

## **CHAPTER 2**

### **LITERATURE REVIEW**

The review of literature in this chapter is organized into four major parts. The first part is concerned with the concept of depression. The second part is related to Thai adolescent students with depression. The third part covers factors associated with depression in adolescence. The fourth part concerns theories and concepts in the application of the brief cognitive-support treatment.

#### *Concept of Depression*

In this review, the concept of depression includes definitions of depression, types of depression, instruments for screening depression, and treatment as follows:

#### *Definitions of depression*

Depression, according to various dictionaries (Longman, 1978; 1995; Webster, 1995), can be categorized into three groups. Firstly, it can mean a feeling of sadness and no hope for the future. A second meaning is the act of not being engaged in much business activities, and being less active than usual. Thirdly, it can also mean a person's emotional state, including being unhappy and anxious, which prevents a person from living a normal life.

The diagnostic system used in the United States, known as Diagnostic Statistical Manual IV (DSM-IV), developed by the American Psychiatric Association, defines several categories of depression on the basis of three major types of criteria:

the depressed mood has to be associated with a set of other symptoms, the constellation of symptoms has to be present for a specified duration, and the constellation must result in significant emotional distress or functional impairment (Chaput, Moreau, & Mufson, 1998). From other literature, depression can be defined in terms of 4 types of symptoms as follows:

1. On the basis of emotional features, depression is described as feelings of sadness, loneliness, guilt/shame, anhedonia, and past failure (Westermeyer, 2003). Furthermore, signs and symptoms associated with depression in adolescents are persistent sadness, loss of interest in activities once enjoyed, feelings of worthlessness or inappropriate guilt, being bored, increased irritability, anger, or hostility (National Institute of Mental Health, 2000).

2. On the basis of physical features, depression is described as low energy, fatigue, agitation, diminished libido, insomnia/hypersomnia, increase/decrease in appetite, and lack of interest in sex (Westermeyer, 2003). Signs and symptoms associated with depression in adolescents are significant change in appetite or body weight, psychomotor agitation or retardation, difficulty sleeping or oversleeping, frequent vague, non-specific physical complaints such as headaches, muscle aches, stomachaches or tiredness (National Institute of Mental Health, 2000).

3. On the basis of cognitive features, depression is described as diminished concentration, and feelings hopelessness, helplessness, worthlessness, self-dislike, and self-blame (Westermeyer, 2003). Signs and symptoms associated with depression in adolescents are extreme sensitivity to rejection or failure (National Institute of Mental Health, 2000).

4. On the basis of behavioral features, depression is described as loss of interest in activities, withdrawal, reduced socialization, self-injury/suicide, crying, punishment, irritability (Westermeyer, 2003). Signs and symptoms associated with depression in adolescents are frequent absences from school or poor performance in school, talk of or efforts to run away from home, outbursts of shouting, complaining, unexplained irritability or crying, lack of interest in playing with friends, alcohol or substance abuse, social isolation, poor communication, difficulty with relationships, and reckless behavior (National Institute of Mental Health, 2000).

These symptoms cycle automatically, and the state of depression can maintain itself for weeks, even months as shown in Figure 1 (Westermeyer, 2003):

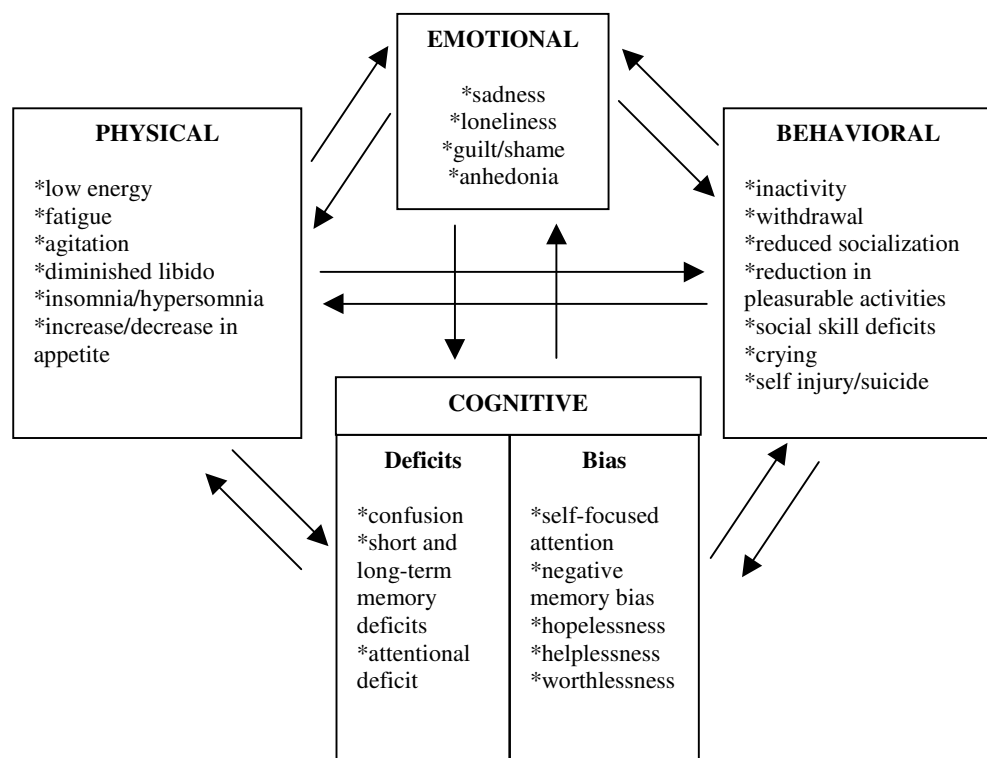


Figure 1 Four general symptom areas of depression (Westermeyer, 2003)

In this study, these symptoms were measured by BDI (Beck Depression Inventory), specifically designed based on cognitive therapy of the Beck concept to assess depression in the population as a self-rating scale. In addition, it can be measured by the Hamilton Rating Scale for Depression (HRS) as a clinician-rating scale for approving accuracy of the depressive symptom levels.

### *Types of depression*

Depression occurs as an illness or as a response to experiences.

#### 1. Depression as an illness.

##### 1.1 Major depressive disorder

Major depressive disorder is diagnosed when a person has experienced at least five of the following symptoms: depressed or irritable mood most of the day, significantly decreased interest or pleasure in almost all activities, significant change in weight or appetite, insomnia or hypersomnia, fatigue or loss of energy, difficulty concentrating or making decisions, observable psychomotor agitation or retardation, feelings of worthlessness or excessive guilt, and recurrent suicidal thoughts with or without a plan or suicide attempt. These symptoms must have occurred nearly every day for a minimum of 2 weeks, and this condition must represent a change from previous functioning.

##### 1.2 Bipolar disorder

If a person who presents a depressive episode and has a history of one or several manic or hypomanic episodes (periods of euphoria or irritability with increased energy, increased activity, decreased need for sleep, increased talkativeness,

racing thoughts, inflated self-esteem), the diagnosis is bipolar disorder. When there is no such history, the adolescent is given a diagnosis of depressive disorder.

### 1.3 Dysthymic disorder

Dysthymic disorder is diagnosed when a person has a depressed or irritable mood, and two of the following symptoms, which must have been present for at least a year: (1) appetite change, (2) sleep change, (3) low energy or fatigue, (4) low self-esteem, (5) difficulty concentrating or making decisions, or (6) feelings of hopelessness. During this 1-year period the adolescent must not have been symptom-free for more than 2 months.

## 2. Depression as a response to experiences.

### 2.1 Adjustment disorder with depressed mood

This type is diagnosed when the depressive symptom is in response to an identifiable psychosocial stressor but the episode does not meet the criteria for major depression or dysthymia. DSM-IV classification specifies that the disturbance must occur within 3 months of the onset of the stressor and must be resolved within 6 months after the stressor's termination.

### 2.2 Bereavement

This diagnosis is given when the disturbance caused by the death of a loved one does not meet the criteria for a major depressive episode. The usual symptoms are depressed mood, insomnia, decreased appetite, and difficulty concentrating. These are considered to be part of normal grief unless they persist for more than 2 months or are accompanied by severe psychomotor retardation or agitation, excessive guilt, recurrent suicidal thoughts, marked functional impairment, or psychotic symptoms.

### *Instruments for screening depression*

The instruments for screening depression in adolescents is divided into 2 groups: screening depression by self-rating scale and clinician-rating scale as follows:

#### 1. Screening depression by self-rating scale

1.1 Beck Depression Inventory (BDI). The original version was introduced by Beck, Ward, Mendelson, Mock, & Erbaugh in 1961. The BDI was revised in 1971 and made copyright in 1978. The BDI is a 21 item self-report rating scale specifically designed to assess the existence and severity of depression in normal population for clinical and research purposes. The BDI takes approximately 10 minutes to complete. Internal consistency for the BDI ranges from .73 to .92 with a mean of .86. The BDI demonstrates high internal consistency, with alpha coefficients of .86 and .81 for psychiatric and non-psychiatric populations, respectively (Beck et al., 1988). Sriyong (1979) translated BDI into Thai and tested it. Internal consistency was .85. She suggested that BDI efficiently differentiates depressed from non-depressed adolescents, is easy to administer and readily analyzable. It should be used as a screen for clinical evaluation of depression in adolescents.

In the inventory, respondents indicate how often over the preceding 2 weeks they have experienced each of 21 symptoms on a 4-point Likert scale, ranging from 0 (rarely or none of the time: less than 1 day) to 3 (most or all of the time: 5-7 days). Total scores range from 0 to 63: normal 5-9; mild to moderate depression 10-18; moderate to severe depression 19-29; severe depression 30-63. For the normal Thai population, Sriyong (1979) recommends the following classification: no depression 0-9; mild depression 10-15; moderate depression 16-19; rather severe depression 20-29; and severe depression 30-36.

1.2 Center for Epidemiologic Studies-Depression (CES-D), a 20 item inventory developed for use in studies of the epidemiology of depressive symptoms in the general population. The scale is not intended for a clinical diagnosis of depression. Scores can range from 0 to 60, with higher scores indicating greater symptomatology (Radloff, 1977). CES-D was translated into Thai version Trangkasombat, Larpboonsarp, and Havanond (1997), who concluded in their research study that the CES-D efficiently differentiates between the depressed from the non-depressed.

1.3 Children's Depression Inventory (CDI). The CDI has been designed as a self-rated assessment of depressive symptoms for school aged children and adolescents. There are 27 item-quantifying symptoms such as depressed mood, hedonic capacity, vegetative functions self-evaluation and interpersonal behaviors. For each item the child has three possible answers; 0 indicating an absence of symptoms, 1 indicating mild symptoms, and 2 definite symptoms. The total score can range from 0 to 54. Internal consistency reliability has been found to be good, with coefficients ranging from .71 to .89 with various samples.

1.4 General Health Questionnaire 28 (GHQ-28), a 28 item inventory is a widely used screening instrument. It detects a wide range of psychological disorders, mainly the anxiety/depression spectrum in normal population for clinical and research purposes. It consists of 4 sub-scales: (1) item 1-7 refer to somatic symptoms, (2) item 8-14 refer to anxiety and insomnia, (3) item 15-21 refer to social dysfunction, and (4) item 22-28 refer to severe depression. It efficiently differentiates psychological disorders from non-psychological disorders in adolescents, is easy to administer and readily analyzable. In the inventory, respondents indicate how often over the preceding 2 to 3 weeks they have experienced each of the 28 symptoms on a 3-point,

ranging from 0-0-1-1. Total scores range from 0 to 28. The purposed cut-off point of 5/6 points was established at the level of the highest possible sensitivity and specificity not lower than 75% (Makowska, Merecz, Moscicka, & Kolasa, 2002). This principle has been accepted for a practical reason, as the acceptance of the lower level of specificity forces medical practitioners to devote too much time to practically healthy people.

## 2. Screening depression by clinician-rating scale

2.1 Hamilton Rating Scale for Depression (HRS). The HRS was one of the first rating scales developed to quantify the severity of depressive symptomatology. First introduced by Max Hamilton in 1960, it has since become the most widely used and accepted outcome measure for evaluating depression severity. The HRS is a 17-item scale that evaluates depressed mood, vegetative and cognitive symptoms of depression, and comorbid anxiety symptoms. It provides ratings on current DSM-IV symptoms of depression, with the exceptions of hypersomnia, increased appetite, and concentration/indecision. The HRS was originally designed to be administered by a trained clinician using a semi-structured clinical interview. The 17-items are rated on either a 5-point (0-4) or a 3-point (0-2) scale. In general, the 5-point scale items use a rating of 0 = absent; 1 = doubtful to mild; 2 = mild to moderate; 3 = moderate to severe; 4 = very severe. A rating of 4 is usually reserved for extreme symptoms. The 3-point scale items used a rating of 0 = absent; 1 = probable or mild; 2 = definite. HRS was translated into a Thai version by Lotrakul, Sukanich, and Sukying (1996). The kappa value of the scale was 0.87. The Spearman's correlation coefficient that indicated the validity was -0.8239 ( $p < 0.0001$ ). The internal consistency was



acceptable (standardized Cronbach's alpha coefficient = 0.7380). Lotrakul et al. (1996) stated that the Thai HRS is the most widely used rating scale for depression. It is strongly recommended for measuring severity of depression in Thai patients.

2.2 Cronholm-Ottosson Depression Scale (CODS). The CODS was introduced by Ottosson and published in 1960. It was the first measurement that was specifically designed to be sensitive in measuring patient's depressive symptom changes during anti-depressive therapy. There is no report of it being used in the normal population.

In this study, Beck Depression Inventory (BDI) was selected as the self-rating scale, and Hamilton Rating Scale for Depression (HRS) was used as the clinician-rating scale to increase the quality of the data. Both were selected because both instruments have been confirmed by research studies, which strongly recommend using the two measurements since they efficiently differentiate depressed from non-depressed Thai adolescents. The items also cover the components of depression that include emotional, physical, cognitive, and behavioral facets. In addition, these instruments also are economical, easy to administer and readily analyzable. Thus, they should be used as a screen in this study.

### *Treatment of depression*

The general treatment for managing depression is divided into two types - pharmacotherapy and psychosocial therapy -as follows (Harrington & Dubicka, 2002):

## 1. Pharmacotherapy

The efficacy of tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), and monoamine oxidase inhibitors (MAOIs) in depressed adults has been well established, and clinical experience suggests that some depressed adolescents respond well to these medications. In most cases, pharmacotherapy should be restricted to adolescents who have not responded to psychosocial treatment, or to adolescents who show evidence of severe impairment associated with vegetative symptoms such as insomnia or decreased appetite (Chaput et al., 1998).

Most of the early research on pharmacotherapy was with the tricyclic antidepressants (TCAs). Although significant research showed the efficacy in TCAs for treating depression in adults, nevertheless double-blind studies have failed to show their efficacy and suggest that TCAs are probably ineffective in child and adolescent depression. The results from open trials were encouraging but almost all of the randomized controlled double-blind trials found no significant differences between oral tricyclics and placebos (Harrington & Dubicka, 2002). A meta-analysis of all available placebo controlled trials (n=12) of TCAs in patients between 6 and 18 years concluded that the difference between active treatment and placebo is too small to be clinically significant (Hazell, O'Connell, Heathcote, Robertson, & Henry, 1995 cited by Lynch, Glod, & Fitzgerald, 2001). Also, most depressed adolescents fail to respond to TCAs (Brown, 2001). Furthermore, problems with TCAs have been extensive: sudden cardiac death, increased blood pressure and heart rate, and some electrocardiographic (ECG) condition abnormalities in the PR, QRS parameters, and ECG abnormalities were related to higher TCA serum levels. Thus, TCAs are used infrequently with children and adolescents (Lynch et al., 2001).

Monoamine oxidase inhibitors (MAOIs) have been used very cautiously and usually for treatment-resistant depression in adults. However, there is a lack of studies involving adolescents. Because of the risk of hypertensive crisis associated with the intake of food or medicines containing tyramine, MAOIs have rarely been used with adolescents (Lynch et al., 2001).

Selective serotonin reuptake inhibitors (SSRIs), newer antidepressants have received increased interest because of the lack of efficacy of the TCAs as well as their side effects (Lynch et al., 2001). Emslie et al. (2002) reported current results from the acute treatment phase of a clinical trial designed to confirm efficacy of a fixed dose of 20 mg of fluoxetine in children and adolescents with major depressive disorder (MDD). The results showed that fluoxetine 20 mg daily appears to be well tolerated and effective for acute treatment of MDD in child and adolescent outpatients. Fluoxetine is the only antidepressant that has demonstrated efficacy in two placebo-controlled, randomized clinical trials of pediatric depression.

Although double-blind studies have failed to show the efficacy of tricyclic antidepressants, more recent evidence has emerged for the use of selective serotonin reuptake inhibitors in this population. However, placebo-controlled, double-blind studies are limited, and many of the other newer antidepressants have yet to be investigated in treating adolescent depression. Nonetheless, antidepressants are widely prescribed to these populations, and psychiatric nurses are actively involved in assessing and monitoring the need for these medications in adolescents (Lynch et al., 2001).

## 2. Psychosocial therapy

There is a strong case for preventing depression in young people by psychosocial therapy (Ellen, 1999). Some interventions involve either attempts to reduce levels of depression directly or efforts to develop strengths that might protect them against depression. Another approach is to develop positive skills that will protect the youngsters against depression and help them in other domains of development (Harrington & Dubicka, 2002; Simon, 2002).

There are various psychosocial interventions such as psychotherapy, psycho-education, behavioral therapy (social skill training, communication skill, and social rhythm therapy), family therapy, self help groups and supportive group therapy, etc. Psychotherapy seems reasonable for beginning treatment, particularly when the adolescent presents mild to moderate depression (Chaput et al., 1998). Cognitive behavioral therapy (CBT) is mentioned as the best type of psychotherapy for juvenile depression (Butler & Beck, 2000).

Cognitive behavioral therapy is a combination of two kinds of very effective psychotherapy: cognitive therapy, which examines unwanted thoughts, attitudes, and beliefs (called cognitive processes) and behavioral therapy, which focuses on behavior in response to those thoughts (Sanderson, 2003). In cognitive therapy, the therapist teaches the person how certain thinking patterns are causing symptoms by giving the person a distorted picture of what's going on in life, and making the person feel anxious, depressed or angry for no good reason, or provoking the person into ill-chosen actions. Behavior therapy helps the person weaken the connections between some troubling situations and his habitual reactions to them such as fear, depression or rage, and self-defeating or self-damaging behavior. It also teaches the person how to calm

his mind and body, so the person can feel better, think more clearly, and make better decisions (Bush, 2003).

Cognitive behavioral therapies are divided into three groups as follows (Mahoney & Arnkoff, 1978 cited by Aiemsupasit, 1993):

1. Focusing on cognitive restructuring (CR). This group believes that emotional disorders are related to inappropriate thought. Thus, the treatment is based on developing appropriate thought. This group consists of Rational-Emotive Therapy (RET), Cognitive Therapy, Self-Instructional Training, Rational Behavior Therapy, and Structural Psychotherapy.

2. Focusing on coping-skill therapies (CS). This group focuses on developing skills of the person until he can cope with stress or anxiety in various situations. This group consists of Anxiety-Management Training, Stress Inoculation Training, and Systematic Rational Restructuring.

3. Focusing on problem-solving therapies (PS). This group combines the cognitive restructuring group and the coping skill therapy group. It aims to develop various strategies to manage and control the problems, stress and anxiety. It requires cooperation between clients and cognitive therapists. This group consists of Problem-Solving Therapy, Personal Science, and Self-Control Therapy.

This study selected from the cognitive restructuring (CR) group cognitive therapy, a system developed by Aaron Beck at the University of Pennsylvania, as a treatment for depression, which stresses the importance of belief systems and thinking in determining behavior and feelings (Sanderson, 2003). Beck's cognitive therapy has proven its therapeutic success with people who are depressed or show anxiety or panic, as well as with a great deal of people with other problematic behaviors.

A comprehensive assessment and a careful evaluation of the depressive symptomatology should guide the clinician in choosing the treatment modality that will best address the specific problems of the individual. However, there are studies that mentioned ineffective psychosocial treatment for managing depression in adolescents with the reasons that: (1) the interventions have not thus far been widely transformed into routine practice, and are still relatively uncommon, (2) they may not be really suited for adolescents, and (3) they lack collaboration among key individuals such as parents, teachers, friends, and the healthcare team who provide the most important social support for adolescents (Harrington & Dubicka, 2002; Katon, et al., 1999).

Thus, the most effective assessment and management of depression for adolescent students should be feasible, practical, suited to the real context, and include collaboration amongst the parents/guardians, teachers, and nurses. Education about the nature of depression and available treatments is a necessary initial step in establishing a therapeutic alliance with the adolescents, the school, the family, and the primary care setting (Chaput et al., 1998).

### *Thai Adolescent Students with Depression*

Currently, depression is viewed as an important mental health problem of Thai adolescents, especially adolescent students aged between 15 to 19 years who have been identified as the group of high probability of risk for depression and who represent the future hopes and resources for the development of the country (Department of Mental Health, Ministry of Public Health, 2005). Rates of depressive

illness among Thai adolescents have been reported to range from 5% to 8% for major depression and 1.6% to 8.0% for dysthymia (Suampun, 2004). Increased concern of depression among adolescents is also related to other problems such as conduct disorder, substance abuse, academic problems, and antisocial or personality disorder (Hongsangunsri & Limsuwan, 2004). At its worst, depression induces suicide (World Health Organization, 2005). The number of new cases of depression and suicides related to depression in Thailand has grown annually (Department of Mental Health, Ministry of Public Health, 2005).

Increased risk of depression among Thai adolescent students was explored by a preliminary focus group study. The study compared perceptions of depression risk factors between depressed ( $n = 42$ ) and nondepressed ( $n = 43$ ) adolescent students aged between 15 to 19 years at two public secondary schools in Thasala District, Nakonsithammarat Province, Southern Thailand. The findings indicated that increased risk of depression among Thai adolescent students has been shown to be associated with a variety of reasons as described below (Aekwarangkoon, 2005).

1. Adolescent vulnerability to depression. Adolescent students in the preliminary focus group perceived the meaning of depression as a suffering that is caused by major physical and emotional changes, especially in regards to body image such as acne, body odour, weight, sexual appearance, and emotional changes such as love, hate, anger, and mood swings. These changes influence their self-confidence, which can lead to depression. Because one's transition from childhood to adulthood is a period of uncertainty, this transition greatly influences adolescents, especially in regards to psychological well being that can lead to depression (Rice, 1996).

2. Crisis situations. Adolescent students also described that depression is often created by crisis situations. They view a crisis situation as a relational conflict with an important person such as a boyfriend or girlfriend, a family member especially their parents, friends, and teachers. They also described that it is the nature of adolescents to need respect from their family, peer groups, and school. A lack of respect from these persons will often create emotional suffering leading to low self-esteem, loss of power, or hopelessness that leads to depression. As such, appropriate relationship affects one's mental health balance, whereas a conflict within a relationship creates mental health problems like depression, stress, anxiety, and/or suicide.

3. Thai culture. Depressed and non-depressed Thai adolescent students perceived that their nature and lifestyle are formed by the Thai culture, which is different from other countries. Thai social culture provides values which adolescents must live by. The structure of culture determines those rules that dictate how to be a good person. For example, "you are not an adult until you graduate from the university". Thus, good adolescents always follow the rules of culture. Those who do not will be blamed and stigmatized by society. Thus, culture also may create adolescent conflict.

4. Family environment. Family relationship is the main support system for adolescents. In recent years, the model of the Thai families has changed from being a large family consisting of more than one generation, to a smaller unit that consists of only the parents and the child or children. This leads to less social support. Parents work hard, while students are also expected to study hard. Everyone has limited time for each other. Still, students need more time to consult with their family members



about those many issues they confront their lives. This situation may create frustration leading to inappropriate thought and behavior.

5. School environment. The school environment includes peer groups and teachers. Other environmental characteristics include structure, rules of the school, and pressure. Adolescents perceive that they must be good student who follow school rules by being attentive to lessons, not opposing school regulations, suppressing inappropriate emotions (love, hate, anger, etc.), not arguing with adults, especially their teachers, because everything that teachers do is considered the best thing for them. This situation easily creates external conflicts that develop into internal conflict leading to depression.

6. Defense mechanism. Adolescents rely on defense mechanisms depending on their perceptions of any situation. Most depressed students exhibit defense mechanisms in the form of repression, isolation, and/or introjections. They often repress the conflicts and frustrations that happen in their lives, so they cannot manage their depressive symptoms. The first time they have such symptoms, they may ask for help from their friends which may lead to high-risk behavior such as narcotics use, sexual intercourse, teen pregnancy, sexual transmitted diseases, homicide, and/or suicide.

A preliminary focus group comparison study between depressed and non-depressed Thai adolescent students showed significant group differences in their perception of home and school expectations. Depressed adolescent students said they are more likely to be depressed if they think they must meet performance expectations that they think they are not able to achieve. They said that at home, they always felt pressured by family expectations such as to do more work around the house. In the

focus group, they expressed significantly greater psychological sensitivity to interpersonal conflict, particularly family and parental conflict. Their interpretation was that there was no love in the family (Aekwarangkoon, 2005).

They said that in school they were pressured by the school personnel to be good students who never disobeyed their teachers, who paid attention in the classes, never opposed school regulations, always suppressed strong emotions such as love, anger, hate, or sadness, never disobeyed adults, particularly parents and teachers, and always respected parents and teachers as positive symbols. Furthermore, relationships with friends were also greatly important for the depressed students, as conflict with their peers, especially their close friends could create hurt feelings. In addition, they also perceived that the influence of rapid social change, the effect of various media and complex technology, often in competition in their life, increased the rate of depression among Thai adolescent students. This broad range of expectations may create depression among adolescent students because they perceive that there are too many expectations that they are unable to fulfill, thus creating internal conflict, leading to self blame, self-worthlessness, low self-esteem, powerlessness, and hopelessness and finally to depression.

The results differed significantly for those students who were not depressed. The adolescent students in the focus group who were not depressed did not share these perceptions. They did not think they were expected to accept or strive to achieve such rigid standards of behavior. This apparent association between negative thinking and depression of the first group can appear to be a simple cause and effect relationship but the actual association is highly complex. Negative thinking can precede the onset of depression can occur as a symptom of depression, or develop as a

learned coping response to other symptoms of depression (Beck et al., 1979; Nolen-Hoeksema, 1987).

For all of the above reasons, it is easy for Thai adolescent students to experience internal conflict and frustration which increases negative thought through low self-esteem, self-satisfaction, feeling worthlessness, hopelessness, and powerlessness and that can lead to depression resulting in the delay of the developmental stage of students (Brown, 2001). These results related to other research findings demonstrate that most adolescents do not experience major turmoil, but negative views of self, of the world or of the future and a major conflict in the relationship with parents, peers, and teachers in the school causing depression (Hauenstein, 2003).

#### *Psychological help system in the secondary school*

To access the psychological help system, ten guidance teachers in three secondary schools at Thasala District were interviewed about the usual system to assist depressed students in the school. The results found that students with mental health problems including depression would receive the usual services provided by a guidance teacher following these steps (Aekwarangkoon, 2005).

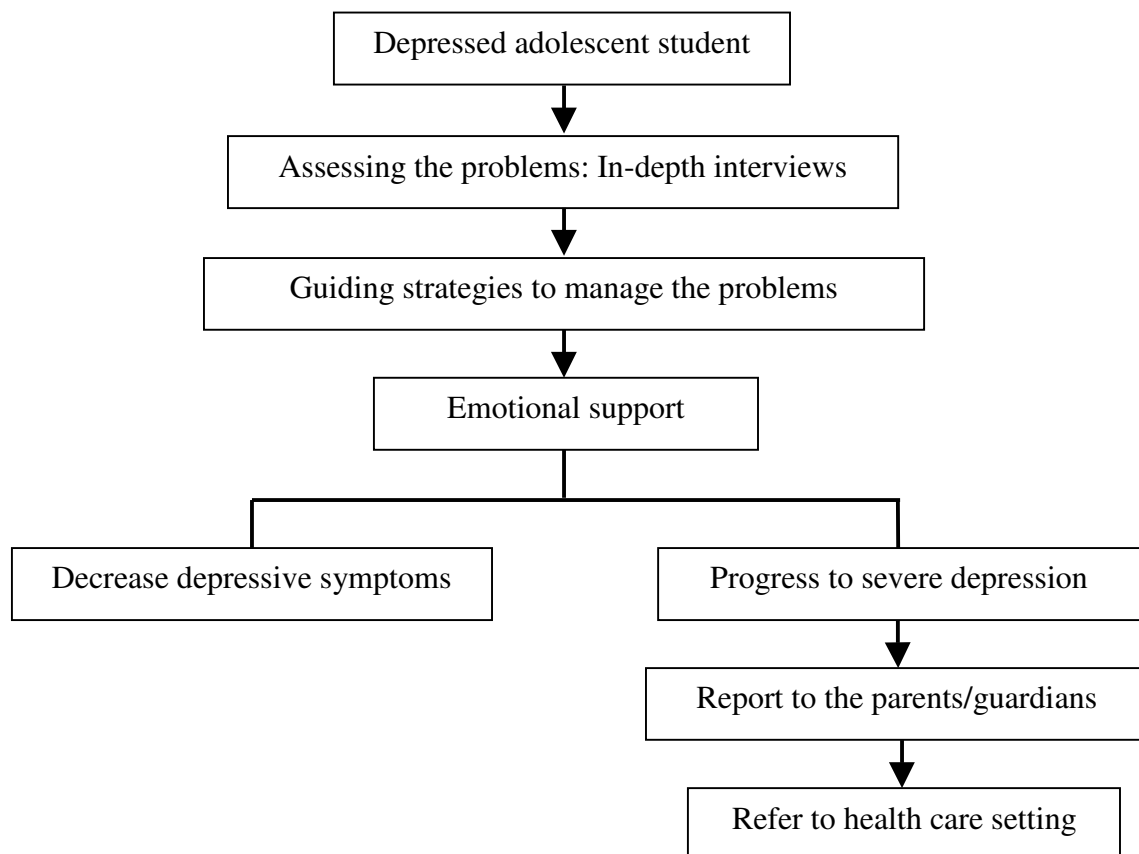
1. Assessing the problems. Most cases were detected by abnormal symptoms such as short attention in the classroom, crying, a sudden change of activities, interest in the environment, and isolation, etc. After the guidance teachers received cases, depressed students would be approached in order to assess the problem by in-depth interviews.

2. Guiding strategies to manage the problems consist of 3 techniques: (1) the guidance teachers teach adolescents about the impact of depression and ask them to stop negative thought, (2) study hard to forget their problems, and (3) focus on other activities such as playing with peer group, painting, drawing, exercising for referring interest from them.

3. Emotional support until they can cope with the real situation.

4. Reporting the problems to the parents/guardians if the depressive symptoms are not decreased.

5. Referring to health care setting near the school in severe cases. These steps are as show in Figure 2:



*Figure 2* The usual service model provided by guidance teachers at three public secondary schools in Thasala District

However, the guidance teachers said that the treatment was always limited in the real situation because of three reasons: (1) the guidance teachers are never trained for assessing depression, so, he/she is limited in depression assessment skills. This problem can be prevented by early detection and early treatment. However, most cases were detected during the severe depression phase which is very difficult to treat, (2) the guidance teachers were never trained for managing depression, and (3) the lack of collaborative care team of key persons such as parents/guardians, peer, or health care providers who are specialists in the mental health and psychiatric field that can provide effective treatment for students in the long term. This creates problems for the guidance teachers. A guideline of effective interventions that are practical and suited to the Thai students' context to manage depression is needed for helping depressed students, especially those who have mild to moderate depression, to reduce their depressive symptoms level and to prevent depressive disorders.

### *Factors Associated with Depression in Adolescence*

The factors associated with depression in adolescence are divided into 2 major factors: personal factors and environment factors. Each factor was described as follows:

1. Personal factors

- 1.1 Cognition

Aaron Beck's cognitive model states that depression is a result of negative misinterpretation of life events (Gordon, Matwychuk, Sachs, & Canedy, 1988).

Depression is triggered by the perception and cognitive processing of adverse events. Much previous research has shown that depression in young people is associated with negative thinking and some recent studies have reported that such thinking can presage subsequent depression (Harrington & Dubicka, 2002). In addition, many research findings indicate that most students do not experience major turmoil, but negative views of the self, the world or of the future are still often interpreted as part of normal development (Hauenstein, 2003). These negative thoughts create low self-esteem, low self-satisfaction, feelings of worthlessness, hopelessness, and powerlessness that can lead to depression (Brown, 2001).

### 1.2 Genetic

Depression runs in families, and there is now strong evidence that genetic factors play an important role in this familial aggregation. The genetic component accounts for approximately 80% of the variance in liability to bipolar disorder and severe major depression; however, in milder forms of major depression, it accounts for only about 20% of the variance (McGuffin et al., 1994 cited by Chaput et al., 1998). Furthermore, parental psychopathology, such as depression, anxiety, and personality disorders, often results in impaired parenting skills and family dysfunction that affects the psychopathology of child and adolescent. Similarly, some studies suggest that the adjustments of the parent to stressful events have a major influence on the child's reaction (Chaput et al., 1998).

### 1.3 Gender

During adolescence, depression rates rise in both males and females, and numerous studies have documented significant gender differences regarding depression (Galaif, Sussman, Chou, & Wills, 2003). It is more common in girls than

in boys, so that by late adolescence the female-to-male ratio approaches 2:1 (Angold & Rutter, 1992 cited by Chaput et al., 1998). Lynch et al. (2001) found that in children, the rate in boys and girls is approximately the same until adolescence, when the ratio becomes 2:1, with females having the greater incidence. In addition, Weissman (2002) found that the increase around the onset of puberty was greatest in girls.

#### 1.4 Age

Recent prevalence studies have suggested that 2% to 8% of young people experience their first episode of major depression by age 16 (McGee, Feehan, Williams, Partridge, Silva & Kelly, 1990 cited by Fergusson & Woodward, 2002). A high rate of depression was reported between ages 16 and 21 years (Fergusson & Woodward, 2002). In Thailand, the epidemiological data from the Ministry of Public Health (2003) mentions that the age group with suicide from depression is 15 to 29 years. It is congruent with the data from the National Institute of Mental Health Epidemiologic Catchment Area which shows that the age intervals with the highest probability for an onset of major depression for both males and females are 15 to 19 years and 25 to 29 years. Most are adolescents, especially students in the secondary school age 15 to 19 years who are very important to the development of the country (Department of Mental Health, Ministry of Public Health, 2005).

## 2. Environment factors

### 2.1 Social support

Studies have documented the positive influence of social support on psychological well being, both as a direct health-promoting agent and as a buffer

against the negative effects of stress (Turner & Butler, 2003). Adolescents who sought out support from family and friends were less likely to experience stress or to utilize maladaptive anger coping strategies to deal with their problems. Rather, receiving social support from others apparently protected them from tension and/or adopting negative management coping skills (Galaif et al., 2003).

There is reason to believe that individuals with a history of depression may receive less social support than those without such a history. Research shows that depressed people are consistently described as unpleasant and that the interactional styles of depressed people encourage rejection by others (Coyne, 1976; Monroe & Steiner, 1986 cited by Turner & Butler, 2003). The risk of the onset of depression in adolescence is significantly reduced by having supportive family members, as it provides some protection from depression when an adolescent is exposed to a stressor (McFarlane et al., 1994 cited by Galaif et al., 2003).

## 2.2 Negative life events

Depression is stimulated by negative life events such as the death and/or illness of a parent or illness, parental divorce or separation, parental unemployment, residential relocation and changing schools. Turner and Butler (2003) studied the direct and indirect effects of childhood adversity on depressive symptoms in young adults. The results indicated that higher trauma is associated with both the early onset of depressive disorder and later depressive symptoms. Studies of Kessler and Magee (1994 cited by Turner & Butler, 2003) found childhood adversity in the form of family violence, especially sibling violence and violence from multiple family members, to be significantly related to recurrent adult depression.



From literature reviewed, many causes of depression in adolescents are related to factors that cannot be controlled such as genetic, gender, and negative life events whereas the factors that can be controlled are cognitive and social support. Depression has many causes: biological changes rigid negative attitudes about oneself and catastrophic events can all cause depression. But one thing occurs after onset that is common to depression regardless of its etiology: negative thinking (Westermeyer, 2003). Social support is a factor that is most important for helping adolescents to cope with their life. Thus, effective strategies for reducing depressive symptom levels in adolescents are the management of thoughts and social support.

#### *Theories and Concepts in the Application of the Brief Cognitive-Support Treatment*

The following literature was reviewed presenting the theories and concepts for application in this study: cognitive therapy, brief intervention, and social support interventions.

##### *Cognitive therapy (CT)*

Cognitive therapy was developed by Aaron Beck at the University of Pennsylvania (Sanderson, 2003). Cognitive therapy for depression has its roots in the cognitive theory of depression (Beck, 1967 cited by Butler & Beck, 2000). A vast amount of research has indicated that cognitive therapy is the best type of psychotherapy for depression and other mental health problems. Cognitive therapy focuses on cognitive restructuring (CR), examining unwanted thoughts, attitudes, and beliefs (called cognitive processes) (Sanderson, 2003). Beck found that depressed people process

information in negative ways. They use internal conversation that communicates self-blame and self-criticism. In addition, they often predict failure or disaster for themselves and draw negative interpretations where positive ones would have been more appropriate. Beck believes three automatic negative thoughts are responsible for depression in these people. Three thoughts are called Beck's cognitive triad: (1) a negative view of self, (2) a negative view of the world, and (3) a negative view of the future (Sharf, 1996).

The focus of cognitive therapy is on the client's cognitions (thoughts) (Sanderson, 2003). The basic premise of cognitive therapy is that thoughts and beliefs have the greatest impact on emotions and behaviors. Emotional disturbance (e.g., anxiety or depression) is seen as a result of distorted thought patterns that determine the way that a person interprets the events in his or her life. The overall aim of cognitive therapy is to help clients restructure their thinking. That is, the point of cognitive therapy is to encourage accurate and logical thinking (Sharf, 1996). Thus, the person can feel better, think more clearly, and make better decisions (Bush, 2003).

The efficacy of cognitive therapy for depression has been studied extensively. It has been shown to be effective or superior to alternative interventions (Butler & Beck, 2000). Gloaguen et al. (1998) created the largest meta-analysis, evaluating 48 randomized controlled trials that included 2,765 patients with nonpsychotic and non-bipolar major depression or dysthymia. The results showed that the treatment of patients receiving cognitive therapy was quantified as superior to the "treatment" of an amalgamated group of placebo control subjects, the treatment of patients receiving antidepressant medication, and "other therapies," such as supportive and nondirective psychotherapies, interpersonal psychotherapy, and relaxation therapy. The authors

concluded that cognitive therapy had superior efficacy to both no therapy and all other modalities apart from behavior therapy.

Dobson (1989 cited by Butler & Beck, 2000) conducted a meta-analysis of 28 controlled treatment outcome studies of unipolar depression. Based on the scores of the patients on Beck Depression Inventory at the end of treatment, the research findings showed that cognitive therapy for depression was superior to “other” psychotherapies. Harrington et al. (1998) undertook a meta-analysis of six randomized trials with clinically diagnosed cases of depressive disorder and found that cognitive therapy was significantly superior to comparison conditions, such as, remaining on a waiting list or having relaxation training. In addition, Embling (2002) examined the effectiveness of cognitive therapy for treatment of clients with unipolar depression. The results confirm those of previous outcome studies that cognitive therapy is an effective treatment for depression.

The process of cognitive therapy based on Beck consists of three broad phases as follows (Sanderson, 2003):

1. Gaining awareness of one’s thoughts. The person must become aware of exactly what he is “telling himself” before he can change it.
2. Once one has identified a thought pattern that is making him feel bad, he must examine the validity of the pattern. Typically, negative thoughts are either incorrect or an exaggeration of the truth.
3. The final phase involves “challenging” one’s negative thoughts by answering them back with a more accurate way of thinking about that reality. Clients are taught to utilize this process outside of therapy sessions.

The principles of treatment in cognitive therapy according to Beck and Emery (1985) consists of correcting faulty or illogical thinking by repeatedly confronting cognitive schemata with discrepant information from role-playing and homework assignments. The entire procedure is carried out in 4 steps described below.

1. Elicit automatic thoughts

Automatic thoughts are habitual ways of thinking. They usually occur spontaneously and tend to contain cognitive distortions. The following techniques may be used to elicit them.

- 1.1 Focus on the other components of the problem (i.e., mood, behavior) and ask for associated thoughts.

- 1.2 Focus on an image and ask for whatever words come to mind.

- 1.3 Use imagination in mentally recreating the situation, perhaps with someone else in the role of client. Ask what thought comes to mind or what they might be thinking.

2. Identify underlying irrational beliefs

Examine the automatic thoughts for any cognitive distortions that may be present. The irrational beliefs are all based on flawed or faulty logic and have the potential to be highly maladaptive for the person who holds them. Depression as a negative mood state is the consequence of irrational beliefs that interfere with ability to solve problems and cause trouble for that person or create other difficulties.

The techniques that are used to help identify irrational beliefs comprise 2 techniques: (1) the downward arrow technique; challenging statements people make about what they think is causing their negative mood states by repeatedly asking the question, “If that were true, why would it be so upsetting?”, and (2) the use of thought

records, a common form of homework given to people in cognitive therapy that requires them to record their automatic thoughts associated with problem situations during the week.

### 3. Challenge the irrational beliefs

Once the irrational belief underlying an automatic thought has been identified from the list above, it is important to refute these beliefs by examining the evidence for them and by looking for alternative explanations. Generic questions called “dispute handles” originally developed by Sank and Shaffer (1984 cited by Beck & Emery, 1985) can be used to refute irrational beliefs in 2 ways. Questions about how certain we are a particular outcome will occur are referred to as probability dispute handles. Questions about the worst thing that could happen and how bad that could be are called coping dispute handles.

### 4. Replace the irrational beliefs with suitable alternatives

Often the replacements for automatic thoughts become evident in the course of refuting the irrational beliefs on which they are based. Client and therapist will establish the following goals:

4.1 Increase the number of opportunities for confronting with uncertain situations.

4.2 Initiate strategies to deal with situations.

4.3 Initiate follow-up with a situation the client dealt with previously.

4.4 Maintain ability to cope with situations.

Although there are numerous research studies that confirm the effectiveness of cognitive therapy for managing depression among adolescents, the limitation is that

cognitive processes need counselors who are specialists. It is extremely difficult to use its full model in countries with inadequate professionals of psychiatrics in the health care system such as Thailand.

### *Brief intervention*

Brief intervention has been widely accepted for mental health treating, as well as preventing mental health problems such as alcohol and other psychological problems, by raising awareness of these problems and advising changes (Fagan, 2003). Its aims vary according to the type and severity of the problems. To its good, any people who are trained by the specialist can process this intervention. This intervention also works in a short period of time and is practical in applying it in the real contexts. It has been developed largely for the primary health care environment (Budman & Gurman, 1988). The youth work setting is likely to be an appropriate place for brief interventions with young people who are experiencing problems with alcohol and the others (Fagan, 2003). Brief intervention consists of six core elements known as FRAMES, which stands for feedback, responsibility, advice, menu of options, empathy, and self-efficacy (Fagan, 2003).

Feedback involves giving personal feedback with regard to ways in which the behavior is harming the individual. Lectures and films about detrimental effects of the problem on people in general seem to have little problem. Personal feedback based on a thorough assessment of the individual regarding the ways in which their severity of the problem is harming them does seem to have strong motivational effect.

Responsibility is related to the research that consistently shows that people are most likely to take action when they perceive that they personally have chosen to do

so (Fagan, 2003). It emphasizes that a person is responsible for making changes to his/her thoughts that induce to the problems. Perceived personal control is seen as an important element of motivation for thought and behavior change and maintenance of change. When individuals are told they have no choice, they often resist change, but when they are told that it is ultimately up to them to choose, then they may be more likely to change. Instead of telling individuals that they have a problem, individuals should be asked to talk about their own perceptions of the situation. Statements such as: “you have a serious problem and you need treatment” is likely to evoke from many individuals the countering argument that can help individuals resolve their ambivalence. In this step, the counselor has respect for the person’s right to make choices for himself.

Advice involves giving the person clear and direct counsel as to the need for change and how it might be accomplished. The key element is a clear recommendation for change, based on accurate personal information, given in an empathic manner.

Menu of options means in order for a person to truly believe that he or she has personal responsibility in decision-making, there must first be real alternatives from among which the individual can choose. A menu involves individuals being actively involved in choosing their own treatment approach from alternatives. The research shows that programs need to be flexible with no single treatment being appropriate for all individuals.

Empathy is one of the strongest predictors of therapist success in motivating and treating individuals. An empathic therapist is one who is client-centered, listens closely, and reflects the client’s statements and feelings by:

1. Speaking directly, simply, and honestly.
2. Avoiding making judgmental comments, asking open-ended questions including their thoughts and feelings about being in therapy, and then being a good listener.
3. Acknowledging the person's distress and ambivalence about being in therapy and addressing their problems.
4. Exploring the purpose and goals of treatment and ways in which recovery can best be accomplished with them.
5. Discussing issues of confidentiality.
6. Instilling confidence in the person about skills as a therapist and the belief that they can meaningfully address their problems.

Finally, self-efficacy involves helping individuals come to believe that meaningful change can be achieved. This is accomplished not only by helping to give them the tools they need to make meaningful changes, but it also involves treatment personnel truly believing in what they are doing, communicating that they care about the person and that they believe the person can make meaningful changes.

Clearly, research shows that FRAMES is an effective strategy for improving one's cognition and behavior. Counselors can use FRAMES elements to develop individualized treatment strategies that increase a person motivation for meaningful long-term change.

Although there is strong evidence to support the effectiveness of cognitive intervention for reducing depression, brief intervention is practical for solving the mental health problems with youth. Research studies confirmed that brief cognitive



interventions fail in the long term if patients lack social support (Chittawan, 2003; Reinecke, Ryan, & DuBois, 1998; Reunthongdee, 2001).

### *Social support*

Social support has been shown to be important for adolescents with depression (Finfgeld-Connett, 2005; Heino, Rimpela, Rantanen, & Laippala, 2001; Piper et al., 2002; Stice, Ragan, & Randall, 2004). Social support refers to the people in one's life who can be relied upon for guidance, practice support, and emotional support to enhance a person's ability to cope with depression or to alleviate the impact of the stressful event on the person (Choenarom, Williams, & Hagerty, 2005; Cohen & Willis, 1985; Jones, 2002). The exact role of social support, however, varies across studies depending on the theory of social support that drives a particular investigation (Choenarom et al., 2005). Therefore, the researcher used this framework to create supportive environment added with brief cognitive intervention.

Currently, there are two models used to explain the manner in which social support influences mental health: the main effect model and the buffering model (Jones, 2002). On the one hand, from the diathesis distress-buffering model, social support can enhance a person's ability for managing distress situations that is always beneficial to an individual's well being. In this model, social support is seen as a moderator (Cohen & Willis, 1985). On the other hand, the social-cognitive model (Rhode & Lakey, 1999 cited by Choenarom et al., 2005), influenced by attachment, symbolic interaction, and cognitive theories, hypothesizes that social support promotes well-being in and of itself regardless of the presence of stress level.

Social support that influences adolescent students' well being can be obtained from two resources: their family members, especially their parents, and their school environment such as peers, teachers, and the other school personnel (Mahachoklerdwattana, Rungkanjanaset, Boonsit, & Areekul, 2004; Reunthongdee, 2001; Heino et al., 2001).

Stice et al. (2004) tested whether deficits in perceived social support predicted subsequent increases in depression, and whether depression predicted subsequent decreases in social support with longitudinal data from adolescent girls (N = 496). The results found that deficits in parental support but not peer support predicted future increase in depressive symptoms and the onset of major depression. In contrast, initial depressive symptoms and major depression predicted future decreases in peer support but not parental support. Results are consistent with the theory that support decrease the risk for depression but suggest that this effect may be specific to parental support during early adolescence. Results are also consonant with the claim that depression promotes support erosion but imply that this effect may only occur with peer support during this period.

In addition, a number of studies have reported the effectiveness of social support on reducing depression. A supportive system with collaboration between key persons appeared to be feasible and resulted in a significantly greater decrease in the severity of depression over time compared with the usual care in a wide range of primary care practices (Katon et al., 1995; Unutzer et al., 2002). Heino et al. (2001) studied sociodemographic determinants of depression among 16,464 adolescents aged 14 to 16 years old girls and boys, and the role of perceived social support in mediating the effects of the background variables. The results indicated that depression was

associated with family structure in both sexes. Accumulating number of discontinuities in life course increased the proportion of the depressed among both girls and boys. Perceived lack of social support had the same effect. Lack of support did not explain the effect on depression of the discontinuities in life course.

Social support always acts as a mediating effect, when stressful events trigger the mobilization of social support which, in turn, contributes to the maintenance of health and well-being (Boswell, 1969 cited by Choenarom et al., 2005). Social support is both a direct health promoting agent and a buffer against the negative effects of stress (Turner & Butler, 2003). The findings of research studies to follow up and evaluate the effectiveness of cognitive therapy showed that more than 50% of the participants had experienced recurrent depression due to lack of social support (Chittawan, 2003; Reinecke et al., 1998; Reunthongdee, 2001).

Other research results indicated that social support play a significant role for increasing the effectiveness of depression treatment among depressed adolescents (Katon et al., 1995 cited by Craske et al., 2002; Piper et al., 2002). This result is congruent with Reunthongdee (2001) who developed an intervention model that focused on appropriate conscious thought formulation for treatment of Thai adolescent students suffering from depression. She strongly suggested that social support from both family and school increases the effectiveness of the cognitive behavior treatment.

In this study, the researcher is interested to combine brief cognitive treatment, and support intervention such as social support that may provide more effective intervention for reducing depression. Brief cognitive intervention acts as the main component that helps the depressed adolescents to change their inappropriate thoughts to appropriate thoughts (Butler & Beck, 2000). Supportive intervention acts as the

supportive component in the treatment that enables the adolescents to maintain the capability to transform their thought processes. As depression results from cognitive distortion that is developing in the life pattern, it is easy for it to recur once the intervention ends. Supportive intervention is consistent with the nature of adolescents who seek out support from friends, teachers, or parents for coping strategies to deal with their problems (Galaif et al., 2003).

The brief cognitive-support treatment is intended to break the cycle of negative thoughts and negative interpersonal interactions by promoting realistic thinking, increasing positive interpersonal interactions with others, relieving emotional distress, and improving symptom of self-management skills. Based on these strategies, the person can feel better, think more clearly, make better decisions, and reduce depression (Bush, 2003). The results of this treatment provide preliminary evidence of treatment effectiveness for the model.

The process of brief cognitive interventions differ from strict cognitive therapy for depression (Beck et al., 1979) in that the intervention was not used to directly counter the specific negative thoughts held by the participants. The brief cognitive intervention provides cognitive methods to improve a range of coping responses to distressing problems. Improved self-management of mild to moderate depressive symptoms can reduce this level of depression symptom severity. Brief cognitive-support treatment focuses attention on patterns of negative thinking while at the same time promoting more frequent interpersonal interaction with supportive others. Thus, this treatment promotes more realistic cognitive and interpersonal responses to stressful circumstances and problems (Galaif et al., 2003).

### *Summary*

The review of literature in this study shows that depression is a major mental health concern affecting a large population, particularly adolescent students with consequent problems which may include narcotic use, mental health disability, and suicide attempts associated with significant mortality, and increased economic health care costs. These problems affect both the individuals and the society in the long term. Even though there are factors contributing to depression in adolescents, cognitive modification, brief intervention, and social support are important in promoting good mental health.

Considerable research studies, both in Thailand and in other western countries, suggest that brief cognitive treatment combined with social support is effective for treating as well as preventing depression among adolescents who suffer from mild to moderately depression (Finfgeld-Connett, 2005; Reunthongdee, 2001). However, to date there have been only a limited number of studies that combine these concepts for reducing depressive symptoms in Thai adolescents.

Considering the enormous costs and effect of mental health disability in the long term and mortality associated with depression, early detection and early treatment for prevention is the best and most cost-effective approach. Effective programs on the brief cognitive-support treatment must be tested in order to decrease depressive symptoms and prevent depressive disorder in Thai adolescents.