# ปัจจัยทำนายการคิดฆ่าตัวตายในวัยรุ่นชาวไทย Predictors of Suicidal Ideation among Thai Adolescents

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# บทคัดย่อ

การคิดฆ่าตัวตาย หมายถึง ความคิด การวางแผน หรือการพยายามกระทำพฤติกรรมต่าง ๆ เพื่อจบชีวิตของตนเอง การคิดฆ่าตัวตายเป็นตัวชี้วัดของการฆ่าตัวตาย และเป็นสิ่งเริ่มต้นที่สำคัญของการพยายามฆ่าตัวตายและการฆ่าตัวตายสำเร็จ การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาการคิดฆ่าตัวตายและปัจจัยทำนายการคิดฆ่าตัวตาย กลุ่มตัวอย่างคัดเลือกโดยวิธีการสุ่ม แบบหลายขั้นตอน คือ วัยรุ่นที่กำลังศึกษาอยู่ในโรงเรียนมัธยมศึกษา ในปี พ.ศ. 2559 จังหวัดปทุมธานี จำนวน 408 คน มีอายุเฉลี่ย 15.35 ปี (SD = 1.76) การเก็บรวบรวมข้อมูลโดยใช้แบบสอบถามที่ให้กลุ่มตัวอย่างเป็นผู้ตอบเอง ได้แก่ แบบวัดการคิดฆ่าตัวตาย แบบสอบถามความเครียดทั่วไป แบบสอบถามพฤติกรรมการแสดงออก แบบสอบถามความรู้สึกมีคุณค่าในตนเอง และแบบวัดการ รับรู้ต่อเหตุการณ์ที่สร้างความยุ่งยากใจมีค่าความเชื่อมั่นของครอนบาคเท่ากับ 82, .79, .70, .84, และ .85 ตามลำดับ วิเคราะห์ ข้อมูลโดยใช้สถิติพรรณนาและการวิเคราะห์ถดถอยพหูคูณแบบขั้นตอน ผลการวิจัยพบว่าคะแนนการคิดฆ่าตัวตายมีค่าเฉลี่ยเท่ากับ 6.61 (SD = 5.05) ซึ่งหมายถึงอยู่ในระดับเสี่ยงสูง การรับรู้ต่อเหตุการณ์ที่สร้างความยุ่งยากใจเป็นปัจจัยทำนายที่มีนัยสำคัญ ทางสถิตที่ดีที่สุด ( $\beta$  = .293) รองลงมาอันดับสองคือความเครียดโดยรวม ( $\beta$  = .163) และอันดับสามคือพฤติกรรมการแสดงออก ทางลบ ( $\beta$  = .151) ปัจจัยทำนายทั้งสามนี้อธิบายความแปรปรวนในการทำนายการคิดฆ่าตัวตายได้ร้อยละ 21.7 ( $\beta$  - .3,404 = 37.218, p < .001) ผลการวิจัยนี้ให้ข้อเสนอแนะว่าพยาบาลหรือผู้มีหน้าที่ดูแลสุขภาพวัยรุ่น โดยเฉพาะอย่างยิ่งการดูแลสุขภาพจิต ควรวางแผนอย่างเร่งด่วนในการจัดกิจกรรมหรือโครงการที่มุ่งแน้นให้ลดเหตุการณ์ที่สร้างความยุ่งยากใจ ความเครียดโดยรวม และพฤติกรรมการแสดงออกทางลบ เพื่อส่งผลให้วัยรุ่นชาวไทยมีการคิดฆ่าตัวตายลดน้อสง

คำสำคัญ : การคิดฆ่าตัวตาย เหตุการณ์ที่สร้างความยุ่งยากใจ ความเครียดทั่วไป พฤติกรรมการแสดงออกในทางลบ วัยรุ่น

#### Abstract

Suicidal ideation refers to thought, planning or considering of engaging in behavior intended to end one's life. It is an indicator of suicide and significant in anticipating the suicidal attempt and completed suicide. This study aimed toexamine suicidal ideation and determine factors predicting suicidal ideation among Thai adolescents. A multi - stage random sampling technique was used to recruit a sample of 408 adolescents with a mean age of 15.35 (SD = 1.76) years who were attending secondary schools in 2016, PhathumThani province, Thailand. Research instruments were self - report questionnaires, including, the Scale for Suicidal Ideation, the General Health Questionnaire, the Strengths and Difficulties Questionnaire, the Rosenberg's Self - Esteem Scale,

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and the Negative Event Scale. Their Cronbach's alpha reliabilities were .82, .79, .70, .84, and .85, respectively. Descriptive statistics and stepwise multiple regression analysis were used to analyzed the data. Results revealed that the mean score of suicidal ideation was 6.61 (SD = 5.05), which was at a high risk. Stressful events was the best significant predictor ( $\beta$  = .293), the second best was overall distress ( $\beta$  = .163) and the third best was negative psychological attribute ( $\beta$  = .151). These three predictors accounted for 21.7% ( $F_{3,404}$  = 37.218, p < .001) in the prediction of suicidal ideation among Thai adolescents. These findings suggest that nurses or health care providers who are responsible for adolescent health, especially mental health, should urgently plan activities or an intervention focusing on reduce stressful events, overall distress and negative psychological attribute. Consequently, suicidal ideation would be lessened.

Keywords: Suicidal ideation, Stressful events, Overall distress, Negative psychological attribute, Adolescents

#### Introduction

Suicidal ideation refers to thought, planning or considering of engaging in behavior intended to end one's life.<sup>1</sup> It is an as an indicator of suicide and significant in anticipating the suicidal attempt and completed suicide <sup>2</sup>, and suicide has been recognized as a significant public health problem. In Bangkok, 11.2 % of students aged 15 - 19 years reported suicidal ideation.<sup>3</sup> Interestingly, a study in Chiang Mai high school students found that there were 4.6 % of adolescents had attempted suicide during the past year.<sup>4</sup>

Suicidal ideation is grounded in the Rudd's cognitive behavioral model<sup>5</sup> in that the cognitive systems of suicide was a current thoughts that could lead to engage in behavior intended to suicide. It is believed that individuals were likely to develop suicidal ideation because of having a predisposition to suicide such as genetic factors, biological factors, history of trauma or abuse, impulsivity, aggressive, prior suicidal experiences, and psychiatric illness. These factors could be stimulated by stressful events such as perceived loss, and relation difficulty or problems, which increased vulnerability for suicidal ideation and could lead to suicidal attempt and completed suicide. In addition, reviewed literatures also illustrated that there were several significant

factors, including overall distress, negative psychological attributes, self - esteem and stressful event, relevant to suicidal ideation.

Overall distress was the predisposition to suicide ideation.<sup>6</sup> It referred to negative affectivity or combination of anxiety and depressive features that related to adolescents who feel greatly distressed about their life.<sup>7-8</sup> Most studies reported depression and anxiety were positive associated with suicidal ideation. 4, 7-9 Negative psychological attributes, inappropriate adjustment of adolescents during their developmental stage, consisted of emotional symptom, conduct problems, hyperactivity and peer relationship problem. 10 Consistent with this definition, several researches illustrated these negative behaviors were related to suicidal ideation among adolescents. Adolescents who made suicide attempt and those who experienced suicidal ideation had significantly associated with emotional problems and hyperactivity. 11 Moreover, conduct behavior, impulsivity, and aggression were related to suicidal ideation in adolescents. 12-13

Research reported that self - esteem was negatively associated with suicidal ideation and found that a decrease in self - esteem was significantly related to increase in suicidal ideation. <sup>14-15</sup> In addition, a wide range of research showed clearly that feelings

of self - worth make people resilient during crises. 16-17 Stressful event referred to perception of loss or a belief that one is a burden to others and have been found to be related to suicidal ideation among adolescents According to the cognitive behavior theory. It was an important factor influencing on suicidal ideation. 4

Empirical evidence indicated that suicidal ideation of adolescents did not occur in isolation but rather were influential within multi - causality. Meanwhile, research on suicidal ideation among Thai adolescents tends to be fragmented. An integrative approach to determine predicting factors of suicidal ideation among Thai adolescents is needed. Its findings would contribute to knowledge development of a nursing intervention that can prevent risk for suicide among Thai adolescents. Therefore, this study aimed to examine suicidal ideation and the predictors of suicidal ideation among Thai adolescents.

#### Conceptual Framework of the study

The conceptual framework of this study based on the cognitive behavioral model<sup>12</sup> and

reviewed relevant literatures. It explained suicidal ideation in that the cognitive systems of suicide mode that characterize suicidal individuals and were associated with increased vulnerability to suicidal ideation, which have been impact from various factors.<sup>7</sup> The model claimed that predisposition to suicide included genetic factors, biological factors, history of trauma or abuse, impulsivity, aggressive, prior suicidal experiences, and psychiatric illness. While literature reviews of suicidal ideation among adolescents in the last 20 years have shown that factors influencing suicidal ideation included overall distress, negative psychological attributes, self - esteem, and stressful events. 1-5, 9-12 Overall distress consisted of depression, anxiety, and life satisfaction. Negative psychological attributes consisted of emotional symptom, conduct behavior, hyperactivity and peer relationship problem. Stressful events consisted of problems with friends, boy/girls friend, money, courses, teacher, parents, other students, and relative/s, health problems, academic limitations and poor course interest. These found relationships were illustrated in the Figure 1.

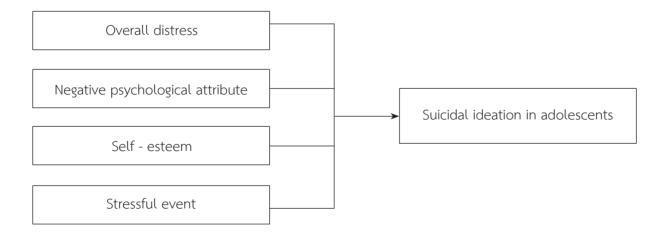


Figure 1 Conceptual framework of the study

#### Methods

This predictive correlational study was designed to determine predictors of suicidal ideation among adolescents, including, overall distress, negative psychological attributes, self - esteem and stressful event.

Population: The population of this study was adolescents studying in Mathayomsuksa (M.) 1 - 6. Target population was students who were attending in M. 1 - 6 in secondary schools of PathumThani province in the second semester of academic year 2015.

Sample: A total sample of 408 adolescents was recruited through the target population by using a multi - stage random sampling. Six secondary schools were randomly selected. Two classes per one school wereselected randomly, all students in 2 classrooms of M. 1 for school #1, all students in 2 classrooms of M. 2 for school #2, and so on. A total of 12 classrooms with a combination of M 1 - 6 equally were included. All students in each selected classroom were invited to participate in the study.

Instruments: Data were collected by using six self - report questionnaires as following.

- 1. Demographic information, including, age, gender, GPA, marital status of parents, and father's and mother's educationwas completed by the sample using a personal information record form.
- 2. Suicide ideation was measured by using the Scale for Suicide Ideation (SSI Thai version).<sup>18</sup> It consisted of 19 items that measure the severity of ideation, plan to suicide, and likelihood of attempting suicide someday. Scores ranged from 0 38. Higher score indicated high level of thought to suicide. A total score between 0 5 indicated low suicidal ideation, 6 19 was high risk or ready to commit suicide, and 20 38 was very high risk or determined to commit suicide. In this study, its Cronbach's alpha reliability was. 82.

- 3. Overall distress was measured by using the General Health Questionnaire (GHQ Thai version). <sup>19</sup> It has been widely used to determine whether an individual had at risk of developing a psychiatric disorder. It was a 12 item self report questionnaire to identify psychological distress including depression, anxiety, and life dissatisfaction. Scores range from 0 12. Its Cronbach's alpha reliability was .79.
- 4. Negative psychological attribute was measured by using the Strengths and Difficulties Questionnaire (SDQ Thai version).<sup>20</sup> It was designed to assess positive and negative aspects of the behavior of children and adolescents. These 25 items are divided between 5 scales: emotional symptoms (5 items), conduct problems (5 items), hyperactivity/inattention (5 items), peer relationship problems (5 items) and prosocialbehavior (5 items). In this study used only 20 items of negative psychological attribute. Cronbach's alpha reliability of this instrument was .70.
- 5. Self Esteem was measured by using the Rosenberg's Self Esteem Scale (RSE Thai version).<sup>21</sup> It was used to measure orientation toward oneself self esteem. It consisted of 10 statements of 5 positive and 5 negative. Likert's five point scale (1 5) was given with each statement. The total score was calculated by simple addition of the scores on individual scales. The scores range from 0 40 with higher scores representing higher self esteem, and vice versa. Its Cronbach's alpha reliability was. 84.
- 6. Stressful event was measured by using the Negative Event Scale (NES Thai version).<sup>22</sup> It was designed to measure the level of negative events in adolescent population. Forty two items of the NES with a six point Likert's scale (0 5) which included 10 subscales of 1) problems with friends, 2) problems with boy/girls friend, 3) problems with money, 4) problems with course, 5) problems with teacher/lectures, 6) problems with parents, 7) problems with

other students, 8) problems with relatives, 9) health problems, 10) academic limitation and course interest. Its internal consistency reliability was. 85.

**Ethical Considerations**: This study has been approved by the ethical committee of Nursing Graduate studies, Faculty of Nursing, Burapha University before administering the questionnaires to the participants. Participants and their parents were asked to provide their signatures on the Consent Form. Prior to sign the consent form, selected adolescents were invited to participate and receive a full explanation of all aspects of the study. It were included potential risks and benefits related to uncomfortable feelings due to the sensitive nature of some questions and possible fatigue associated with completing the pencil and paper forms. Adolescents and their parents also were informed that their participations were voluntary and that they could refuse to participate at any time without any penalty.

Data collection: After the IRB approval by the ethical committee of Nursing Graduate studies, Faculty of Nursing, Burapha University, and permission procedures. The researcher met with the facilitated teachers to make an appointment. At that time, written informed consent for completing was obtained. Data collection in a given school setting took approximately 1 hour.

**Data Analysis**: descriptive statistics was used to describe demographic characteristics and the study variables in terms of frequency, per cent, mean,

standard deviation and range. Stepwise multiple regression were carried out to determine association and prediction of overall distress, negative psychological attributes, self - esteem, stressful event to suicidal ideation.

#### Results

A total of 408 participants with about 43% were male. Their age ranged from 12 - 19 years with a mean of 15.35 (SD = 1.76). Approximately equal percent of the participants were studying in M. 1 – 6. More than one half of the participants (68%) had grade point average above 3.00. Most of them was living with their family (85%), and had sufficiency of living expenses (90%). Approximately 70% of their parents were married. There were 84% of non - smoking, and 72% of non - alcoholic drinking adolescents.

The total score of suicidal ideation ranged from 0 to 24 (M=6.61, SD=5.05). This mean score of 6.61 implied a high risk for suicidal ideation among this sample. The total actual score for overall distress ranged from 0 to 9 with a mean of 1.56 (SD=2.05). The mean total score of negative psychological attributes were 18.87 (SD=5.00) and ranged from 8 to 34. Self - esteem contained 10 items with rating scale from 1 to 4. The total score of self - esteem ranged from 19 to 30 (M=24.72, SD=1.67). The mean total score of stressful events was 51.05 (SD=29.81) and range from 0 to 153. (Table 1)

Table 1 Descriptive statistics of variables (n = 408)

Variable	Mean	SD	Range	
Suicidal Ideation	6.61	5.05	0 - 24	
Overall distress	1.56	2.05	0 - 9	
Negative psychological attributes	18.87	5.00	8 - 34	
Self - esteem	24.72	1.67	19 - 30	
Stressful events	50.60	30.25	0 - 153	

Table 2 Correlation matrix of variables predicting suicidal ideation (n = 408)

Variables	1	2	3	4
1. Overall distress				
2. Negative psychological attributes	.306***			
3. Self - esteem	019 <sup>ns</sup>	.116*		
4. Stressful events	.285***	.436***	.068 <sup>ns</sup>	
5. Suicidal ideation	.293***	.329***	.067 <sup>ns</sup>	.406***

<sup>\*</sup> p< .05, \*\*\* p< 0.001, ns = non - significant

The general assumptions of multivariate analysis including missing, outlier, normality, linearity, and multicolinearity were tested prior to data analyses in order to reduce the potential distortion and bias in the results. Correlation matrix of Pearson's correlation coefficients found that overall distress, negative psychological, and stressful events were statistically associated with suicidal ideation (p< .001), while self - esteem was not statistically associated with suicidal ideation (p > .05). Details were presented inTable 2.

To identify the significant and the best predictor of suicidal ideation among Thai adolescents, stepwise multiple regression analysis was carried out. It was found that stressful events is significant and the best predictor. It accounted for 16.5% in variance explained ( $\beta$  = .293, t = 5.900, p < .001). The second significant best predictor was overall distress which increasing accounted for 3.4 % in the prediction ( $\beta$ = .163, t = 3.462, p < .01). The third and significant last predictor was negative psychological attribute. It increasingly accounted for 1.8% ( $\beta$ = .151, t = 3.022, p < .05). These three predictors accounted for 21.7% ( $F_{3,404}$ = 37.218, p < .001) in the prediction of suicidal ideation among Thai adolescents. (Table 3)

Table 3 Stepwise multiple regression statistics of variables predicting suicidal ideation (n = 408)

Variables	$\Delta R^2$	b	SE-b	β	t
Constant		.620	.873		7.100 <sup>ns</sup>
Stressful events	.165	.049	.008	.293	5.900***
Overall distress	.034	.401	.116	.163	3.462**
Negative psychological attributes	.018	.153	.051	.151	3.022*
F <sub>3,404</sub> = 37.218 *** R <sup>2</sup> = .217					
Adjust $R^2 = .211$					

p,<05,\*\* p<.01, \*\*\*p<.001, ns = non - significant

#### Discussion

Studies of suicidal ideation among adolescents are important because thoughts about suicide are associated with attempted and commit suicides.4 the result presented the average of suicidal ideation was 6.61 (SD = 5.05, range = 0 - 24) in the past 12 months among Thai adolescents. It seems to be less than in previous study in Thailand.<sup>3</sup> The lower rate of suicidal ideation may be they were living with their family, and they are Buddhism. This study revealed that there were 84.90 % of the participants living with family. Their parents provide positive relationships and support them to prevent to thoughts about suicide. 25-27 Similarly, there were about 96.57 % of the participants are Buddhist. Buddhism requires a lay - Buddhist to train them to avoid destroying life.<sup>28</sup> Religious affiliation and practice among Thai people may play an important role in preventing them from suicide when they encounter negative feelings in their lives.<sup>29</sup> Additionally, in a cross sectional study<sup>3</sup>, the results revealed that there was an overall prevalence of suicidal ideation of 8.8 % (9.9 % males and 7.7 % females) in the past 12 months among school - going adolescents. Although the result presented low score of suicidal ideation, this group of sample was high risk to suicide. Suicidal ideation should not be ignored as a predictor of suicide.

Overall distress, negative psychological attributes, and stressful events were statistically associated with suicidal ideation (p< .001). These three predictors accounted 21.7 % ( $F_{3,404}=37.218$ , p < .001) in the prediction of suicidal ideation among Thai adolescents. Stressful events was statistically associated with suicidal ideation (p< .001) and it is the best predictor accounted for 16.5 % ( $\beta$  = .293, t = 5.900, p < .001) which seemed that an individual's perceived level of stressful event is associated with suicide ideation. The explanation of this finding can be found in cognitive behavioral model<sup>27</sup>. Based on

this model, Rudd and colleagues <sup>27</sup> defined stressful life event as individual's perceived loss, and relation difficulty or problems, which increased vulnerability for suicidal ideation and could lead to suicidal attempt and completed suicide. Consistently, previous studies have shown that adolescents with higher levels of stressful events tended to have more suicidal ideation. 29-30 For example, Chang and colleagues 31 conducted a correlational study of 2,341 adolescents aged from 12 to 18 years in Taiwanese urban. They indicated that adolescent suicidal ideation was significantly related to life events. A higher level of suicidal Ideation was significantly and positively related to life. Likewise, In Thailand, Boonyamalik<sup>3</sup> showed that perceived life stress was associated with adolescent suicidal ideation. Tanoi and colleagues<sup>24</sup> also found that high level of negative life events are generally at increased risk for suicide behaviors.

Overall distress was statistically associated with suicidal ideation (p< .001). This findings can be explain based on the cognitive behavioral model<sup>27</sup> that adolescents who have high overall distress tend to develop suicidal ideation. Moreover, adolescents with high overall distress could have depression, anxiety and life dissatisfaction which impact on their cognitive vulnerability, cognitive triad and emotion regulation. This reason is supported by several previous studies.<sup>28-30</sup> For example, a cross - sectional study in 265 students of Tehran University<sup>29</sup> conducted to explore the relationship between suicidal ideation, depression, anxiety, resiliency, daily stresses and mental health. The result found that anxiety, depression, mental health, and daily stresses had a positive relationship with suicidal ideations. These explanations could support association between overall distress and suicidal ideation.

Negative psychological attributes were also statistically associated with suicidal ideation (p< .001). This finding has consistency with several researches.

It illustrated that these negative psychological attributes were related to suicidal ideation among adolescents. 11, 31 For example, there is a across - sectional survey research<sup>11</sup> using self - reported to assess suicidal ideation among 1,087 adolescents attending a pre - university college in India. The authors identified factors associated with recent suicidal ideation and attempt, negative social behaviors such as emotional problems and hyperactivity/inattention, were at higher risk for suicidal ideation. Besides, in a study in 2638 Hong Kong adolescents<sup>31</sup>, the relationships among suicidal ideation, general mental health status (domains: depression, lack of confidence and uselessness) and psychosocial difficulties and strengths were determined. The results indicated that factors associated with increased level of suicidal ideation were conduct disorder, and emotional symptoms.

A factor that found no significant association with suicidal ideation was self - esteem. It seemed that suicidal ideation resulted from an interaction of low self - esteem and other potentially distress factors such as depression. Studies 19, 25-26 indicated that adolescent with high depression within the low self - esteem were significantly associated with suicide ideation while only self - esteem influenced effect onthe suicide attempts. However, adolescents with high self-esteem can positively perceive a given situation, and thus the risk of thought about suicide could decrease. Additionally, it has been consistently demonstrated in previous studies that adolescents with positive and high self - esteem could appropriately cope with stress and deal with a problem based on a positive method. 18 Moreover, adolescents who living with their family which provided positive relationships and supported could help strengthen oneself and better adapt to daily life. 25-26

## Implications for Nursing Practice

The findings suggest a new direction for psychiatric - mental health nurses working in community especially on school setting should reduce overall distress, negative psychological attributes and stressfulevents. Enhancing an appropriated adjustment of adolescents within an unsatisfied situation is important. Moreover, the prevention program would seem to be that adolescent suicidal ideation could be reduced by teaching youth to manage their negative feelings in their daily life by teaching them about coping strategies and ability to deal with such stressful situations and guiding and teaching them to reduce or stop their negative feelings or change their negative feelings into a positive one. Comparison studies between adolescents studying at private and Technology schools, or across gender, across the region of the country should be further explored. Additionally, longitudinal and qualitative design should be carried out for further understanding about adolescent suicidal ideation phenomenon.

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