CHAPTER 1

INTRODUCTION

Background and Significance of Research Problem

Depression during adolescence is a significant public health concern (Horowitz & Garber, 2006). By 2020, depression will be the second most common cause of disability globally (Kowalenko et al., 2005). Nevertheless, for many years, adolescents' depression under recognized since children and adolescents were considered to lack the mature psychological and cognitive structure necessary to experience depression (Hamrin & Patcher, 2005; Pinar Ay, 2004). Currently, depression often starts in adolescence and causes significant impairment, impacts on developmental trajectories, interferes with educational attainment and increases the risk of attempted and completed suicide as well as develops major depressive disorder in adulthood (Calear & Christensen, 2010; Stallard et al., 2010). The prevalence of depressive disorder in adolescents has similarly high in all studied countries across the world. Rates were reported in developing countries, Asia and some Western European countries, with prevalence rates between 2.5% and 10% (Chen, Wong, Lee, Chan-Ho Lau, & Fung, 1993; Demyttenaere et al., 2004; Dong, Yang, & Ollendick, 1994; Kawakami, Shimizu, Haratani, Iwata, & Kitamura, 2004). Trangkasombat and Likanapichitkul (1997) reported the prevalence of 3.7% of depressed adolescents in Thailand. Once depression presented, the relapsed rates occurred at 12% within a year and 33% within 4 years, and by the age of 18 years, some 30% of adolescents

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will have met criteria for a diagnosis of major depressive disorder (Weisz & McCarty, 2006).

Depression exhibits with depressive symptoms in two categories: syndromal or depressive disorder and subsyndromal (Kowalenko et al., 2005). Adolescents with subsyndromal depression currently experience depression based on self-reported level of depressive symptoms but these symptoms do not meet diagnostic criteria (Kowalenko et al., 2005). Symptoms of subsyndromal depression cover the negative affect (blues, depressed, lonely, cry, sad), positive affect (good, hopeful, happy, enjoy), somatic complaints (appetite and sleep), and interpersonal difficulty (unfriendly and dislike) (Radloff, 1977). Symptoms of syndromal depression meet diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR; American Psychiatric Association [APA], 2000) or in the International Classification of Diseases (ICD-IO; World Health Organization, 2010). Depressive symptoms that persist during adolescence are a risk for depression episodes and related with high risk behaviors and suicidal ideation (Pinar Ay, 2004).

Depressive symptoms have three levels of severity that are mild, moderate, or severe depressive symptoms. Severe depressive symptoms refer to symptoms that highly interfere with normal functions such as the ability to work, study, sleep, eat, and enjoy once pleasurable activities. For moderate depressive symptoms refer to symptoms that impair functioning between mild and severe. Mild depressive symptoms refer to symptoms that mildly interfere with normal functions, but keep adolescent from functioning well or from feeling good (National Institute of Mental Health [NIMH], 2008; Lewinsohn, Munoz, Youngren, & Zeiss, 1992).

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Adolescents with mild to moderate depression recognized as at risk for developing major depressive disorder and 2 to 3 times more likely to develop other psychopathology compared to their non-depressed peers (Gotlib, Lewinsohn, Seeley, Rohde, & Redner, 1993; Kovacs, 1997). Unfortunately, mild to moderate depressive symptoms in adolescents are largely undetected and therefore remain unaddressed (Modenhauer, 2004). Untreated depression, particularly during adolescence when issues of identity development are paramount, can affect every aspect of future adult functioning (Probst, 2008). This incident accents the need for early identification and effective intervention to prevent and treat (Birmahir et.al., 1996; Lewinsohn, Rohde, & Seeley, 1998).

Adolescents with depressive symptoms have many problems including psychosocial dysfunction and physical condition problems that resulted from their depression. Jaycox and colleagues (2009) studied impact of depression in adolescents and found impairment in many areas such as peer, family, social, and school functioning. The exposure to depression at this critical major transition point could impede critical life choices including academic achievement, work, and social adjustment (Bru, 2010).

It has been hypothesized that depression is a result from interaction between adolescent's biological, psychosocial, and environmental causes (Cicchetti & Toth, 1999). For biological cause, imbalance of neurotransmitters and genetic tendency to depression influence the rates of depressive symptoms (Lewinsohn, Rohde, & Seeley, 1998; Rice & McLaughlin, 2001; WHO, 2008). For psychosocial cause, negative cognition and impairment of social and adaptive functioning were seen important for adolescent depression (Pinar Ay, 2004). Beck (1967) postulated that depressive

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symptoms arise from a set of negative automatic thoughts whose origins and formation occur following exposure to adverse experience during childhood and adolescents. In addition, Beck proposed negative automatic thoughts which is a stream of unrealistic (distorted) and dysfunctional appraisals or interpretations-meanings individuals take from both internalizing and externalizing difficulties in adolescents from moment to moment, is the strongest cognitive factor to develop depressive symptoms (Beck, 1967). Adolescents who have more and more negative automatic thoughts about themselves, the world, and the future began to feel more and more inadequate, inferior, failure, hopeless, and sad (Beck, 1995). Thus, when negative automatic thoughts are evoked of specific events or situations and adolescents can not be coped by their more realistic positive thoughts, facilitated the expression of depressive symptoms (Beck, 1995).

For social and adaptive functioning cause, Lewinsohn (1974) and Bandura (1998) proposed that depressive symptoms resulted from deficit of social and adaptive skills and a high rate of aversive experiences as well as repeated failure and low self efficacy. Additionally, symptoms from depression have an adverse effect on the social capacity of depressed adolescents, affecting their social and adaptive functioning and ability to react and deal with stressful situations (Goodyer, Altham, Herbert, & Tamplin, 2000). Gotlib and Hammen (1992) discussed the social and adaptive functioning of adolescents with depression and found that adolescents with the symptoms of depression are found to test low in social activities, close relationships, quality close relationships, family actives, and network contact, yet they test high in family arguments. Depressed adolescents reported significantly higher level of hopelessness, lower general self-esteem, and lower coping skills than non-

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depressed adolescents. Their ability to be unable to cope with stressful situations and problems can lead to fewer and less adaptive coping and problem-solving techniques (Asarnow, Carlson, & Guthrie, 1987).

Interventions are employed in the management of depressive symptoms to prevent and treat depression. There are two main forms of intervention for depressed adolescents: (a) Biological intervention that the American Academy of Child and Adolescent practice parameter recommended is antidepressants for children and adolescents with severe depressive symptoms, experience psychosis, delusion and hallucination, no improvement within 4 to 6 weeks, unable to undergo psychological interventions, recurrent episodes of depression, or bipolar depression (Birmahir, Brent, & Benson, 1998; Olfson, Gameroff, Marcus, & Waslick, 2003). However, pharmacotherapy has limitation to utilize for adolescents depression due to their side effects and disturbance to the brain and normal development (Schneekloth, Rummans, & Logan, 1993). (b) Psychological interventions are the interventions that determine the approach to adolescent's cognitive and emotional developmental level such as psychodynamic or cognitive behavior therapy [CBT] would be more appropriate in adolescents (Weller, Weller, & Svadjian, 1996). The current literature in adolescent's depression interventions heavily emphasizes approaches that stress altering unrealistic negative automatic thoughts (Weisz & McCarty, 2006). Evidences were supported the approach that a cognitive emphasis and behavioral activation are needed to generate improvement in adolescents with depression (Jacobson et al., 1996).

The American Academy of Child and Adolescent Psychiatry [AACAP] (1998) recommends psychological intervention as the first treatment approach for depressed adolescents with mild to moderate depression, of which cognitive

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behavioral therapy (CBT) is the most frequently studied approach (Compton et.al., 2004). Haby, Tonge, Littlefield, Carter, & Vos (2004) concluded that CBT is the most effective and cost-effective option for the first-line treatment in adolescents.

CBT for depression refers to a psychological intervention that integrates both cognitive principles and behavioral principles. The fundamental principle behind cognitive therapy is that a thought precedes a mood and that thought and mood interrelated with a person's environment, physical reaction, and subsequent behavior. Therefore, changing a thought that arises in a given situation will change mood, behavior, and physical reaction (Rupke, Blecke, & Renfrow, 2006). CBT focuses on alleviating the symptoms of depression by changing individuals' negative automatic thoughts, encouraging activities that promote a positive mood, and teaching problem-solving skills designed to promote more effective coping strategies to better manage negative life events (Hamrin & Patcher, 2005). Lewinsohn, Youngren, and Grosscup (1979) explained behavioral principles in the CBT that increase rates of positive reinforcement (positive social interactions, pleasant activities and events, etc.) can reduce social and adaptive functioning impairments and improve depressive symptoms.

The effectiveness of CBT compared to other psychological interventions was investigated by Brent and colleagues (1997) as cited in Hamrin and Patcher (2005) and found that CBT demonstrated higher remission rates (60%) compared to systematic-behavioral family treatment (29%) and nondirective supportive psychotherapy (36%) at 16 weeks. Clark, Lewinsohn, and Hops (1990) evaluated the three randomized trials. The study showed improvement of 46% (CBT with parental involvement), 67% (CBT with no parental involvement), and 48% in the waitlist

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control group. Weersing and Weisz (2002) used a benchmarking strategy to compare the effectiveness of CBT and psychodynamic psychotherapy. The analysis revealed that adolescents participated in CBT showed steep declines in symptoms of depression. These studies above showed that interventions using CBT produced significantly decline in depressive symptoms of depressed adolescents.

Depressed adolescents in schools have many problems such as behavior problems, increasing difficulty in schools with learning, peers, and teachers, possibly dropping out, impairment their ability to function appropriately, or drug and alcohol abused (Ingersoll & Goldstein, 1995). Unfortunately, depression in school students was the most overlooked and under-treated (Evans, Velsor, & Schumacher, 2002). Given the high prevalence rate and associated negative effects in adolescents, the need to prevent the development of depressive disorders has become essential (Calear & Christensen, 2010). To achieve this goal, the implementation of prevention intervention in schools was one important means because schools have unparalleled contact with students and represent a place in which the majority can be reached (Calear & Christensen, 2010). Research puts forward promising results for depression prevention intervention for adolescents in schools who are at risk for depression or with elevated depressive symptoms but did not meet the diagnostic criteria for depression (Pinar Ay, 2004). Intervention trials are based on CBT because CBT is proven to be effective for adolescents' depression (Pinar Ay, 2004).

School-based CBT program is a CBT intervention that delivers in school settings to prevent or treat depression (Gottfredson, Gottfredson, & Skroban, 1996). School-based CBT program in this study is developed for preventing and helping adolescents with depressive symptoms to improve their ability of restructuring

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negative automatic thoughts and enhancing their social and adaptive functioning so that they can manage and reduce their depressive symptoms. Clarke and colleagues (2001) conducted a randomized controlled trial utilized CBT in 94 secondary school students with depressive symptoms but did not meet the diagnostic criteria for depression. The intervention was based on a manual based CBT program which was delivered in fifteen 1-hour group sessions in eight weeks. This study determined significant preventive effects for depression, suicide symptoms, and social functioning. In addition, this study revealed the effectiveness of CBT preventive effects that a cumulative major depression incidence during a median of 15 months follow up of 9.3% and 28.8% in experiment and control groups.

Kowalenko and colleagues (2005) evaluated the effectiveness of a school-based CBT program in 82 school students with elevated depressive symptoms scores. The program was eight weekly sessions of 90-minutes duration during school time. The results showed significantly decreased levels of depressive symptoms and negative automatic thoughts, and improvement in coping skills compared with the control group. Curry and colleagues (2000) evaluated the effectiveness of CBT with 439 depressed adolescents in the Treatment for Adolescents with Depression Study (TADS). The results showed that CBT for adolescents is a superior intervention to placebo with rates of response to CBT 43.2%, placebo 34.8% in reducing depressive symptoms.

Calear and Christensen (2010) conducted a systematic review of school-based prevention and early intervention programs for adolescents to evaluate their effectiveness in reducing depressive symptoms. A large proportion of the program identified were based on CBT and delivered by a mental health professional or

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graduate students over 8-12 sessions. Indicated program which targeted students exhibiting elevated level of depressive symptoms were found to be the most effective with effect size ranging from 0.21 to 1.40. Kratochwill and Stoiber (2002) and Schaeffer and colleagues (2005) recommended school-based CBT for depressed adolescents in schools because CBT has been tested and found to significantly reduce depressive symptoms in participating students.

Since CBT has emerged as a highly effective intervention for depression in schools, it is resonable for adapting CBT to school-based program (Swallow & Siegel, 1995). In addition, CBT is considered particularly appropriate to use in schools because CBT format reflects the familiar structures of school such as study, homework, learning skills, researching problems, experimenting with new ideas, and collaborative styles (Platts & Williamson, 2000).

For studies emphasized cognitive principles of depressed adolescents in Thailand, Chatkaew (2003) studied effects of cognitive therapy on depression of 8 female youths in a Welfare Institution. The results demonstrated that post-intervention depressive score was significantly lower than pre-intervention depressive score. Aekwarangkoon and colleagues (2006) studied effects of brief cognitive-support treatment on 70 adolescent students with depression. The results revealed that the brief cognitive-support treatment was more effective than usual care in reducing mild to moderate symptoms of depression. However, these studies were conducted based on the cognitive therapy strategies not integrated behavior strategies in their studies and not conducted in the school settings in which the majority adolescents can be reached. Numerous studies demonstrated that school-based CBT effectively to prevent or treat adolescents with depression in other countries school

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settings (Kratochwill & Stoiber, 2002; Schaeffer, et.al., 2005; Swallow & Siegel, 1995). Therefore, the inclusion of school-based CBT in Thai schools may allow the emotional problems of previously unidentified and untreated students to be addressed.

Even though adolescents attending schools in Thailand or the Western countries conform in school context mostly similar in term of school organization and system, curricular content, basic material inputs, and academic achievement from the globalization of social movement (Buchmann & Hannum, 2001). However, the cultural (values, beliefs, expectancies) influence remains different between Thailand and the Western schools (Weisz, Suwanlert, Chaiyasit, & Walter, 1987). Thus, implementing school-based CBT developed in Western countries is a challenge in that many intervention strategies were primarily conducted and evaluated with adolescents who did not have co-occurring issues or multiple needs common of adolescents presenting in the Thai school settings (Fischer, et al., 2006). Therefore, some activities in the Western school-based CBT should adapt in Thai schools to suite with life style of Thai adolescents such as activities or interaction with peers and teachers (Fischer, et al., 2006).

In this study, researchers developed a school-based CBT program from the literature reviews regarding differences of adolescents attending in the Thai schools' cultural context and the CBT original version developed by Curry and colleagues (2000). The CBT developed by Curry and colleagues demonstrated successful on reducing depressive symptoms among depressed adolescents in the USA as stated earlier. Since there has not previously been school-based CBT conducted in Thai school settings, this school-based CBT program represents an innovative intervention of preventing or treating mild to moderate adolescents with depressive symptoms. By

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the end of this study, the information in regard to effective school-based CBT program in Thai adolescents with depression would be an alternative intervention to prevent and relieve depressive symptoms and would be an evidence for nursing practice, education, and nursing research.

Objective of the Study

The purpose of this study is to examine the effects of the school-based cognitive behavioral therapy program on depressive symptoms, negative automatic thought, and social and adaptive functioning among Thai adolescents with mild to moderate depression.

Hypotheses

In order to test the effects of the school-based cognitive behavioral therapy program on depressive symptoms, negative automatic thought, and social and adaptive functioning among Thai adolescents, the following hypotheses proposed for this study are as follows:

Hypothesis I: The mean score of depressive symptoms among Thai adolescents with depression receiving the school-based cognitive behavior therapy program is significantly lower than those receiving school nurses' usual care at six weeks, immediate upon the completion of intervention, and four weeks after the completion of intervention.

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Hypothesis II: The mean score of negative automatic thought among Thai adolescents with depression receiving the school-based cognitive behavior therapy program is significantly lower than those receiving school nurses' usual care at six weeks, immediate upon the completion of intervention, and four weeks after the completion of intervention.

Hypothesis III: The mean score of social and adaptive functioning among Thai adolescents with depression receiving the school-based cognitive behavior therapy program is significantly lower than those receiving school nurses' usual care at six weeks, immediate upon the completion of intervention, and four weeks after the completion of intervention.

Definition of Terms

School-based Cognitive Behavior Therapy Program for Thai Adolescent with Depression (School-based CBT) is defined as the process of preventing and helping that the researcher provided to adolescents with mild to moderate depressive symptoms in schools to improve their ability of restructuring negative automatic thoughts, managing depressive symptoms, and improving social and adaptive functioning. The program was modified using framework of Curry and colleagues (2000) and the literature review regarding adolescents attending in the school's context by the investigator.

The program has twelve sessions administered one hour per week for twelve weeks. The program begin with behavioral approaches including goal setting, mood monitoring, increasing, pleasant activities, problem-solving, a systematic appraisal of

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adolescents' day-to-day activities and the impact that this has on mood and thinking followed by targeted activation. About 5 sessions into intervention as mood begin to lift, cognitive techniques are used. Through session six to seven, the cognitive components were introduced regarding identifying negative automatic thoughts, recognizing distorted thinking, and cognitive restructuring. Adolescents are involved in self monitor their thoughts, feeling, and behaviors and challenging negative thoughts as well as changing or replacing them with realistic and positive ones.

Through session eight to twelve, the components regarding social skills training and relaxation training are utilized to work on social and adaptive difficulties. These sessions help depressed adolescents to improve communication and conflict resolution, and reduce physiological tension. Integrating social skill training with behavior strategies in the earlier sessions, given the improvement of social competence, adolescents have become to reduce rates of withdrawing from family and friends, to reduce rates of refusing to participate in pleasant activities, and to fulfill work demands at school or home. Social and adaptive functioning is enhanced after these sessions completed. As intervention draw to a termination, depressive symptoms and negative automatic thoughts decrease, and social and adaptive functioning increase.

Depressive symptoms is defined as the manifestations of depression that affect emotions, behavior, thoughts, and physical condition. Depressive symptoms include negative affect, positive affect, somatic complaints, and interpersonal difficulty, which is measured by the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977) translated to Thai by Trangkasombat, Larpboonsarp, and Havanond (1997).

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Negative automatic thoughts is defined as stream of unrealistic (distorted) and dysfunctional appraisals or interpretations-meanings individuals take from both internalizing and externalizing difficulties in adolescents from moment to moment. Negative automatic thoughts include physical threat, social threat, personal failure, and hostility, which is measured by Children Automatic Thought Scale (CATS) (Schniering & Rapee, 2002) translated to Thai by Thapinta and Songmuang (2004).

Social and adaptive functioning is defined as the degree of social competence and adaptive functioning to which an adolescent fulfills key social roles in his or her life. Social and adaptive functioning include school performance, peer relationships, family relationships, and home duties/self care, which is measured by Child and Adolescent Social and Adaptive Functioning Scale (CASAFS) (Spence, Price, Sheffield, & Donovan, 2000) translated to Thai by an investigator.

Adolescent with depression is a male or female student in public school age between 14 and 17 (Steinberg, 1999). This adolescent has depressive symptoms score of 16 to 24 which assessed by using the Center for Epidemiologic Studies-Depression Scale, Thai Version (CES-D, Thai Version).

School nurses' usual care refers to activities provided by school nurses for adolescents with depression compose of psychological problems assessment and giving advice or counseling individually to adolescent.

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