathani, Thailand 34330 Tel. 089-7196700 E-mail: monnoy1980@hotmail.com
EMPLOYMENT ADDRESS	Regional Health Promotion Center 7th Ubon Ratchathani, Thailand 34190. Tel. 045-288580-8
PRESENTATION	The Thailand University Research Network National Conference 2013: Economics, Socials and Cultures for ASEAN Economic Community on 27-28 February 2013.