

**Evaluation of a cognitive behavioural bibliotherapy self-help
intervention program on the promotion of resilience in
individuals with depression**

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ABSTRACT

Depression is projected to become the major mental health problem in Thailand. One way of helping people with depression is Cognitive Behavioural Therapy incorporated in bibliotherapy. The study used a randomised controlled trial to evaluate the effectiveness of an 8-week modularised self-help intervention program in promoting resilience in people living in the community with moderate depression. Ethics approval was obtained from the Human Research Ethics Committee, Victoria University, and the Mental Health Department, Public Health Ministry of Thailand, Bangkok. Based on a power analysis, a sample of 56 individuals with moderate depression was recruited through Suan Prung Psychiatric Hospital, Chiang Mai, Thailand. Participants were randomly allocated to an intervention or control group. Data were collected with standardised psychometric instruments, including *Resilience Scale*, *Centre for Epidemiologic Studies Depression Scale*, and *Kessler Psychological Distress Scale*. Data were collected at baseline, at the end of intervention, and four weeks after the completion of the intervention. Data were analysed using SPSS, Version 16.0. The findings showed there were statistically significant differences between the intervention and the control group in their resilience, depression and psychological distress levels. The participants who completed the self-help manual achieved greater resilience and lower levels of depression and psychological distress than the control group. The findings support the use of bibliotherapy for people with moderate depression in a Thai context. Bibliotherapy is straightforward to use, and an easily accessible addition to the standard approach to promoting recovery from depression. It is readily incorporated into the work of mental health professionals in promoting resilience and enhancing recovery in people with moderate depression in the community.

DOCTOR OF PHILOSOPHY DECLARATION

“I, Mrs. Wallapa Songprakun, declare that the PhD thesis entitled “Evaluation of a cognitive behavioural bibliotherapy self-help intervention program on the promotion of resilience in individuals with depression” is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work”.

Signature



Date 18 March 2010

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2. “Evaluation of a cognitive behavioural bibliotherapy self-help intervention program on the promotion of resilience in individuals with depression” at 40th Asia-Pacific Academic Consortium for Public Health Annual Conference, 7-9 November 2008, Renaissance Hotel, Kuala Lumpur, Malaysia.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

In this chapter, an overview of the study is presented. The background, research questions, aims of the study, research hypotheses and definition of terms are stated. This is followed by the justification for the study. Finally, an overview of the structure of the thesis is presented.

1.2 BACKGROUND

Depression is one of the leading causes of disability in developed and developing countries, including Thailand. This thesis relates to a study of the effectiveness of a Cognitive Behavioural Bibliotherapy (CBB) self-help intervention programme on the promotion of resilience in individuals with moderate depression. The study participants are individuals who are receiving treatment for moderate depression at the outpatient department, Suan Prung Psychiatric Hospital, Chiang Mai, Thailand.

1.3 RESEARCH QUESTION

What effect does a CBB self-help intervention programme have on the resilience level of individuals with moderate depression?

1.4 HYPOTHESES

The hypotheses of the study are:

- 1). Individuals with moderate depression who take part in a cognitive behavioural bibliotherapy self-help intervention programme as well as continuing to receive standard care will have greater resilience level than those who receive only standard care.
- 2). Individuals with moderate depression who take part in a cognitive behavioural bibliotherapy self-help intervention programme as well as continuing to receive standard care will have lower depression level than those who receive only standard care.
- 3). Individuals with moderate depression who take part in a cognitive behavioural bibliotherapy self-help intervention programme as well as continuing to receive standard care will have lower psychological distress level than those who receive only standard care.

1.5 DEFINITION OF TERMS

Moderate depression means a moderate depressive episode (F32.1) diagnosis, as assessed by ICD-10: *The Tenth Revision of the WHO International Statistical Classification of Diseases and Related Health Problems* (World Health Organization, 1993 p.vi)

- A. The general criteria for depressive episode (F32) must be met; the depressive episode should last for at least 2 weeks, there have been no hypomanic or manic symptoms sufficient to meet the criteria for hypomanic or manic episode (F30) at any time in the individual's life, and

the episode is not attributable to psychoactive substance use (F10–F19) or to any organic mental disorder (F00–F09).

B. At least two of the three symptoms listed for F32.0, Criterion B, must be present: abnormal depressed mood present for most of the day and almost every day and sustained for at least 2 weeks, loss of interest and pleasure in activities that are usual pleasurable and decreased energy or increased fatigability.

C. Additional symptoms from F32.0, Criterion C, must be present, to give a total of at least six symptoms: loss of confidence, inappropriate guilt, recurrent thoughts of death and any suicidal behaviours, complaints of diminished ability to think or concentrate, sleep disturbances, and change in appetite with weight change.

Resilience is the psychosocial capacity of the person to maintain positive adaptive functioning which minimises negative thoughts and promotes recovery of strength and coping ability with adversity (Reivich, Gillham, Chaplin, & Seligman, 2005).

Cognitive behavioural bibliotherapy is active self-help using written materials in standard book form (Campbell & Smith, 2003; Cuijpers, 1997; Jorm, Griffiths, Christensen, & Rodgers, 2002). Bibliotherapy incorporates the foundational principles of cognitive behavioural therapy for depression and provides exercises designed to help the reader overcome negative feelings associated with depression (Gregory, Canning, Lee, & Wise, 2004).

1.6 JUSTIFICATION FOR THE STUDY

There is a need for a study that examines the effectiveness of a CBB self-help intervention programme in promoting resilience in individuals with moderate depression. The need for such a study is premised on cognitive behavioural therapy (CBT), an effective psychological therapy, which focuses on decreasing automatic negative thoughts, increasing positive activities, and enhancing behavioural coping skills and interpersonal skills (Reivich et al., 2005). CBT is associated with lower relapse rates and affords protection against future episodes of depression (Goldman, Nielsen, & Champion, 1999; Spangler, Simons, Monroe, & Thase, 1997). An emphasis on CBB is valuable in this context because it is a standardised treatment in book form that an individual works through, independent of any assistance from health care professionals (Jorm et al., 2002). It involves individuals with depression using the CBB self-help approach to help control their negative emotions, and monitor and increase their activities of daily life independently (Jorm et al., 2002). Bibliotherapy has produced therapeutic gains in the treatment of depression, which have been maintained for three years (Smith, Floyd, Scogin, & Jamison, 1997). The main difference between CBB and CBT is that the former incorporates CBT in book-form, whereas the latter is most commonly provided face-to-face by a therapist. CBB is also more accessible to people with depression than standard approaches to CBT delivered by therapists.

Justification for the study can also be based on the concept of resilience, the psychosocial capacity with which an individual manages difficulties. It is the latent psychological capacity to minimise the negative effect of difficulties and promote coping with adversity in every day life (Kim, 1998). Resilience is the cognitive, emotional and behavioural response to change from negative encounters or losses

to enable positive behavioural and psychological outcomes. The concept focuses on the individual factors associated with adjustment, such as personality traits and coping skills (Sheridan, Eagle, & Dowd, 2005). Apart from reports that focus on mental health consumers (hereafter, consumers) who have depression, no studies have yet been carried out elsewhere focusing on the effectiveness of a cognitive behavioural bibliotherapy self-help intervention programme in the promotion of resilience in individuals with depression. Although it is important to assess the value of self-help manuals for depression developed in other countries, the findings cannot be assumed to be applicable to a Thai setting due to differences in cultures setting, and delivery of mental health care services.

CBT is an effective intervention for people with depression (Reivich et al., 2005). It focuses on changing their negative thoughts and behaviours. CBT can also be used to promote resilience, which is effective in helping individuals face adversity and in promoting emotional health, like anxiety and depression (Reivich et al., 2005).

There are potential benefits in using a CBB self-help intervention programme to promote resilience in individuals with depression in Thailand. The programme uses the principles of self-help, contained in a workbook format, for recovery from depression. It is anticipated that the main outcome of the study may be a therapeutic option for the promotion of resilience in individuals with depression. Moreover, the results could be used as an intervention by psychiatric nurses, counsellors, and other mental health care staff to promote resilience in individuals with depression in Thailand.

1.7 STRUCTURE OF THE THESIS

The remainder of the thesis is presented in seven chapters. In Chapter Two, the context of the consumer is presented. A review is undertaken of depression. In Chapter Three, the treatment modalities for depression, including CBT and CBB, are summarised. In Chapter Four, the concept of resilience is explored. In Chapter Five, the methods of study are outlined and discussed. In Chapter Six, the findings of the study are presented. In Chapter Seven, a discussion of the findings is undertaken, into the effect of the CBB self-help intervention programme on resilience, depression and psychological distress. Finally, the conclusion and recommendations of the study are presented, as well as the implications for clinical practice, consumers with depression, and future research.

CHAPTER TWO

THE CONTEXT OF PEOPLE WITH DEPRESSION

2.1 INTRODUCTION

This chapter presents a review of selected literature about the context of consumers with depression. The literature review begins with an overview of depression, including its epidemiology and aetiology. This is followed by an explanation of the factors influencing depression, and the symptoms of depression. Finally, an overview of the types of depression is presented.

2.2 OVERVIEW OF DEPRESSION

2.2.1 Defining Depression

Depression has been defined in a variety of terms referring to symptoms, syndrome, disorder or illness. Hippocrates described the states of “melancholia” and “mania”, attributing depression (melancholia) to black bile, one of the four humours,¹ a toxic substance produced in the spleen or intestine, which affected the brain (Townsend, 2008). Both these terms survived the passage of time and are still in use today (Palazidou & Tiffin, 2002). Depression has been defined as feelings of sadness, loneliness, anxiety and despair. These feelings may lead to suicidal thoughts when individuals with depression have severe symptoms (Townsend, 2008). Depression has also been defined as changes in emotions, thoughts, behaviours and body mechanisms or the progression of negative moods (Thompson & McNeil, 2000). Furthermore,

¹ The four bodily humours are yellow bile, black bile, phlegm, and blood (Nemade, Reiss, & Dombeck, 2007).

Chittawon (2003) summarised depression in her study in Thailand as feelings of sadness, loneliness, being unloved, and self-worthlessness. Individuals with depression may also have held feelings of anger for a long time and may have been physically and sexually abused; as a result, the person may express loss of interest in daily activities, interaction with others, including school and work participation. These symptoms may be accompanied by physical problems such as abdominal pain, headache, insomnia or drowsiness.

2.2.2 Epidemiology of Depression

Depression is associated with long-term morbidity and increased mortality (Wilson, Mottram, Ashworth, & Abou-saleh, 2003). The prevalence of severe and moderate depression increased tenfold from the periods 1947–1957 to 1957–1972 (Dubovsky, Davies, & Dubovsky, 2004). According to the World Health Organization, globally 154 million people currently suffer from depressive illness (World Health Organization, 2007). The *World Health Organization Global Burden of Disease Study* ranked it as the fourth leading cause of disease burden, accounting for 4.1% of total disease burden (Murray & Lopez, 1997). In terms of worldwide disease burden, it is estimated that by the year 2020 major depressive disorder will rise from the fourth to the second most common cause of disease burden after ischaemic heart disease (Davidson & Meltzer-Brody, 1999; Murray & Lopez, 1997; Scott & Dickey, 2003; World Health Organization, 2006b)

In most developed countries, 15% of the population suffer severe depression (World Health Organization, 2001). For instance, depression has an estimated

prevalence of 15–30% of the population in the United Kingdom (Churchill et al., 2007). In the United States of America (USA), the National Institute of Mental Health claimed 18.8 million adults, about 9.5% of the population aged 18 years or older, have a depressive disorder in a given year (Cornwell, 2003). In Australia, people with a mental or behavioural disorder as their primary condition comprise 16% of the total disease burden. The most common conditions within this group are depressive/mood (affective) disorders, accounting for 3% of this figure (Australian Bureau of Statistics, 2007).

In developing countries in Asia, the prevalence of depression has been increasing over the past 20 years (Patel, 2006). In South-East Asia, it is estimated 5–10% of the population of the region suffers from a severe enough form of depression to require one or more forms of treatment (Desai & Isaac, 2006).

Thailand has a population of approximately 63 million people. Over the past decade, the country has experienced several severe economic and political crises. As a consequence, there has been a rapid increase in mental health problems, amounting to 12 million people or 20% of the population. Of these, depression accounts for approximately 1.2 million people. Furthermore, it is estimated that by the year 2010 the number diagnosed with mental illnesses will increase by an additional 1.1 million people (Department of Mental Health, 2008). The Department of Mental Health (2007b) reported the national prevalence rate of depression increased from 56 per 100,000 population in 1997 to 197 per 100,000 population in 2007 (Department of Mental Health,

2007a). Chiang Mai, one of 13 provinces in the northern region of Thailand, has the second highest rates of depression (207 per 100,000 Chiang Mai population) and completed suicide (14.48 per 100,000 Chiang Mai population) in the northern region (Department of Mental Health, 2007b). The considerably higher prevalence rate of depression may be attributable, in part, to the rapid increase in population growth in 2007 (+0.37%) compared with 1987 (-1.04%) (Chiang Mai Provincial Statistical Office, 2008). Moreover, the Chiang Mai metropolitan area has a population of nearly 1 million people, of whom 15% live in the Chiang Mai municipality (Chiang Mai Municipality, 2008), accounting for more than half the total population of Chiang Mai Province (1.6 million) (Department of Provincial Administration, 2008). It is unclear, however, about the reliability of statistical data on depression in Thailand. The figures may, in fact, be an underestimate of the actual rate of depression.

2.2.3 Aetiology of Depression

The aetiology of depression is unclear. There is no single theory or hypothesis that adequately explains depression. However, in trying to understand the mechanisms that increase the risk for depression, current evidence emphasises the interplay of biological, psychological, and social factors that contribute to individuals experiencing depression (Gotlib & Hammen, 2009; Semple, Smyth, Burns, Darjee, & McIntosh, 2005; Townsend, 2008).

2.2.3.1 Biological factors

Biological causes are due to hereditary factors and changes in the chemistry of the brain, such as imbalances in neurotransmitters, natural substances that allow brain cells to communicate with one another.

Genetic theories

In the field of psychiatric genetics, there are three classic approaches to studying depression: family, twin, and adoption studies (Hagerty & Patusky, 2004; Townsend, 2008; Wallace, Schneider, & McGuffin, 2002). Family studies suggest depression runs in families (Hagerty & Patusky, 2004). Depression is two to three times more common in people with first-degree biological relatives with depression than in the general population (American Psychiatric Association, 2000). Although some researchers hypothesise that genes contribute to depression, mounting evidence suggests several genes may be implicated (Diehl & Goldberg, 2004; Hagerty & Patusky, 2004). Depression may run in families for non-genetic reasons, as family members typically share a common environment and culture. Nevertheless, all the factors that could conceivably contribute to familial clustering of the illness need to be addressed (Hagerty & Patusky, 2004).

Twin studies are based on the assumption monozygotic twins share the same genes and dizygotic twins have about 50% of their genes in common. Results of twin studies provide additional evidence for the genetic transmission of mood disorders (Kendler, 2001). These studies suggest the aggregation of mood disorders in families is due to genetic factors, with the concordance rate

for bipolar and unipolar depressive disorder being higher in monozygotic than dizygotic twins (Gelder, Mayou, & Cowen, 2001).

Adoption studies provide another important method of extricating the influence of genetic and environmental factors in depression (Hagerty & Patusky, 2004). These studies show the biological children of affected parents remain at high risk of depression, even if they grow up in non-affected adoptive families (Sadock & Sadock, 2003).

Biochemical factors

Deficiencies of biogenic amines at brain receptor sites have been hypothesised as causing depression. This may be due to a deficiency of the neurotransmitters norepinephrine, serotonin, and dopamine, which are associated with the development of depression (Townsend, 2008).

Converging lines of evidence point to the likelihood of dysfunction of the central nervous system subserved by two key neurotransmitters: the catecholamine norepinephrine and the indoleamine serotonin (also known as 5-hydroxytryptamine, or 5-HT). Both these monoamines regulate vital bodily functions that often are disturbed during depression (e.g., energy, sleep, appetite, libido, and psychomotor behaviour). Abnormal brain development, vascular injury, ageing, or degenerative disease may cause these abnormalities in the structure or function of brain receptors that regulate mood, including affective symptoms (Dubovsky et al., 2004).

Increased amounts of the neurotransmitters norepinephrine and serotonin at receptor sites in the brain cause an elevation in mood, whereas decreased amounts can lead to depression (Shives, 2008). It is believed monoamine neurotransmitter systems, especially those of norepinephrine and serotonin, their metabolites and receptors, are somehow altered during episodes of depression and mania (Hagerty & Patusky, 2004). Monoamines, such as norepinephrine and serotonin, are deficient in depression and the therapeutic action of antidepressants depends on increasing synaptic availability of these monoamines (Dubovsky et al., 2004). These changes may produce changes in the functional states of various neurotransmitter and intraneuronal signalling systems, changes that may even include the loss of neurons and an excessive reduction in synaptic contact (Sadock & Sadock, 2004). Norepinephrine has been identified as a key component in the mobilisation of the body to deal with stressful situations. Serotonin has also a central role in the regulation of many psychobiological functions, such as mood, anxiety, irritability, cognition, and behaviour (Dubovsky et al., 2004).

Finally, over the last decade research into the aetiology of mood disorders has focused on the biological mechanisms that may be related to their onset and clinical course. Although this research has been able to identify physiological correlates of depression and mania, direct cause-and-effect relationships have not been established (Hagerty & Patusky, 2004).

2.2.3.2 Psychosocial factors

Psychological factors influencing depression include characteristic negative patterns of thinking, deficits in coping skills, judgment problems, and impaired emotional intelligence of individuals with depression. There are several psychological explanatory theories for depression, including psychodynamic theory, cognitive and behaviour theory, and life events and stress theory.

Psychodynamic theory

In the psychodynamic theory of depression, people with depressed mood are like mourners who do not make a realistic adjustment to living without the loved person. Most psychodynamic theorists acknowledge Freud's original conceptualisation of the psychodynamics of depression, which attributes aetiology to an early lack of love, care, warmth, and protection, and resultant anger, guilt, helplessness, and fear regarding the loss of love. Conflict between wanting to be loved and fear of rejection engenders pathologic self-punitiveness, self-rejection, low self-esteem, and, as a result, depressive symptoms may occur (Wood, 2005). Freud believed that the individual predisposed to depression experienced ambivalence in love relationships (Townsend, 2008)

Generally, the psychodynamic theory of depression, as defined by Sigmund Freud and expanded by Karl Abraham, is known as the classic view of depression. There are four key elements to the psychodynamic theory (Sadock & Sadock, 2003): (1) disturbances in the infant–mother relationship during the oral phase (the first 10 to 18 months of life) predispose to subsequent vulnerability to depression; (2) depression can be linked to real or imagined

object loss; (3) the loss is turned inward to the self to deal with the distress connected with the object's loss; and (4) because the lost object is regarded with a mixture of love and hate, feelings of anger are directed inward at the self. Furthermore, many individuals with depression have difficulty expressing anger openly, either because they lack self-confidence or are afraid of being abandoned by a loved one on whom they are excessively dependent (Dubovsky et al., 2004).

Cognitive theories

Cognitive theorists believe thoughts are maintained by reinforcement, thus contributing to mood disorders. People with a depressed mood are convinced they are worthless, the world is hostile, the future offers hopelessness, and every accidental misfortune is a judgment of them. Such reactions are the result of assumptions learned early in life and reinforced with disappointment, loss, and rejection (Shives, 2008). Depression results from specific cognitive distortions present in persons prone to depression. (Beck, Rush, Shaw, & Emery, 1979). Errors of logical thinking as a causative factor in depression, and mood are influenced by underlying cognitive structures, some of which are not fully conscious. These cognitive structures, or schemas, may be shaped by early life experiences and are predisposed to negative processing of information (Hagerty & Patusky, 2004). Beck et al. (1979) postulate that three major elements explain the psychological substrate of depression: the cognitive triad, schemas, and cognitive errors.

Cognitive triad: The first major element in the cognitive model is the cognitive triad. This consists of three major cognitive patterns that induce individuals with depression to regard themselves, their future and experiences in an idiosyncratic manner. The first cognitive pattern of the triad revolves around people's negative views of themselves. The second cognitive pattern of the triad consists of the tendency of people with depression to interpret their ongoing experiences in a negative way. The third cognitive pattern of the triad comprises a negative view of the future. Individuals expect unremitting hardship, frustration, and deprivation, and when considering undertaking a specific task in the immediate future, they expect to fail (Beck et al., 1979).

Schemas: The second major element of the cognitive model is the concept of schemas. This concept is used to explain why individuals with depression maintain their pain-inducing and self-defeating attitudes despite objective evidence of positive factors in their life. When they face a particular situation, a schema related to the event is activated. Thus, the schema constitutes the basis for screening out, differentiating, and coding the stimuli that confront the individual. In milder forms of depression, individuals are generally able to view their negative thoughts with some objectivity. As the depression worsens, their thinking becomes increasingly dominated by negative ideas, although there may be no logical connection between actual situations and negative interpretations (Beck et al., 1979).

Cognitive errors: The third key element of the cognitive model is cognitive errors or faulty information processing. This represents a way of understanding the thinking disorder in depression, by conceptualising it in terms of “primitive” vs. “mature” modes of organising reality. As a consequence, people with depression are prone to structure their experiences in relatively primitive ways, to make broad global judgments regarding events that impinge on their lives in negative ways. The emotional response, therefore, tends to be negative and extreme. In contrast to this primitive way of thinking, more mature thinking integrates life situations into many dimensions or qualities, and according to relative rather than absolutist standards (Beck et al., 1979).

According to the cognitive model, automatic thoughts can be brought to awareness, although they appear fleetingly and are usually unrecognised. They form the person’s perception of a situation, and it is this perception, rather than the objective facts about the situation, that results in emotional and behavioural responses (Hagerty & Patusky, 2004). Therefore, the cognitive approach maintains that irrational beliefs and negative distortions of thought about the self, the environment, and the future engender and perpetuate depressive moods (Wood, 2005).

Behavioural theories

Behavioural theories of depression, which are related to learned helplessness, hold that depression is caused by loss of reinforcement for nondepressive behaviours, resulting in deficits in adaptive social behaviours, such as being

assertive, responding positively to challenge, and seeking important reinforces like affection, caretaking, and attention (Dubovsky et al., 2004). Behaviourists claim that depression occurs primarily as the result of a severe reduction in rewarding activities or an increase in unpleasant events in one's life. As a consequence, depression then leads to further restriction of activity, thereby decreasing the likelihood of the person experiencing pleasurable activities, which, in turn, intensifies the mood disturbance (Wood, 2005).

Life events and stress theory

Depression may follow adverse or traumatic life events, especially those that involve loss of significant human relationships or roles in life, such as social isolation, deprivation, and financial deprivation (Wood, 2005). Life events most likely influence the development and recurrence of depression through psychological and ultimately biological experiences of stress (Hagerty & Patusky, 2004). A complex aetiology based on interacting contributions from life events and the environment may ultimately result in clinical symptoms of depression (Shives, 2008). Stressful social factors, such as lack of an intimate, confiding relationship with a significant other, being unemployed, and loss of one's mother before the age of 11 years, contribute significantly to vulnerability to depression (Hagerty & Patusky, 2004). The most compelling data indicate the life event most often related to the onset of an episode of depression is the loss of a spouse. Another event is unemployment. People out of work are three times more likely to report symptoms of an episode of major depression than those who are employed (Sadock & Sadock, 2004).

Loss is a life event that has been most reliably linked to depression. It is stressful because it removes an important external source of regulation of disrupted psychology and physiology. Loss may be a more severe instance of a range of stresses that predispose to mood disorders. In most studies that compare people with depression with non-depressed individuals, childhood loss, especially loss of parent, has a positive association with adult depression, which is temporally related to a recent loss, separation, or disappointment (Dubovsky et al., 2004).

2.2.4 Factors Influencing Depression

2.2.4.1 Gender

An almost universal observation, independent of country or culture, is the two-fold greater prevalence of major depressive disorder in women than in men (Puri & Hall, 2004; Townsend, 2008). The prevalence in western countries is 1.8–3.2% for men and 2.0–9.3% for women (Puri & Hall, 2004). In the USA, the prevalence of major depression ranges from 2.6% to 5.5% in men and from 6.0% to 11.8% in women (Dubovsky et al., 2004). Furthermore, recent estimates indicate that almost 20% of the population of the USA, primarily women, will experience a clinically significant episode of depression at some point in their lives (Gotlib & Hammen, 2002; Zauszniewski & Rong, 1999). In Thailand, the 2003 *National Epidemiology Survey on Mental Health in Thailand* reported the prevalence of depression in Thai people at 3.98 % for women and 2.47% for men. The survey also reported a similar prevalence of depression in the northern region at 4.32% for women and 2.58% for men (Department of Mental Health, 2005).

In adolescence, depression is more common in girls than boys (Dubovsky et al., 2004). A range of reasons has been hypothesised for the gender difference in depression, including hormonal differences, reproductive events (Dubovsky et al., 2004), childbirth, differing psychosocial stressors for women than for men, and behavioural models of learned helplessness (Sadock & Sadock, 2004). As a consequence, women may have a higher prevalence of atypical symptoms of depression (Kornstein et al., 2000; Silverstein, 1999). A comparison of gender has indicated women report more interpersonal stressors, whereas men report more legal and work-related stressful life events (Kendler, Thornton, & Prescott, 2001). It is possible some males with depression misuse alcohol and are diagnosed as suffering from alcohol-related disorders rather than depression, with the consequence that the true number of depressive disorders in males is underestimated (Gelder et al., 2001). In adolescents and adults, belief in dealing with depression alone is associated with male gender, less favourable views about mental health professionals, and more favourable views about substance abuse to deal with depression (Jorm, Kelly et al., 2006). Moreover, Khan, Gardner, Prescott, and Kendler (2002) indicate female twins experience significantly more fatigue, hypersomnia, and psychomotor retardation during the most severe major depressive episode, whereas male twins experience more insomnia and agitation.

2.2.4.2 Age of onset

The average age of onset for a first episode of major depressive disorder is approximately 40 years, with 50% of all individuals with depression having an

onset between the ages of 20 and 50 years (Diehl & Goldberg, 2004; Puri & Hall, 2004; Sadock & Sadock, 2004). Major depressive disorder can also begin in childhood or in old age. Recent epidemiological data suggest the incidence of major depressive disorder may be increasing in people younger than 20 years, and may be associated with increased use of alcohol and drug abuse, and antisocial behaviour groups (Dubovsky et al., 2004; Sadock & Sadock, 2004).

2.2.4.3 Marital status

Depression occurs most often in people without close interpersonal relationships or in those who are unmarried, divorced or separated (Puri & Hall, 2004; Sadock & Sadock, 2004). The incidence of major depression is higher in separated or divorced people than in married individuals, especially men, and in people with chronic medical illnesses (Dubovsky et al., 2004).

2.2.4.4 Socio-economic status

Depression is closely associated with socio-economic deprivation across the lifespan (Lorant et al., 2007). Brow and Harris found 15% of urban women had severe depressive symptoms, and there was a higher prevalence in working class than in middle class women (Puri & Hall, 2004). A study by Lorant et al. (2007) over a seven-year period in Belgium, to assess if longitudinal change in socio-economic factors affect depression levels, found a relationship between worsening socio-economic circumstances and depression. There is also evidence that lack of social support may increase the risk of depression, and low socio-economic status might decrease a person's ability to engage in social activities (World Health Organization, 2006b). Another factor that might

contribute to depression is those with the lowest socio-economic status are also the least likely to receive and/or adhere to effective treatment (Weich, Nazareth, Morgan, & King, 2007).

2.2.5 Symptoms of Depression

2.2.5.1 Biological manifestations

Biological symptoms of depression include, for instance, sleep disturbance, loss of appetite, and weight loss. In many cases, fatigue, constipation, and various aches and pain are experienced (Gournay, 2009). If the episode of depression persists, there is usually a marked reduction in libido, and in women who normally menstruate, amenorrhea may occur (Gelder et al., 2001; Puri, Laking, & Treasaden, 2002). In most individuals, reduced appetite leads to weight loss, which is usually defined as a loss of at least 5% of body weight in one month (Puri & Hall, 2004; Puri et al., 2002). Moreover, abnormal sleep is one of the most common symptoms of depression, and the most frequent cause of sleep disorders in individuals evaluated at sleep centres is depression (Dubovsky et al., 2004). People with depression commonly complain of sleep disturbance, with characteristic early morning wakening (Gournay, 2009).

2.2.5.2 Emotional manifestations

Emotional symptoms include low self-esteem, ideas of guilt and worthlessness, and pessimistic thoughts. There is a characteristically low and sad mood with feelings of hopelessness, while anxiety, irritability and agitation may also occur (Gournay, 2009; Puri & Hall, 2004). The person may complain of reduced energy and drive, an inability to feel enjoyment, and may sometimes speak of a

black cloud pervading all mental activities (Gelder et al., 2001; Puri et al., 2002).

2.2.5.3 Cognitive manifestations

There are many types of cognitive symptoms in depression, including reduced self-esteem and motivation, and impaired decision-making, memory and concentration (Gournay, 2009). Negative thoughts are important symptoms and can be divided into three types: worthlessness, pessimistic thoughts, and guilt (Gelder et al., 2001). Additionally, depression adversely affects attention and concentration, which may lead affected individuals to think their memory is impaired. Speech may be slow, with long delays before answering questions (Puri et al., 2002). In turn, cognitive symptoms in depression may result in varying behavioural problems, including aggressiveness, tearfulness, withdrawal from others, and a reduction in self-care activities (Gournay, 2009).

2.2.5.4 Psychological distress

Psychological distress is defined as the unique discomfoting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person (Ridner, 2004). There are five antecedents for psychological distress to occur in individuals: (1) experiencing physical, psychological and social adversity; (2) a perceived stressor; (3) perception that the stressor is a personal threat; (4) loss of ability to deal with problems; and (5) ineffective coping. The consequences of psychological distress may be viewed on a continuum from negative to positive (Ridner, 2004). Masee (2000) conducted qualitative studies of psychological

distress in France to develop validated culturally sensitive and multidimensional scales to assess psychological distress. The results identified six features of distress: pessimism toward the future, anguish and stress, self depreciation, isolation, somatisation, and withdrawal into oneself.

Kilkkinen et al. (2007) conducted a study in Australia to describe the prevalence of psychological distress, depression, and anxiety in people living in three rural settings. The authors concluded that a third of the participants in these settings reported psychological distress, with the highest prevalence observed in middle-aged men and women. According to the Australian Bureau of Statistics (2003), the 2001 *National Health Survey* showed that the adult prevalence of very high levels of psychological distress in Australia increased for all age groups and both genders, except for males aged 65 to 74 years, in comparison with results from the 1997 *National Survey of Mental Health and Wellbeing*.

Talala, Huurre, Aro, Martelin, and Prattala (2008) conducted a study to assess socio-demographic characteristic differences in psychological distress among adults in Finland. They found socio-demographic factors, such as having a partner and employment status, were related to psychological distress, highlighting the importance of social and economic factors for psychological well-being. Furthermore, Jorm et al. (2005) carried out a study in Australia, surveying anxiety, depression, and psychological distress in 7485 persons aged 20–24, 40–44 or 60–64 years. They found psychological distress generally declined across the age range from 20 to 64 years, and differential exposure to

risk factors explained some, but not all of the age group differences. Moreover, a study in Finland by Lemmens, Buysse, Heene, Eisler, & Demyttenaere (2007) compared couples with a depressed partner and those without a depressed partner, to identify differences in marital satisfaction, attachment style, psychological distress, and conflict communication. The authors found people with depression reported more psychological distress and attachment difficulties than their non-depressed partners and the couples without depression. In addition, females with depression reported higher levels of psychological distress symptoms than males.

2.2.5.5 Depression and suicide

Depressive symptoms may lead to feelings of hopelessness and helplessness, and a belief life is not worth living. As a result, suicidal thoughts may occur (Chittawon, 2003; Puri & Hall, 2004). Suicide remains a common and often avoidable outcome of depression. About one million suicides are reported every year. A majority of those committing suicide are known to have suffered from depression (World Health Organization, 2006a). Approximately 13% of all inpatients with depression commit suicide (Gournay, 2009). Worldwide, about 877,000 people die by suicide every year (World Health Organization, 2007). In the USA in 2003, 10.5 per 100,000 people died from suicide (Hoyert, Kung, & Smith, 2005). In Australia in 2006, suicide was ranked fifteenth of all causes of death, with a suicide rate of 10 per 100,000 population (Australian Bureau of Statistics, 2006). In South-East Asia, Sri Lanka has the highest suicide rate (37 per 100,000 population) (World Health Organization, 2006a),

while in Thailand, the Department of Mental Health (2007b) reported a considerably lower suicide rate of 5.96 per 100.000 population.

2.2.6 Types of Depression

The types of depression can be viewed on a continuum according to the severity of the illness. Differences occur in the severity of depressive symptomatology, including transient, mild, moderate, and severe (Townsend, 2008). There are two main classification systems for depression based on the *International Classification of Diseases*, 10th revision (ICD-10) (World Health Organization, 1993), and the *Diagnostic and Statistical Manual*, 4th edition, known as DSM-IV-TR (American Psychiatric Association, 2000). Both ICD-10 and DSM-IV-TR classify depressive episodes on the basis of severity and whether psychotic features are present. In DSM-IV-TR, an episode of major depression with appropriate clinical symptomatology can be specified as atypical depression, whereas in ICD-10 atypical depression is classified separately under 'Other depressive episodes'. Both ICD-10 and DSM-IV recognise the diagnosis of recurrent brief depression, but under slightly different headings.

In Thailand, all psychiatric hospitals run by the Department of Mental Health, Ministry of Public Health, use ICD-10 for classifying mental illnesses. Thus, the following types of depression are based on the ICD-10 classification for depressive disorders.

2.2.6.1 Mild depression

According to ICD-10 (World Health Organization, 1993, pp.82-83), the criteria for a mild depressive episode (F32.0) are as follows: criterion A, the general criteria for depressive episode (F32) have been met, including the episode should last for at least two weeks, there have been no hypomanic or manic episodes (F30) at any time in the individual's life, and the episode is not attributable to psychoactive substance use (F10–F19) or to any organic mental disorder (F00–F09); criterion B, at least two of the following three symptoms must be present: 1) depressed mood to a degree that is definitely abnormal for the individual, present for most of the day and almost every day, sustained for at least two weeks; 2) loss of interest or pleasure in activities that are normally pleasurable; 3) decreased energy or increased fatigability; criterion C, an additional symptom or symptoms should be present to give a total of at least four from the total list including 1) loss of confidence or self-esteem; 2) unreasonable feelings and inappropriate guilt; 3) recurrent thoughts or behaviour of suicide; 4) evidence of diminished ability to think or concentrate; 5) change of psychomotor activity, with agitation or retardation; 6) sleep disturbance of any type; 7) change in appetite with corresponding weight change.

Generally, in mild depression, alterations occur in four spheres of human functioning: (1) *affective*: denial of feelings, anger, guilt, sadness, and hopelessness; (2) *behaviour*: tearfulness, restlessness, withdrawal, and agitation; (3) *cognitive*: preoccupation with loss, self-blame, and ambivalence; and (4) *physiological*: anorexia or overeating, insomnia or hypersomnia, chest pain, and headache (Townsend, 2008).

2.2.6.2 Moderate depression

In this thesis, participants who met the inclusion criteria for moderate depression were recruited to take part in the study. According to ICD-10 (World Health Organization, 1993, p.83), the criteria for a moderate depressive episode (F32.1) are as follows: criterion A, the general criteria for depressive episode (F32) must be met (as stated above for a mild depressive episode [F32.0]); criterion B, at least two of the three symptoms from criterion B of F32.0 must be present; criterion C, additional symptoms from criterion C of F32.0 must be present, to give a total of at least six symptoms.

Overall, symptoms of moderate depression can be described as alterations in four spheres of human functioning (Townsend, 2008): (1) *affective*: feelings of sadness, helplessness, hopelessness, low self-esteem, and difficulty experiencing pleasure in activities; (2) *behaviour*: psychomotor retardation, slowed speech, limited verbalisation, social isolation, self-destructive behaviour is possible, and decreased interest in personal hygiene and grooming; (3) *cognitive*: retarded thinking processes, repetitive thoughts, generally portraying pessimism and negativism, and behaviour reflecting suicide ideation is possible; and (4) *physiological*: anorexia or overeating, sleep disturbances, amenorrhoea, decreased libido, headaches, backaches, chest pain, abdominal pain, and fatigue.

2.2.6.3 Severe depression

According to ICD-10 (World Health Organization, 1993, p.84), the criteria for a severe depressive episode, without psychotic symptoms (F32.2) are as follows: criterion A, the general criteria for depressive episode (F32) must be met (as stated above for mild depressive episode [F32.0]); criterion B, at least two of the three symptoms from criterion B of F32.0 must be present; criterion C, additional symptoms from criterion C of F32.0 must be present, to give a total of at least eight symptoms.

Generally, the symptoms of severe depression can be described as alterations in four spheres of human functioning: (1) *affective*: feelings of total despair, hopelessness and worthlessness, prevalent feelings of emptiness, loneliness and inability to experience pleasure in activities; (2) *behaviour*: severe psychomotor retardation, purposeless movement, slumped posture, virtually nonexistent communication, social isolation, poor personal hygiene and grooming; (3) *cognitive*: delusional thinking, with persecutory and somatic delusions, inability to concentrate, hallucinations, self-blame, and thoughts of suicide; and (4) *physiological*: a general slowdown of the entire body, reflected in sluggish digestion, constipation, urinary retention, amenorrhoea, diminished libido, weight loss, and difficulty falling sleep (Townsend, 2008). Furthermore, approximately 80% of people with severe depression complain of trouble in sleeping, especially early-morning awakening and multiple awakenings at night, during which they ruminate about their problems. Many have decreased appetite and weight loss, but others experience increased appetite and weight gain and sleep longer than usual (Sadock & Sadock, 2004).

2.2.7 Onset and Prognosis of Depression

2.2.7.1 Onset of depressive episode

Onset is perhaps the most easily conceptualised aspect of causality because it tends to be treated as synonymous with causality. However, onset is more precisely defined as the appearance of depressive symptoms. If the type of major depressive disorder specified by DSM-IV-TR is of interest, onset is defined as the appearance of at least five out of nine symptoms with at least one of these symptoms consisting of sad mood or loss of pleasure, and all symptoms persisting for at least two weeks (Ingram & Siegle, 2002). Approximately 50% of people undergoing their first episode of major depression have significant depressive symptoms before the first identified episode. One implication of this observation is timely identification and treatment of early symptoms may prevent the development of a full depressive episode. An episode of depression is defined on the basis of having a certain number of symptoms for a defined period of time. The presence or absence of the illness is conceptualised in statistical rather than absolute terms in which a gold standard definition can establish without doubt if a person has an episode of the illness (Boland & Keller, 2002).

2.2.7.2 Prognosis of depression

It has become increasingly clear that a significant proportion of people suffering from depression remain chronically ill, despite the previously held belief that they tend to recover fully between depressive episodes. Factors predicting a prolonged recovery time are longer duration and increased severity of the episode, a history of non-affective psychiatric disorder, and lower family

income during the episode (Puri & Hall, 2004). People who have been hospitalised for a first episode of major depressive disorder have approximately a 50% chance of recovery in the first year (Sadock & Sadock, 2004), about 25% have episodes lasting more than one year, and approximately 10–20% develop a chronic unremitting course (Gelder et al., 2001). After a single major depressive episode, the risk of a second episode is about 50%; after a third episode, the risk of a fourth is about 90% (Dubovsky et al., 2004). Overall, over a 25-year follow-up, about 80% of individuals with major depression will experience further episodes, on average about five further episodes (Dubovsky et al., 2004; Puri et al., 2002).

Generally, as a person experiences repeated episodes, the severity of each episode increases. The possibility of a poor prognosis is increased by coexisting dysthymic disorder, alcohol and other substance abuse, anxiety disorder symptoms, a history of more than one previous depressive episode, and decreasing time between episodes.

Remission is defined as the state of having few or no symptoms of a mood disorder for at least eight weeks (Dubovsky et al., 2004). Although remission is defined as a significant reduction in or total disappearance of depressive symptoms, it implies some symptoms underlying the disorder may remain (Boland & Keller, 2002, 2009; Ingram & Siegle, 2002). There is a 50% chance of remission of depression that has been present for 3–5 months, but there is only a 5% likelihood of remission within the next six months if depression has been present for two years (Dubovsky et al., 2004).

2.2.7.3 Duration and interval between attacks

An untreated episode of depression can last from 6 to 13 months, whereas most treated episodes last approximately three months. This was highlighted in a study by Kocsis et al. (1996) examining the effect of maintenance treatment with desipramine for people with chronic depression who were initially successfully treated during the acute phase and 16-week continuation treatment. Wood (2005) states that if depression goes untreated or is inadequately treated, episodes can become more frequent and severe, and of longer duration, and then lead to suicide.

2.2.7.4 Recurrence and relapse

Recurrence refers to a new episode occurring after recovery from a previous episode (Boland & Keller, 2009). Over 75% of people with depression suffer more than one episode of illness, and may have residual symptoms between episodes (Diehl & Goldberg, 2004; Keller & Boland, 1998; Palazidou & Tiffin, 2002). Approximately 25% of people experience a recurrence in the first six months after discharge from hospital, 30% to 50% in the first two years, and 50% to 75% in the first five years (Sadock & Sadock, 2004). Risk factors for recurrence include frequent and/or multiple prior episodes, onset after age 60 years, long duration of individual episodes, seasonal pattern, and a family history of mood disorder (Boland & Keller, 2002; Puri & Hall, 2004). Because residual depressive symptoms after treatment are associated with recurrence, complete symptom control should be a treatment priority (Wilson et al., 2003). A high recurrence rate suggests there are specific factors that increase a

persons' risk of developing repeated episodes of the disorder (Dubovsky et al., 2004; First & Tasman, 2006; Gotlib & Hammen, 2002). Moreover, depression in adolescence and early adulthood is often recurrent; 22.7% of individuals report having two or more episodes of major depression between the ages of 16 and 21 years (Fergusson, Boden, & Horwood, 2007). Over a 20-year period, the mean number of episodes is five or six (Sadock & Sadock, 2004).

Relapse is defined as the early return of symptoms following an apparent response to treatment, and implies the continuation of the initial episode (Boland & Keller, 2002; Dubovsky et al., 2004). People with depression often experience relapse within two years of recovery from the depressive episode (Gotlib & Hammen, 2009). Thirty percent of individuals experience a relapse within three months of recovery and, in the absence of continuation or maintenance treatment, 50% experience a further episode within two years (Scott & Dickey, 2003). The risk of relapse is particularly high (40–60%) following the withdrawal of antidepressants within the first four months of achieving a treatment response. In contrast, the incidence of relapse is reduced to 10–30% in individuals who continue prophylactic psychopharmacological treatment (Puri & Hall, 2004; Sadock & Sadock, 2004).

2.2.7.5 Recovery and chronicity

Recovery is defined as a full remission that lasts for at least four to six months (Boland & Keller, 2002; Dubovsky et al., 2004; Puri & Hall, 2002). Conceptually, it implies the end of an episode of illness, not the end of illness itself (Boland & Keller, 2002). Recovery also implies the complete

disappearance of the illness. In practice, differentiation between remission and recovery can be quite difficult, with probably the best indicators being the presence of some mild to moderate symptoms, or, in the case where symptoms are no longer present, the length of time since the symptoms disappeared (Ingram & Siegle, 2002). Findings from the USA National Institute of Mental Health *Collaborative Depression Study on the Psychobiology of Depression* showed that after recovery from an episode of major unipolar depression, the likelihood of recurrence was nearly 30% after six months of follow-up, and almost 40% after 12 months of follow-up (Solomon et al., 2000).

2.3 SUMMARY

Depression is projected to be a major mental health problem in many countries, including Thailand. It is a chronic and recurrent condition, and is a major cause of functional disability. Depression is a disorder with important genetic, environmental, and interpersonal determinants. From a cognitive behavioural perspective, depression results from cognitive distortions. To decrease the relapse rate of depression, treatment should concentrate on reduction of depressive symptoms, restoration of functioning, and prevention of relapse.

CHAPTER THREE

INTERVENTION MODALITIES FOR DEPRESSION

3.1 INTRODUCTION

This chapter presents a review of selected literature about intervention modalities for depression. The literature review begins with an overview of pharmacological and somatic treatments for depression. This is followed by an outline of the use of cognitive behavioural bibliotherapy. Finally, a summary is provided of psychosocial treatments and prevention of relapse in depression.

3.2 TREATMENT FOR DEPRESSION

Evidence-based systematic reviews² indicate that several treatments for depressive disorders are supported as effective, and these have been incorporated in some clinical practice guidelines (Jorm et al., 2002). To reduce morbidity, treatments should not only reduce depressive symptoms and restore functioning but also prevent relapse or recurrence (Scott, Palmer, Paykel, Teasdale, & Hayhurst, 2003).

The goals of treatment are full remission of symptoms of depression, with restoration of optimal work and social functioning (First & Tasman, 2006). Treatment has several objectives. First, the person's safety must be guaranteed. Second, a complete diagnostic evaluation of the person must be carried out. Third, a treatment plan that addresses not only the immediate symptoms, but

² A systematic review is a literature review informed by a single question that aims to identify, critique, select and synthesise all high quality research evidence related to that question (Centre for Evidence Based Medicine, 2009).

also the person's prospective well-being must be initiated. Although current treatment emphasises a combination of pharmacotherapy and psychotherapy, stressful life events are also associated with an increase in relapse rates in individuals with depression. Thus, treatment must reduce the number and severity of stressors in the person's life (Sadock & Sadock, 2004). The phases of treatment include (First & Tasman, 2006):

- a) An acute phase directed at reduction and elimination of signs and symptoms of depression, and active restoration of psychosocial and work functioning.
- b) A continuation phase directed at prevention of relapse and reduction of recurrence through ongoing education, pharmacotherapy, and depression-specific psychotherapy.
- c) A maintenance phase focused on prevention of future episodes of depression, based upon the individual's personal history of relapse and recurrence.

The first-line treatment for most people with depression consists of antidepressant medication, psychotherapy, or a combination of both (World Health Organization, 2001). Antidepressants are the most effective means of achieving remission and preventing relapse in major depression. However, a combination of psychotherapy and pharmacotherapy is more common and effective than either treatment alone (Greenfield et al., 2000; World Health Organization, 2001). Combining medication with psychotherapy can improve treatment outcomes by helping the person cope with low self-esteem and demoralisation (Diehl & Goldberg, 2004). All treatments, whether

pharmacotherapy, psychotherapy or the integration of pharmacotherapy and psychotherapy, require a well-established diagnostic formulation in order to achieve optimal response to treatment (First & Tasman, 2006). Greenfield (2000) conducted a study of the prevalence of treatments for depression in the USA following the 1996 national depression screening day. The findings showed that one-half of the sample received combined pharmacotherapy and psychotherapy, and one-fifth received psychotherapy alone.

3.2.1 Pharmacological Treatment

Continuing high levels of medication in the first few months is associated with a higher chance of recovery (Puri & Hall, 2004). The first-line treatment of depression is antidepressant medication and the principal indication for antidepressants is a major depressive episode. The first symptoms to improve are often poor sleep and appetite patterns. Agitation, anxiety, depressive episodes, and hopelessness usually are the next symptoms to improve. Other target symptoms include low energy, poor concentration, helplessness, and decreased libido (Sadock & Sadock, 2004). A Cochrane review by Candy, Jones, Williams, Tookman, and King (2008), to determine the effectiveness of psychostimulants in the treatment of depression, revealed there is some evidence that in the short term (up to four weeks) psychostimulants reduce the symptoms of depression in comparison with placebos. The use of specific pharmacotherapy approximately doubles the chance that a person with depression will recover in one month, but some people do not respond to treatment. Currently available antidepressants may take up to three to four weeks for the effect of the antidepressant to be felt, although they may begin to

show their effects earlier. If the person shows no improvement by that time, other antidepressants are available (Sadock & Sadock, 2004).

Antidepressant treatment should be maintained for at least six months after the amelioration of symptoms of the acute episode or the length of a previous episode (Puri & Hall, 2004; Sadock & Sadock, 2004). Several types of antidepressant medications are available, and the choice should be made according to the needs of the individual, with particular consideration of likely side effects (Gelder et al., 2001). There are two main groups of antidepressants: first-line treatment with selective serotonin reuptake inhibitors (SSRIs), and second-line treatment with tricyclics and monoamine oxidase inhibitors (MAOIs).

First-line treatment with SSRIs commenced with their introduction over 15 years ago (Gilin, 2009; Gitlin, 2009; Gournay, 2009; Puri & Hall, 2004). SSRIs are available at relatively low cost. They block the presynaptic re-uptake of serotonin, increase its availability to the postsynaptic neuron, and enhance serotonergic function. SSRIs are typically the first medication prescribed for those with atypical depression (Gitlin, 2009). Moreover, a Cochrane review by Hetrick, Merry, McKenzie, Sindahl, & Proctor (2007) aimed to determine the efficacy and adverse outcomes of SSRIs in the treatment of depression in children and adolescents. Overall, the review showed there was evidence of greater reduction in depressive symptoms with SSRIs compared to placebo. Fluoxetine was the only SSRI that was effective in reducing symptoms of depression in children and adolescents.

Second-line treatment uses older tricyclic antidepressants and MAOIs, which enhance norepinephrine and/or 5-hydroxytryptamine neurotransmission (Thase, Jindal, & Howland, 2002). Tricyclic and MAOI antidepressants were introduced as a comparatively effective treatment for depression in the 1950s (Gitlin, 2009; Gournay, 2009; Puri & Hall, 2004). Tricyclic antidepressants have a range of side effects that can be quite disabling, including drowsiness, dry mouth, blurred vision, constipation, reduction of sex drive, and weight gain. Longer term, these drugs are implicated in the causation of more serious physical states, principally cardiac problems and the possibility of sudden death (Gournay, 2009) MAOIs are also characterised by potentially dangerous side effects that limit their acceptance and selection. They may cause a hypertensive crisis if individuals ingest foods with a high content of tyramine; hence they require strict adherence to a set of dietary guidelines (Sadock & Sadock, 2004). It has been reported that in people resistant to treatment with a tricyclic or MAOIs, a combination of the two drugs is more effective than either drug given alone in corresponding dosage (Gelder et al., 2001).

3.2.2 Somatic Treatments

3.2.2.1 Electroconvulsive therapy

Electroconvulsive Therapy (ECT) is the induction of a grand mal (generalised) seizure through the application of electrical current to the brain (Townsend, 2008). It is the oldest and most reliable of the modern somatic therapies for mood disorders (Dubovsky et al., 2004), including severe depression (Diehl & Goldberg, 2004; Gelder et al., 2001; Wood, 2005). ECT is most useful in the treatment of a major depressive episode, especially when it is characterised by

rapid onset; brief duration; psychotic symptoms such as motor retardation, catatonia, severe pseudodementia; lack of insight; and inability to tolerate antidepressants (Dubovsky et al., 2004).

Although a controversial form of treatment, the most common side effects of ECT are temporary memory loss and confusion. ECT is sometimes used to treat severe depression when psychotherapy and medication are not effective, especially when ECT poses a lower risk than other treatments, or when the person is at immediate risk of suicide. While the treatment produces faster results than antidepressant medications (Diehl & Goldberg, 2004), it is a second-line treatment for depression and is usually considered mainly for inpatients. Because ECT continues to have an established and important role in the management of treatment-resistant depression and life-threatening conditions, such as depressive stupor and catatonia, it needs to be readily available (McCall, 2001).

3.2.2.2 Light therapy

Light therapy or phototherapy is a novel treatment that is beneficial to individuals with Seasonal Affective Disorders (First & Tasman, 2006; Sadock & Sadock, 2004) in which rates of remission range from 36% to 75% (Dubovsky et al., 2004). The therapy involves providing treatment with light therapy of greater than 2500 lux (First & Tasman, 2006). Bright light exposure has been associated with a favourable response within four to seven days (First & Tasman, 2006). Over 50% of people with recurrent winter depression respond to bright light treatment. Many respond to bright light within three to

five days and relapse if they discontinue for three days during winter. However, some individuals who do not respond after one week of treatment will respond during the second week (Dubovsky et al., 2004). A Cochrane review by Tuunainen, Kripke, and Endo (2004) to evaluate the clinical effectiveness of light therapy for non-seasonal depression concluded that the benefit of light therapy is modest although promising for non-seasonal depression.

3.2.3 Psychological Treatments

Psychosocial treatment for depression is established within a therapeutic environment where the therapist assists the person to overcome behavioural or interpersonal problems (Townsend, 2008). A meta-analysis by Cuijpers, Straten, Warmerdam and Anderson (2008) has shown that psychological treatments have a large effect, in terms of symptom reduction and increased well-being. In another Cochrane review by Merry, McDowell, Hetrick, Bir, and Muller (2004), to assess the effectiveness of psychotherapies, the authors concluded that psychological programmes for preventing depression were effective in the short term, with some studies showing a decrease in depressive symptoms over a 12-month period. There are numerous individual and group approaches to psychosocial treatment. A summary is presented of psychotherapies and cognitive behavioural therapy.

3.2.3.1 Psychotherapies

Psychotherapies for depression can be classified as group psychotherapy, supportive psychotherapy, and interpersonal psychotherapy. Group

psychotherapy is a treatment in which carefully selected people who are emotionally ill meet in a group guided by a trained therapist to help one another to effect thought and behavioural change. The approach encompasses the theoretical spectrum of therapies in psychiatry: supportive, structured, limit setting, cognitive behavioural, interpersonal, family, and analytically oriented groups. Two of the main strengths of group therapy are the opportunity for immediate feedback from peers, and the chance for consumers and the therapist to observe individual psychological, emotional, and behavioural responses to a variety of people, who elicit a range of transferences (Sadock & Sadock, 2004).

Supportive psychotherapy is used to relieve distress or to help a person cope with difficulties, when problem-solving approaches are unlikely to succeed. Its basic elements are a therapeutic relationship, listening, allowing the release of emotions, explaining, encouraging hope, and persuasion. However, it is important to avoid dependence because the treatment often has to be long-lasting. If individuals are severely disabled or have dependent personalities, it may be difficult to achieve this aim. If dependence cannot be avoided, it should be directed as far as possible to the group of staff caring for the person and not to any individual. The risk of dependence will be less if, from the outset, it is agreed with the person how much time can be allocated for the support (Gelder et al., 2001).

Interpersonal psychotherapy was developed in the 1970s as a method of dealing with the connection between personal relationships and stressful life events. The approach aims to help the person to understand and deal with

adversity (Gelder et al., 2001; Gournay, 2009). It is a problem-solving strategy to deal with analysing problems such as communication and decision making. Moreover, it helps the person to develop strategies for dealing with interpersonal disputes and role transition (Gournay, 2009).

3.2.3.2 Cognitive behavioural therapy

Aron T. Beck developed cognitive behavioural therapy (CBT) in the 1970s. The approach aims to change distorted thoughts (Beck et al., 1979), which are responsible for the onset, maintenance, and exacerbation of affective, motivational, somatic, and behavioural symptoms of depression (Zauszniewski & Rong, 1999). CBT is an active, directive, structured approach that is used to treat a variety of psychiatric disorders in adults of all ages, and is based on the cognitive theory of depression (Beck et al., 1979; Evans, 2007). The overall purpose of this technique is to help individuals to understand the inaccuracy of their cognitive assumptions, to learn new ways of dealing with issues (Sadock & Sadock, 2004), and to learn to overcome negative thoughts, unhelpful behaviours, and difficult emotions (Royal College of Psychiatrists, 2008). Variants of the therapy place different emphasis on cognitive or behavioural components.

CBT has been found to be effective in helping young people with a wide range of problems, including low self-esteem, depression, and anxiety problems (Royal College of Psychiatrists, 2008). Cognitive behavioural techniques are aimed at delineating and testing the person's specific misconceptions and maladaptive assumptions. The approach comprises highly specific learning

experiences designed to teach the person to: (1) monitor negative automatic thoughts; (2) recognise the connections between cognition, affect, and behaviour; (3) examine the evidence for and against distorted automatic thoughts; (4) substitute more reality-oriented interpretations for biased cognitions; and (5) learn to identify and alter dysfunctional beliefs which predispose the person to distort perceptions of experiences (Beck et al., 1979). In terms of style, CBT is collaborative, with a focus on developing therapeutic relationships as well as empathy, warmth and genuineness. It is an active, directive, time limited and goal oriented approach, which gives it a structured, focused form (Evans, 2007). The therapeutic strategies used in CBT for defining and dealing with the cognitions related to mutually agreeable behavioural goals and behaviour change are outlined below.

Activities scheduling: A major component in cognitive therapy for depression is activity scheduling, the behavioural technique used to increase engagement in actual activities during the day, especially pleasant activities considered to increase positive reinforcement. Activity scheduling may alter cognitions, and attributing satisfaction to one's own actions may produce a sense of optimism (Beck et al., 1979).

Mastery and pleasure techniques: Some individuals with depression engage in activities but derive little pleasure from them. This failure to derive gratification often results from (a) an attempt to engage in activities which were not pleasurable even prior to the depressive episode, (b) the dominance of negative cognitions which override any

potential sense of pleasure, or (c) selective inattention to sensations of pleasure. Pleasure refers to feelings of enjoyment, amusement, or fun from an activity (Beck et al., 1979).

Recording dysfunctional thoughts: Recording cognitions and responses is a way of beginning to examine, evaluate, and modify cognitions. People with depression are instructed to write their “cognitions” and “reasonable response” to the cognitions. The written assignment may also include additional details for describing the person’s affect and behaviour, and the specific description of the situation or event which preceded the cognition. A recording form is available to assist individuals with depression to recognise dysfunctional thoughts and images (Beck et al., 1979).

Homework assignments: In CBT, homework is a significant vehicle to shift the focus of therapy from subjective, abstract conceptualisations to more objective, realistic, and detailed accounts. The therapist can strengthen the therapeutic collaboration by engaging the person in the formulation of the homework task itself, and by explaining the goal and rationale for each homework assignment. The assignment of homework critically influences therapeutic collaboration. People with depression often regard homework as a test of personal worth, personal skill, or motivation, or believe they must do the homework perfectly. The therapist should investigate their attitude towards homework, since it is

important they perceive homework as serving a useful purpose (Beck et al., 1979; Neukrug, 2000).

3.3 OVERVIEW OF SELF-HELP INTERVENTIONS

There are various forms of self-help therapies for depression. The most common self-help technique for depression is bibliotherapy presented in a written format.

3.3.1 Self-help intervention

Definitions of self-help therapy are as varied as the myriad of self-help programmes (Watkins, 2008). Jorm et al. (2002) defined self-help intervention as treatment that can be used by the individual without necessarily having to receive therapy from a health care worker. Research has shown that perceived stigma may result in individuals with depression being reluctant to seek help for depression from mental health professionals (Barney, Griffiths, Jorm, & Christensen, 2006). Most self-help resources are based on CBT with limited support from a health care professional. Self-help techniques make use of health technology through written materials or multimedia programmes (Lovell et al., 2008). Self-help intervention aims to guide and encourage people to make changes, resulting in improved self-management, rather than just provide information. The approach fits well with CBT, in which people are encouraged to carry out work between sessions in order to challenge unhelpful thoughts and behaviours (Anderson et al., 2005).

Self-help strategies are believed to reduce the burden of depression. The strategies are highly acceptable to the public, easily applied, inexpensive, and

may avert the development of many clinical cases of depression (Jorm & Griffiths, 2005). People in the community are prepared to use self-help interventions more readily than professional treatments when they have anxiety and depressive symptoms (Jorm et al., 2002).

A literature review by Morgan and Jorm (2008) recommended 282 self-help strategies as helpful for the treatment of depressive symptoms. Sub-threshold depressive symptoms cause substantial disability in the population and are often managed with self-help strategies. However, the promotion of these strategies to the public needs to be evaluated to see if they could reduce the disability burden of sub-threshold depression. Furthermore, a study by Salkovski, Rimes, Stephenson, Sacks, and Scott (2006) examined whether the addition of a brief self-help package to standard primary care treatment of depression with antidepressants was associated with additional improvements in clinical outcomes. The results showed an individualised self-help package improved perceived knowledge about depression. Jorm et al. (2002) also reviewed the evidence for the effectiveness of complementary and self-help treatments for depression. Thirty-seven treatments were identified and grouped under the categories of medicines, physical treatments, lifestyle, and dietary changes. The results showed bibliotherapy involving CBT is one of the most effective treatments for depression.

A meta-synthesis of qualitative studies by Khan, Bower, and Rogers (2007), provided a useful explanatory framework for the development of effective and acceptable guided self-help interventions for depression. The synthesis

revealed a number of themes, including the nature of personal experience in depression, help-seeking in primary care, control and helplessness in engagement with treatment, stigma associated with treatment, and consumers' understandings of self-help intervention. Moreover, a systematic review of eight studies, by Bower, Richards, and Lovell (2001), to examine the clinical and cost effectiveness of self-help treatments for anxiety and depression in primary care, concluded that self-help approaches have the potential to improve overall cost effectiveness, but more rigorous trials are necessary to establish the clinical benefits and cost effectiveness of self-help treatments.

Self-help can be directed solely by the person, it can follow professionals' recommendations, or it can be integrated into formal psychological treatment. In addition to its popularity with the general population, self-help is frequently recommended by psychotherapists (Campbell & Smith, 2003). Norcross (2000) suggested self-help is frequently recommended in variety of forms by psychotherapists, using self-help books (85%), self-help groups (82%), movies (46%), internet sites (34%), and autobiographies (24%). Scogin (2003) indicated that self-help material can be developed in psychotherapy by using complementary media, such as movies, the internet, and books, and can frequently accelerate or enhance treatment outcome. Furthermore, a randomised controlled trial was conducted by Christensen, Griffiths, and Jorm (2004) to evaluate the efficacy of two internet materials, the *BluePages* (<http://bluepages.anu.edu.au>) and the *MoodGYM* (<http://moodgym.anu.edu.au>), for internet users with symptoms of depression who lived in community, in Canberra, Australia. The main outcome showed that delivering interventions

for depression via the internet was effective in reducing symptoms of depression.

Several self-help approaches are available for the treatment of people with depression. However, there is insufficient evidence to suggest that bibliotherapy, based on CBT, is useful for these individuals when it is combined with some additional guidance. More evidence is also required to investigate the effectiveness of self-help and the most suitable format to present the materials, particularly as none have been formally evaluated in a Thai context.

3.3.2 Cognitive Behavioural Bibliotherapy

3.3.2.1 Definition

Cognitive behavioural bibliotherapy (hereafter, bibliotherapy) refers to active self-help using written materials in standard book form (Campbell & Smith, 2003; Cuijpers, 1997; Jorm et al., 2002). Bibliotherapy derives from the Greek words for book (*biblio*) and therapy (*therapeia*), and has been used as a therapeutic method since ancient Greece where the door to the library at Thebes read: “The Healing Place of the Soul” (Pardeck, 1998).

The use of books in the treatment of depression is particularly appropriate for people with depression of mild-to-moderate severity (Anderson et al., 2005). Books provide information and attempt to enable the person to implement treatment (Jorm, Allen et al., 2006). Bibliotherapy is reportedly used with a variety of objectives in mind, most frequently to increase awareness, reinforce

specific concepts or strategies from therapeutic sessions, and enhance lifestyle change (Campbell & Smith, 2003). Self-help books are an easy and effective way to reinforce selected material covered in therapeutic sessions (Floyd, 2003).

Bibliotherapy for depression consists of reading self-help books for depression that use the principles of cognitive therapy (Jamison & Scogin, 1995). It incorporates the foundational elements of a cognitive conceptualisation of depression and provides exercises designed to help the reader overcome negative feelings associated with depression (e.g., sadness, loneliness, guilt, inferiority) (Gregory et al., 2004). Bibliotherapy works in a similar way to therapy administered by a therapist. That is, the book or manual has a psychotherapeutic approach that provides information and outlines strategies participants can use to generate insight, stimulate awareness of negative emotions and cognitions, provide solutions to problems, and encourage them to practise these strategies in every day life. The approach appears to work most efficiently when used in conjunction with other therapeutic approaches (Campbell & Smith, 2003). Clinical use of bibliotherapy should be closely monitored and included in therapy sessions in a planned way. The resource material is employed in the treatment plan and is an integral part of the intervention (Campbell & Smith, 2003). Bibliotherapy has been characterised as empowering for recipients, potentially enhancing the sense of responsibility in treatment and control over their condition (Floyd, 2003; Scogin, 2003).

3.3.2.2 Goals of bibliotherapy

The purpose of bibliotherapy over time is to (a) provide information, (b) generate insight, (c) stimulate discussion, (d) create awareness of others' problems, (e) provide solutions to problems, and (f) troubleshoot problems after finishing bibliotherapy (Pantalon, Lubetkin, & Fishman, 1995).

Bibliotherapy for depression involves helping people identify their distorted and depressed thinking, and learn more realistic ways to frame their experiences by reading and conducting exercises that are completed at home with minimal or no supervision from a therapist. It also involves engaging individuals in monitoring and increasing their activity levels. Ways of delivering effective interventions for depression include the use of structured self-help, treatments and unsupported self-help, where consumers use materials largely by themselves (Bilich, Deane, Phipps, Barisic, & Gould, 2008). Self-help books provide expectations of mental health problems and illnesses in everyday life, enhance identification and empathy, generate hope and insight, offer concrete advice and techniques, explain treatment strategies, and summarise research findings (Norcross, 2000). Self-help books can be used for information by consumers as well as families and friends. Issues that can be addressed in bibliotherapy include, for instance, helping parents deal with teenage concerns, weight management, stepfamilies, pregnancy, communication skills, and assertiveness (Campbell & Smith, 2003).

3.3.2.3. Advantages of cognitive behavioural bibliotherapy

Bibliotherapy offers the advantage of being readily accessible and provides the opportunity for periodic booster treatments by re-reading the book. For

instance, Scogin, Jamison, & Gochneaur (1989) found 48% of their study participants re-read parts of their book after the study finished. The approach also avoids the high cost of psychological treatment, waiting lists, and difficulties with travelling long distances (Bilich et al., 2008). Other benefits of bibliotherapy may include cost effectiveness, a less therapist-intensive approach, and non-invasive route to treatment without the threat of stigmatisation that may accompany seeking standard mental health treatment (Cuijpers, 1997; Kaldø, Cars, Rahnert, & Hans Christian Larsen, 2007; Watkins, 2008).

3.3.2.4 Disadvantages of cognitive behavioural bibliotherapy

Bibliotherapy may be unhelpful if individuals diagnose themselves incorrectly and then give themselves the wrong treatment. The approach has not been evaluated in people with severe clinical depression. A high level of reading ability is needed for some self-help books (Gregory et al., 2004). Bibliotherapy does not influence all attitudes or behaviours, but is used by a knowledgeable minority of participants. Another drawback of some forms of bibliotherapy is the interpretations of participants may vary; one individual may interpret the book one way, while another may have a different interpretation. Because of this, information can be misunderstood and misinterpreted by different individuals (Olsen, 2007). For people with depression, bibliotherapy is suitable for those with moderate depression, but is inappropriate for individuals with severe depression (Karpe & Scogin, 2008). The use of self-help material must be carefully monitored by clinicians to prevent misinterpretation of information, which can exacerbate symptoms, especially among socially

withdrawn individuals with depression (Watkins, 2008). Bibliotherapy also may not be appropriate for some individuals with depression who, because of their illness, lack perseverance and the ability to concentrate for the prolonged periods of time necessary to complete the reading and writing parts of the self-help manual (Gregory et al., 2004; Karpe & Scogin, 2008).

3.3.2.5 Evidence base for bibliotherapy in depression

Numerous studies have shown that CBT is effective. However, increasing demand means individuals who might benefit are unable to obtain access to these therapies. Written self-help materials or bibliotherapy, based on psychological treatments of proven efficacy, are a practical alternative and provide a more accessible source of psychological support (Anderson et al., 2005). Research into bibliotherapy has examined its effectiveness for individuals using self-help interventions, where there is either no or very limited contact with a mental health professional or paraprofessional. Chamberlain, Heaps, and Robert (2008) summarised published reports from ongoing and completed projects into the use of bibliotherapy to deliver individual treatment. The results shows bibliotherapy studies have been conducted with variety of consumer groups, including 13 studies with consumers with depression (Table 3.1), eight studies in individuals with anxiety, 16 studies focusing on a range of problems (e.g., sexual dysfunction, panic disorders, obesity, and bulimia nervosa), four studies on child consumers, five studies on people using alcohol, and seven studies in primary care settings.

Table 3.1 Summary of 13 bibliotherapy studies of people with depression

Study	Client group	Outcome measures	Findings
1. NICE Guidance (2006a)	Mild/moderate depression/anxiety	Depression scores	CCBT is recommended for the management of mild and moderate depression.
2. Anderson et al. (2005)	Depression	Review paper	Useful self-help book based on CBT approach with additional guidance.
3. Den Boer et al. (2004)	Depression/anxiety	Systematic review	Research needed in cost-effectiveness and inpatient characteristics that might affect outcomes.
4. NICE Guidance (2004)	Depression in primary and secondary care	Depression levels	CCBT limited support to be offered by healthcare professionals who introduce the programme and review progress and outcomes.
5. Fraser et al. (2005)	Mild to moderate depression	Systematic review	Bibliotherapy is more effective than either waiting list or placebo.
6. Floyd (2003)	Depression in older adults	Discussion paper with two clinical case studies	Reading self-help book useful as an adjunct to psychotherapy and can facilitate rapid improvement and compensate for limitations in the number of psychotherapy sessions.
7. McKendree-Smith et al. (2003)	Depression	Review paper	CBB treatment by GPs in primary care settings is an appropriate approach.
8. Cuijpers (1998)	Depression in older adults	Meta-analysis	Bibliotherapy useful if people are actively recruited.
9. Cuijpers (1997)	Unipolar depression	Meta-analysis	Bibliotherapy is an effective treatment, especially for reaching a section of people with depression that unable to be reached with traditional forms of therapy.
10. Scogin et al. (1996)	Depression	Meta-analysis	Self-administered treatment is effective for depression, but how participants are prepared for this treatment is critical.
11. Christensen et al. (2002)	Depression and anxiety	Depression and anxiety scores	Web-based CBT intervention is a practical means of delivering treatment.
12. Kaltenthaler et al. (2006)	Depression and anxiety	Systematic review	RCT evidence to support CCBT. It reduces the therapists' time to treat depression and anxiety.
13. Cuijpers et al. (2006)	Late-life depression	Meta-analysis of RCTs	Bibliotherapy is effective in the treatment of depression in older adults.

Several studies have used cognitive bibliotherapy with individuals who have mild-to-moderate depression (Cuijpers, 1997; McKendree-Smith, Floyd, & Scogin, 2003). A meta-analysis, by Anderson et al. (2005), indicated bibliotherapy is an effective intervention, although the evidence was drawn from small studies that were, overall, of poor quality. Bower, Richards, and Lovell (2001) conducted a systematic review of the research literature to determine the clinical and cost effectiveness of self-help treatments for anxiety and depressive disorders in primary care. The review suggested self-help treatments may have the potential to improve the overall cost effectiveness of mental health service provision. Meta-analyses of cognitive bibliotherapy studies for depression, by Gregory et al. (2004), obtained an effect size of 0.77 for these studies, which represents a moderate to large effect size³.

Overall, while a considerable number of bibliotherapy studies have used undertaken, only 13 have focused on people with depression. Bibliotherapy, generally, has been regarded as an effective approach, but the small size and quality of some studies has been criticised. Moreover, none of the studies reviewed have been carried out in Thai context, particularly with people who have moderate depression.

A self-help approach is often popular with people, and there are now many self-help books commercially available, though few have been tested empirically in randomised controlled trials (McKendree-Smith et al., 2003).

³ Effect size or strength of association is a set of statistics that show the size of the differences between means. It summarises the amount of variance in the dependent variable that can be predicted from knowledge of the levels of the independent variable (Pallant, 2007; Polit & Beck, 2006).

Anderson et al. (2005) reviewed the evidence for the clinical effectiveness of bibliotherapy in the treatment of depression. The authors reported two self-help books for depression that are currently available commercially, *Managing Anxiety and Depression* (Holdsworth & Paxton, 1999) and *Feeling Good* (D. D. Burns, 1999), and which have been evaluated in randomised trials. A third book, *Control Your Depression* (Lewinsohn, Munoz, & Youngren, 1992) was used in two trials where *Feeling Good* was the main intervention (Anderson et al., 2005). While all these books were based on CBT, and covered similar content, they differed in the style of their approach. Different formats have not been compared and there is insufficient evidence at present to suggest one format is more effective than another, although the only evidence of effectiveness is for self-help based upon CBT (Anderson et al., 2005). Two other popular books encourage psychological change using psychodynamic principles: *Climbing out of Depression* (Atkinson, 1993) and *Depression: the way out of your prison* (Rowe, 1996) but have not been evaluated.

Several researchers have found that therapeutic gains from using bibliotherapy have been maintained for two years (Scogin, Jamison, & Davis, 1990) and up to three years (Smith et al., 1997) after the end of treatment. It is possible these improvements were maintained because bibliotherapy offers the opportunity to refer back to the book and re-familiarise oneself with specific skills and techniques.

Several systematic reviews emphasise the potential benefits of bibliotherapy for a range of conditions, including depression. A systematic review by Foster

(2006), of randomised controlled trials and controlled before-and-after studies of self-help for primary care consumers with anxiety and depression (eight studies examining written interventions based mainly on behavioural principles), found most trials reported some significant advantages in outcomes over two to six months associated with self-help compared with routine primary care. The mean effect size (based on six studies) was 0.41 (95% CI 0.09 to 0.72). Furthermore, a systematic review was undertaken by Fanner and Urquhart (2008) to evaluate the therapeutic benefit of bibliotherapy-based library services for consumers (the use of written, audio, or e-learning materials to provide therapeutic support). The review found that library-based bibliotherapy could be beneficial for consumers in increasing their understanding of treatments.

In a meta-analysis of six randomised trials of minimal-contact psychotherapy for depression, Cuijpers (1997) found that the effects in people with depressive symptoms were large and comparable with the effects of traditional psychotherapy and antidepressive treatment of depression. However, most studies used small samples. Participants were recruited usually by media announcements, and therapists maintained minimal contact. It was also found that adherence to a bibliotherapy programme improved with weekly telephone contact with a health professional. It has been suggested that minimal contact with participants be maintained in research investigating the impact of bibliotherapy on people with depression.

A meta-analysis of 70 studies by Marrs (1995) examined the efficacy of bibliotherapy in comparison to control groups and therapist-administered treatments. The analysis found that the estimated mean effect size was 0.57. The comparison of bibliotherapy to therapist-administered treatments found no significant differences between effect sizes, including at follow-up. Moreover, meta-analyses by Campbell and Smith (2003) found bibliotherapy to be effective under several conditions. The authors reported that the effectiveness of bibliotherapy has been demonstrated in single studies and meta-analyses, with promising results.

Two more studies support the findings of these meta-analyses. First, in a study by Jamison and Scogin (1995), people living in the community with depression who met the criteria for major depressive disorder were compared with a waiting list control group. The findings showed significant improvements in depressive symptoms and dysfunctional thoughts. A follow-up study reported that these effects were maintained over a three-year period. Second, a study by Ackerson, Scogin, McKendree-Smith, and Lyman (1998) examined the efficacy of bibliotherapy in 30 adolescents experiencing mild and moderate depression, using a cross-over design. The treatment produced both statistically and clinically significant improvements in depressive symptoms. Treatment gains were maintained at one-month follow-up. These results contribute to the growing evidence base on the efficacy of bibliotherapy incorporating CBT for adolescents experiencing symptoms of depression.

Gregory (2004) reported a meta-analysis of 29 outcome studies of cognitive forms of bibliotherapy for the treatment of people with depression, in order to obtain a more robust estimate of the overall effect size for the use of cognitive based bibliotherapy in depression. Seventeen studies with strong research designs (pretest–post-test waiting list control groups) yielded a respectable effect size of 0.77, considered the best estimate of effect size from this meta-analysis. The preliminary results are consistent, however, with the position that bibliotherapy can be used effectively with adolescents, adults, and older adults. Additional research is needed to establish further and elaborate the relationship of age to outcomes. Furthermore, a meta-analysis by Scogin, Bynum, Stephens, and Calhoun (1990), of conjoint psychotherapy and bibliotherapy for depression, concluded that bibliotherapy had impressive overall efficacy. These results suggest that self-administered treatments in general are effective in comparison with no treatment.

A randomised controlled trial by Richards et al.(2003) in primary care (patients 18 years and above) in England compared practice nurse-facilitated self-help with General Practitioner (GP) care for mild-to-moderate anxiety and depression. The self-help group achieved reliable and clinically significant change after one month (29%, n=34) compared with the GP group (12%, n=33) but the difference disappeared at three months. However, self-help patients were more satisfied than GP treated patients. Furthermore, a randomised controlled trial by Mead (2006) in England, in patients with symptoms of anxiety and depression, failed to show any significant difference at three months between guided self-help and waiting list control groups. The authors

provided several possible explanation for the non-significant findings, including ineffectiveness of the self-help manual, the diagnostically heterogeneous sample, patient expectations given that they had already been referred for psychological therapy, and the relative inexperience and brief training of staff.

A randomised controlled trial was carried out by Bilich et al. (2008) into the effectiveness of a cognitive behavioural bibliotherapy self-help programme with varied levels of telephone support. The programme was delivered through Lifeline's 'Just Ask' free call telephone mental health service at Lifeline South Coast, New South Wales, Australia. The study included 84 mild-to-moderately depressed adults. The self-help bibliotherapy workbook, *The Good Mood Guide: A Self-Help Manual for Depression*⁴ (Phipps et al., 2004), was developed for the project. The workbook used a CBT approach and was divided into eight separate modules, each containing reading, writing and activities to be completed over a one-week time-frame. The entire programme was designed to be completed in eight weeks. The study compared the changes in depressive symptoms of three groups: control, self-help with minimal contact (a short weekly telephone call lasting approximately 5 minutes), and self-help with assisted contact (30-minute weekly telephone contact). The results showed the minimal contact and the assisted self-help groups had significant reductions in their levels of depression and psychological distress compared with the control group. The assisted contact group showed the

⁴ This is the English version of the manual that is used in the present study. See Chapter 5, Section 5.4.3: Procedures and Data Collection, for more information about the manual.

greatest amount of symptom reduction. Treatment gains were maintained at one-month follow-up.

Several studies have indicated that bibliotherapy can be an effective treatment for mild and moderate depression in the general adult population, with treatment gains maintained in the short- and long- term. Scogin et al. (1989) compared the efficacy of cognitive and behavioural bibliotherapy for older adults with mild and moderate depression. Participants were assigned to receive the self-help book on behavioural therapy, *Control Your Depression* or the self-help book on cognitive therapy, *Feeling Good*, to read within a four-week time frame, and receive weekly monitoring telephone calls from a researcher. The results indicated there were no significant differences between the cognitive and behavioural bibliotherapy groups, with both groups showing significant improvement in depression scores compared with the waiting list control group. Statistically significant improvements in depression were evidenced. Treatment gains were maintained at six-month follow-up. The results of the study suggest cognitive and behavioural bibliotherapy programmes are potential alternatives or adjuncts to structured psychotherapy for older adults with depression.

Scogin, Jamison et al. (1990) addressed the issue of long-term maintenance of bibliotherapy treatment effects for older adults with depression by conducting a two-year follow-up of participants in the Scogin et al. (1989) study. Thirty of the original 44 participants (68%) were assessed approximately two years after treatment for clinician-rated and self-rated depression (14 from the behavioural

bibliotherapy condition and 16 from the cognitive bibliotherapy condition). Follow-up results revealed most participants (77%) had not received other treatment, most (73%) felt their level of depression had decreased, and over half (53%) had re-read at least parts of their assigned book during the two-year interval. The results provided further support for the use of structured bibliotherapy as a treatment adjunct or alternative.

Smith et al. (1997) investigated the durability of long-term maintenance of cognitive bibliotherapy for 72 older adults with mild-to-moderate depression, in a three-year follow-up of participants in the Scogin, Jamison et al. (1990) study. The results indicated statistically significant improvements in depression scores after bibliotherapy treatment. The outcomes indicate that not only can cognitive bibliotherapy be an effective treatment for mild-to-moderate depression in older adults but treatment gains can be maintained at three-year follow-up.

A randomised controlled trial was conducted by Kaldo (2007) using a self-help book with weekly therapist contact to reduce distress. Participants who received a CBT self-help book, supplemented with seven weekly telephone calls, improved to a greater extent than participants in a waiting list control group. Improvements in distress were observed, and the positive results were maintained up to one year after treatment.

In Thailand, the Thai National Statistics Organisation (2006b) conducted a study of the reading behaviour of Thai people, including academic books,

newspapers, cartoons, and internet resources. The findings showed that children (6–14 years) had the highest rate (87.7%) of reading, adolescents (15–24 years) the second highest rate (83.1%), followed by adults (25–59 years) (65.0%) and older adults (60 years upwards) (37.4%). The results also showed a higher rate of reading in Thai people in 2006 compared with 2004, the previous study year. The difference in reading rates was attributed to study participants favouring listening to the radio for information and watching television instead of reading books. These findings differed from the reading behaviours of Australians in the 2006 *ABS Adult Literacy and Life Skills Survey*. The study found that 61% of respondents aged over 15 years regarded reading as a favourite activity, with females (73%) being more likely than males (50%) to consider reading a favourite pastime. Seventy-seven percent indicated they read newspapers, 58% read magazines and 48% read books at least once a week. Furthermore, respondent in the 45-64 years age group, and those with university or higher qualifications, were more likely to read on a frequent basis (Australian Bureau of Statistics, 2008).

In Thailand, a small quantity of self-help materials for depression have been provided in a variety of ways: pocket books purchased from book stores, depression handbooks for the general population to encourage self-care for themselves and family members, and a booklet on the principles of depression. Online self-help depression web sites (beyond bluethai.com and suicidethai.com) have also been established for the general population. Almost all of these resources have been provided by the Mental Health Department, Public Health

Ministry of Thailand.⁵ However, none of these materials are presented in self-help bibliotherapy form for individuals with depression, and none have been evaluated in randomised controlled trials. To date, only five published bibliotherapy studies have been undertaken in Thailand: (i) Choonam (1998) used bibliotherapy to improve self-perception in elementary school students with chronic illness. (ii) Siricharoenwong (1989) evaluated the effect of bibliotherapy in reducing separation anxiety from primary caregivers in hospitalised preschool students. (iii) Pornchaikate (1991) used bibliotherapy to improve self-esteem in school children who had severe physical disabilities that affected their mobility. (iv) Padee (1994) examined the effect of bibliotherapy in reducing anxiety and depression in patients with cancer. (v) Sainamparn (2003) compared the effects of different methods of bibliotherapy on the self-esteem of children with physical disabilities that affected their mobility in a home for disabled children. Overall, the five studies found bibliotherapy was a useful approach for improving self-perception (Choonam, 1998), reducing separation anxiety (Siricharoenwong, 1989), enhancing self-esteem (Pornchaikate, 1991; Sainamparn, 2003), and lowering anxiety and depression (Padee, 1994). The present study is the first randomised controlled trial to examine the effectiveness of a CBB self-help intervention programme in individuals with moderate depression in Thailand.

3.4 SUMMARY

A wide range of intervention modalities are used in the treatment of depression. However, a combination of pharmacological and psychosocial

⁵ This is the principal government organisation for mental health promotion.

intervention is the most effective treatment for depression. CBT focuses on changing cognitions and behaviour directly, and can be used to prevent relapse in depression. Bibliotherapy is an effective therapeutic approach for people with moderate depression. While most bibliotherapy studies have been carried out in developed countries, few have been undertaken in Thailand, and, of these, only one has focused on people with depression.

Individuals with depression report more psychological distress than non-depressed people. It is important, therefore, in evaluating the usefulness of a CBT based self-help manual to examine how effective it is in reducing depression and psychological distress. Furthermore, there is growing recognition in studies of the importance of incorporating the concept of resilience when facing adversity and having a positive outlook in difficult circumstances such as depression, and this is considered in the following chapter.

CHAPTER FOUR

THE CONCEPT OF RESILIENCE

4.1 INTRODUCTION

This chapter presents a review of selected literature about the concept of resilience. The review begins with an overview of the resilience concept, followed by an exploration of the concept and the factors that enhance resilience. Finally, an examination is presented of the evidence base for promoting resilience in people with depression.

4.2 OVERVIEW

4.2.1 Defining Resilience

A review of resilience literature highlights that the concept has been conceived in different ways because the outcomes and their commonly accepted causes are defined in terms of risk or adversity (Kumper, 1999). Resilience is broadly defined as positive adjustment in the face of adversity or recovery from significant disturbance (Haase, 2009; Masten, 2007). Numerous definitions of resilience can be found in the literature, encompassing overcoming life adversities, recovering from trauma following adverse events, and overcoming life transitions in a competent manner.

The term ranges from a summative measure of successful adaptation despite adversity to a psychological attribute of varying efficacy (Friend, 2007). Resilience is a multidimensional construct relating to exposure and positive adjustment to adversity. Adversity refers to any risks associated with negative

life events that are related to adjustment difficulties (Luthar & Cicchetti, 2000). Resilience is the ability to bounce back after significant adversity and risk (Presbury, Echterling, & McKee, 2008). Haase (2009) defined resilience as the process of identifying resources and strengths to manage stressors flexibly to gain a positive adjustment in the face of adversity. These definitions of resilience are based on an expectation of successful or problematic adjustment in response to risk factors (Schoon, 2006).

In psychology, resilience is the positive capacity of people to cope with stress and catastrophe. It is also used to indicate a characteristic of resistance to future negative events. In this case “resilience” corresponds to cumulative “protective factors” and is used in opposition to cumulative “risk factors” (Bonanno, Galea, Bucciarelli, & Vlahov, 2007). Luthar, Cicchetti, and Becker (2000) also defined resilience as a dynamic process where individuals exhibit positive behavioural adaptation when they encounter significant adversity or trauma. Moreover, Tusaie (2004) denoted resilience as a combination of abilities and characteristics that interact dynamically to allow an individual to bounce back, cope successfully, and function above the norm in spite of significant stress or adversity.

4.2.2 Concept of Resilience

There is widespread agreement that because of the complexity of resilience, it is a complex, multidimensional construct. There is little consensus in the research literature about terminology, characteristics, or boundaries of resilience (Haase, 2009; Luthar & Cicchetti, 2000). However, resilience is

becoming an increasingly popular concept to be adopted in the preventive field (Kumper, 1999).

The concept of resilience has compelling history in psychology and psychiatry. It began with observations of children who were functioning well despite obvious risk factors in their background (Brom & Kleber, 2008). Resilience theory began with research on children in high-risk situations (Greene, 2007). Gallopin (2006) expands the discussion on resilience in ecology by viewing resilience as the capacity of a system to respond. The capacity to respond is the system's ability to adapt to adversity, take advantage of opportunity, and cope with the consequence of the change.

Positive psychology is a recent conceptual shift that reflects a change from focusing on studying deficits and disorders to exploring human strengths, positive experience, and resilience (Presbury et al., 2008). The concept of resilience is deeply enmeshed with the related concepts of risk, stress adversity, and coping (Rayner & Montague, 1999). Resilience is thought to be effective in alleviating distress and promoting well-being at the individual, family, and community levels, and mental health professionals are increasingly using it to expand the effectiveness of treatment (Greene, 2007). Resilience is not a permanent, persistent, state of affairs. The success or otherwise of a person's life cannot be accurately assessed once and for all. The key elements of a definition of resilience are exposure to risk, adversity or stress, maintenance of competencies through coping strategies, and successful adaptation or recovery in the face of exposure to risk (Rayner & Montague, 1999).

The study of resilience has expanded significantly over the past 20 years (Goldstein & Brooks, 2005; Rutter, 2001). Resilience embraces the ability of the person to deal more effectively with everyday challenges and to bounce back from disappointment, adversity, and trauma. Problem-solving and decision-making skills are basic components of a resilient mindset, for reinforcing a sense of control (Goldstein & Brooks, 2005) and mastery (Brooks & Goldstein, 2001). Mental health professionals who use risk and resilience practice strategies often build on other frames of reference to avoid or minimise risks and to foster people's growth and healing processes (Greene, 2007).

A resilience approach recognises and builds on strengths and strategies among high-risk populations for managing their lives and avoiding crises (Gonzalez, 2007). Instead of pathologising individuals and populations at risk, a resilience approach aims to provide an overarching framework for conceptualising social problems, intervention strategies and practice. The framework entails emphasising strengths, such as academic attainment, school motivation, and the hopes and aspirations of less privileged parents for their children's welfare and future development (Lurie & Monahan, 2001).

Broadly, the concept includes four major components (Bernard, 2004). First, social competence involving the overall positive adaptation, characteristics, skills, and attitudes essential to forming relationships and positive attachment to others. Second, problem solving involving the ability to plan, think critically, and develop insight. Third, autonomy, including the development of

sense of self, identity, independence, and power. Fourth, a sense of purpose, including having goals, direction, optimism, and a sense of meaning.

Resilience is a very broad concept that refers to the capacity of mechanisms or systems to withstand or recover from significant disturbances. The concept is contextual in multiple ways. Judgements about adversity or risk refer directly to the events, or context, of risk or adversity exposure. Isolated adverse experiences have a different significance for resilience than the same experiences taking place in the midst of many other negative experiences (Riley & Masten, 2005). Moreover, resilience is explicitly inferential; in that two conditions are required to describe resilience in an individual's life: (a) that significant adversity or threat to adaptation or development has occurred, and (b) that functioning or development is enabled, either because adequate adaptation is sustained over a period of adversity, or because recovery to adequate functioning is not observed (Riley & Masten, 2005).

In developmental research, resilience usually refers to positive adaptation during or following exposure to adversity that has the potential to harm development. Most developmental research has focused on resilience in individuals, although the concept can also be applied to the systems in which individual development is embedded, such as families (Patterson, 2002), classrooms, or schools (Masten, 2007). Two key judgements must be made: one concerns adaptive behaviour or development, and the other concerns the risk or threat to development (Masten, 2007).

Luthar et al. (2000) claimed resilience refers to a dynamic process encompassing positive adaptation in the context of significant adversity. There is confusion, however, regarding the conceptualisation of resilience as a personal trait versus a dynamic process. Originally, resilience was referred to as a personality trait, whereas over the past decade or two resilience has been redefined as dynamic, modifiable process. Resilience researchers have also conceptualised differently the connection between conditions of risk and manifest competence. It is widely recognised that positive adjustment in the face of adversity is dependent on the person-environment interaction that brings about adaptation, and resilience has been described as a dynamic process (Luthar & Cicchetti, 2000).

Resilience research has always had a pragmatic mission: to learn better ways of preventing psychopathology, and to promote healthy development in children at risk of problems. The combined influence of this approach over the past three decades has revolutionised the models for intervention, bringing positive development and strength-based models into much greater prominence (Luthar & Cicchetti, 2000; Masten, 2007). Resilience research increasingly comprises intervention studies based on resilience frameworks that aim to help young people and to test resilience theories simultaneously (Masten, 2007).

Rutter (2001) claimed that the concept of resilience refers to the phenomenon of overcoming stress or adversity, and achieving a relatively good outcome, despite the experience of a situation. The awareness that this is so has led to the concept of resilience meaning the phenomenon that some individuals have a

relatively good outcome despite suffering risk experiences that would be expected to bring about serious sequelae (Rutter, 2007). Three considerations shape studies of resilience. First, overcoming stress or adversity may depend on experiences following the risk exposure. Resilience cannot be reduced to what is involved in the chemistry of the moment of exposure. Second, resilience cannot be equated with individual psychological traits, however conceptualised. It involves an inference based on findings concerning individual differences in response to stress or adversity. Resilience is not, and cannot be, an observed trait. People may be more resilient in some situations than others (Rutter, 2007). Third, the mediating mechanisms giving rise to resilience might be in personal agency or coping strategies, that is, what individuals do in order to deal with the challenges they face. These considerations mean attention needs to be paid to mental operations as well as to individual traits or experiences. In many respects, potentially the most important aspect of the shift from risk or protective concepts to resilience is that it requires a move from variables to processes or mechanisms (Rutter, 2007).

Resilience is not a general quality that represents an individual trait. Research needs to focus on the processes underlying individual differences in response to environmental hazards, rather than resilience as an abstract entity (Rutter, 2006). Because resilience in adulthood adversities may stem from positive childhood experiences, a lifespan approach is needed to study the concept. Furthermore, in light of the importance of gene–environment interactions in resilience, a wide range of research strategies, spanning psychosocial and

biological methods, are needed (Rutter, 2006). Rutter (2006, p.1) claimed that five main conclusions can be made about resilience from research evidence to date:

- (1) resistance to hazards may derive from controlled exposure to risk, (2) resistance may derive from traits or circumstances that are without major effects in the absence of the relevant environmental hazards, (3) resistance may derive from physiological or psychological coping processes rather than external risk or protective factors, (4) delayed recovery may derive from “turning point” experiences in adult life, and (5) resilience may be constrained by biological programming or damaging effects of stress/adversity on neural structures.

Psychological concepts associated with resilience have been more widely studied than physiological concepts. Concepts such as self-esteem, self-perception, personality, temperament, intellect, coping, and problem-solving skills are just a few of the psychological concepts that have been studied in relation to resilience (Haase, 2009).

4.2.3 Factors Influencing Resilience

Although resilience is usually thought to be attributable to individual characteristics, research is increasingly demonstrating that the social context may be a better predictor of resilience (Sameroff & Rosenblum, 2006). There are three protective factors that influence resilience: (1) personal attributes, including positive self-concept; (2) family interactions, such as having close bonds with at least one family member or an emotionally stable parent; and (3)

community support, such as receiving support or counsel from peers (Werner, 1995). Adaptive functioning in the face of adversity is not only dependent on the characteristics of the individual, but is greatly influenced by processes and interactions arising from the family and the wider environment (Schoon, 2006).

4.2.3.1 Cultural identification

A high level of cultural identification can be a positive resilience factor. When the family has a high level of cultural identification, it means the family is functioning in a cultural context where its members are meeting cultural demands successfully. They are being strongly reinforced by the culture in ways that are meaningful to family members (Kaplan, 1999). Protective factors are often rooted in culture. Cultural traditions, religious rituals and ceremonies, and community support services provide a wide variety of protective functions; these have not been studied extensively in resilience research. Moreover, a full understanding of resilience needs to include consideration of cultural differences (Haase, 2009). There may be culturally specific traditions, beliefs, or support systems that function to protect individuals, families, and communities functioning in the context of adversity in those cultures (Wright & Masten, 2005).

4.2.3.2 Social support and interpersonal relationship

Social support is one of the factors that helps predict individual resilience. In studies with children, the presence of at least one healthy attachment to a significant adult is omnipresent when resilience is identified (Luthar et al., 2000; Ramirez, 2007). For adults, social support and meaningful relationships

with at least one peer or family member is consistent with positive resilient outcomes. These key relationships provide opportunities for communication and support (Earvolino-Ramirez, 2007). King, King, Fairbank, Keane, and Adams (1998), used structural equation modelling to study resilience in 1,632 Vietnam War veterans. They examined the relationships among several war zone stressor dimensions, resilience-recovery factors, and post-traumatic stress disorder symptoms. The modelling supported strong mediation effects for the intrapersonal resource characteristic of hardiness, post-war structural and functional social support, and additional negative life events in the post-war period. Support for moderator effects or buffering in terms of interactions between war zone stressor level and resilience-recovery factors was minimal.

4.2.4 Four Main Waves of Resilience Research

The study of resilience has presented in four major waves of research over the past three decades. The first wave was characterised by studies concentrating on phenomenological identification, along with basic concepts and methodologies, and on protective factors that affected the individual. The second wave portrayed resilience as a dynamic, positive adaptation in the face of adversity or risk. The third wave exemplified the postmodern and multidisciplinary view of resilience, as a force that drives a person to grow through adversity, based on a philosophy of spirituality and creativity. The application of resilience, using an educational and practical framework, provides a means for connecting with and nurturing a person's resilience. The process is focused on preventive interventions that are directed at changing developmental pathways (Greene, 2007; Richardson, 2002; Wright & Masten,

2005). The fourth wave was characterised by a focus on multilevel analysis and the dynamics of adaptation and change research. It is only when risk, assets, vulnerabilities, and protections can be mapped and measured effectively at multiple levels, and statistical tools are at hand to address complex dynamics, that it becomes feasible to study the processes of resilience in human development. As a system perspective on resilience grows stronger, attention has shifted to multilevel dynamics (Masten, 2007).

4.2.5 Resilience-based Prevention and Promotion

As the fourth wave of interest in multiple levels of analysis grows, resilience is being increasingly incorporated in preventive interventions, and is assessed in behaviour observed in ecologically meaningful contexts (such as the classroom), cognitive performance on laboratory tasks, brain function observed in images, and psychophysiological responses (Masten, 2007). Empirical evidence from resilience research can inform and guide the development of effective interventions for different at-risk populations, to address issues related to risk factors and psychosocial resources, as well as risk and protective processes. Where risk factors are difficult to identify and/or eliminate, intervention strategies should aim to increase available psychosocial assets and to develop and strengthen protective processes. The application of the resilience paradigm within the design of intervention programmes can help to reduce the impact of adverse experiences (Schoon, 2006). By studying resilience and exploring the possibilities of resilience-based interventions, practitioners from many fields can capitalise on unique opportunities for promoting positive adaptation, including the promotion of secure attachments

in infancy, enhancement of significant relations, development of competencies, and problem-solving skills, and encouragement of a capacity to discover a meaning in life (Earvolino-Ramirez, 2007; Rayner & Montague, 1999). To illustrate, Dishion and Connell (2006) conducted a study that focused on the concept of self-regulation as a measure of resilience in children and adolescents. Their findings suggest measurement of self-regulation might moderate adolescent antisocial behaviour as well as adolescent depression, and the measure is a promising index of adolescent resilience.

Resilience has been measured in many ways, including academic achievement and motivation, psychological adjustment, self-processes and identity development, and overall physical well-being (Freeman, Leonard, & Lipari, 2007). Much of the research and literature in the area of building resilience in adolescents is based on an ecological systems framework. The majority of extant literature highlights three prerequisites for schools to foster resilience: caring relationships, opportunities to participate and contribute, and positive high expectations for all students, all of which underline students' sense of belonging and overall need for self-determination (Freeman et al., 2007).

Effective interventions to enhance individuals' resilience are based on the belief that people can effect positive change when they are able to ascribe new, more positive meanings to adverse events, and draw on environmental resources to reduce the negative effects of the aftermath of adversity (Greene & Armenta, 2007). For instance, a pilot randomised controlled study by Steinhardt & Dolbier (2008) examined the effectiveness of a four-week

resilience intervention programme designed to enhance resilience, coping strategies, and protective factors, and to decrease symptomatology during a period of increased academic stress. Analysis indicated the experimental group had significantly higher resilience scores, more effective coping strategies, higher scores on protective factors, and lower scores on symptomatology (i.e., depressive symptoms, negative affect, and perceived stress) after the intervention than the waiting list control group. The findings suggest resilience programmes may be useful for stress management and stress prevention among college students.

4.3 RESILIENCE AND DEPRESSION

Increasing support for the resilience paradigm, which provides a new perspective on how children and adults bounce back from stress, trauma, and risk in their lives, is emerging from the fields of psychiatry, psychology, and sociology (Henderson & Milstein, 2003). Resilience research has focused on the innate characteristics that contribute to positive development in the face of adversity, and on the institutional and environmental support structures that strengthen resilience (Friend, 2007). Resilience research is contributing to a philosophical shift from a pathology-based medical model of human development to a proactive wellness-based model, which focuses on the emergence of competence, empowerment, and self-efficacy (Henderson & Milstein, 2003).

Research into resilience places emphasis on identifying risk and protective factors and processes and trying to understand how they interact and influence

an individual's capacity to cope with particular combinations of stress and difficult life circumstances (Rayner & Montague, 1999). There is value in conducting research on resilience at different points in human development. For instance, research-based understanding of resilience can allow GPs to capitalise on periods of developmental changes as unique opportunities for promoting positive adaptation (Luthar et al., 2000).

Historically, most resilience research in children and adolescents has been characterised by attributes usually identified as positive (Haase, 2009). Because almost all the resilience research to date has focused on children and adolescents, an understanding of how adults exposed to personal and work-related stress bounce back is only just emerging (Henderson & Milstein, 2003). Resilience research is concerned with the conceptual differences between contemporary studies on resilience in children compared with resilience in adults. In studies with children, researchers usually consider behavioural competence, academic performances and general well-being behaviours. In adults, conversely, the focus is on the individual's emotional, well-being, happiness, and the absence of psychological distress (Luthar, Sawyer, & Brown, 2006).

Resilience has been studied particularly in relation to transitions in periods of great stress. Developmental transitions include school entry, detachment from parents during adolescence, and childbearing. Most study on resilience is contained in two bodies of literature about basic elements of human

experiences: (1) the psychological aspect of coping, and (2) the physiological aspect of stress (Tusaie, 2004).

Several studies have affirmed the association between positive emotion and resilience (Ong, Bergeman, Bisconti, & Wallace, 2006). In examining the role positive emotion plays in resilience, Ong et al. (2006) carried out a study to investigate the functional role of psychological resilience and positive emotions in the stress process, in 226 bereaved widows, in Northern Indiana. The findings indicated that differences in psychological resilience accounted for meaningful variations in daily emotional response to stress. Positive emotion in resilient people functions as a protective factor to moderate the magnitude of adversity they experience and to assist them to cope better in the future (Tugade, Fredrickson, & Barrett, 2004). This was highlighted in a study by Fredrickson et al. (2003) who suggested that positive emotions are active elements in resilience. By examining people's emotional responses to the September 11th terrorist attacks in the USA, they suggested positive emotions were critical elements in resilience and acted as a mediator that buffered people from depression following the crisis. Furthermore, multivariate analyses indicated that the prevalence of resilience was uniquely predicted by participant gender, age, race/ethnicity, education, level of trauma exposure, income change, social support, frequency of chronic disease, and recent and past life stressors.

Humphreys (2003) examined individual psychological processes in women living in sheltered accommodation for 'battered' women. The results indicated

resilience is a pattern of successful outcomes in individuals despite challenging or threatening circumstances, and women who had higher levels of resilience reported significantly fewer symptoms of physical and psychological distress. Furthermore, Wagnild (2003) compared the relationship of resilience and risk factors in low and high income older adults. The author found individuals with lower incomes may be less likely to achieve successful ageing because of a higher prevalence of health risk factors compared to their higher income counterparts. Wagnild concluded resilience seems to be positively associated with indicators of successful ageing, regardless of income.

In Thailand, few studies have been undertaken into resilience. Three studies on resilience have been carried out to examine three types of resilience measurements. First, a study by Chowsilpa (2003) to examine the reliability of the State-Trait Resilience Inventory among undergraduate students at Chiang Mai University. The results highlighted the feasibility and acceptability of the modified version among adolescents in Thailand. Another study was conducted to examine modifications to and translation of the Thai version of the Youth Risk Behavior Survey (Nintachan & Moon, 2007). The results showed the Thai version of the instrument has good semantic, content, and conceptual equivalence as well as feasibility and acceptability. Furthermore, Takviriyannun (2008) developed and tested the Resilience Factors Scale for Thai adolescents. The results showed this scale has good psychometric properties and is an objective tool for assessing resilience in Thai adolescents. Moreover, the Mental Health Department, Public Health Ministry incorporated resilience promotion in a national suicide prevention project, targeting primary health

care units and schools. The resilience promotion package comprised 12 modules about significant life skill scenarios (e.g., self-esteem, conflict management, expression of feelings, optimism, and communication). The project is ongoing and it has not been formally evaluated (Tuntipiwathanasakul, 2008).

4.4 SUMMARY

Resilience is an individual psychological characteristic that strengthens individuals' capacity to face adversity and to have a positive outlook in the face of difficult circumstances such as depression. There is growing interest in incorporating the concept of resilience in educational programmes to promote mental health and enhance individuals' capacity to cope with a range of mental health problems and illnesses. Most resilience strengthening studies in depression have been conducted in developed countries. While a few Thai studies have focused on developing resilience in the mental health field, only one has applied the concept to the prevention of suicide, and none have specifically concentrated on promoting resilience in adults with moderate depression.

CHAPTER FIVE

DESIGN AND METHODS OF THE STUDY

5.1 INTRODUCTION

This chapter presents the design and methods of study. It begins by outlining the conceptual framework and research design, then the setting for the study, selection and recruitment of participants, and the number and type of participants are provided. This is followed by a summary of the data collection instruments, procedures and data collection. Finally, the rigour of the study, ethical considerations, and data analysis are presented.

5.2 CONCEPTUAL FRAMEWORK FOR THE STUDY

According to Beck et al. (1979), the cognitive model postulates three specific psychological concepts to explain depression: (1) the cognitive triad, which comprises three major cognitive patterns that induce individuals to regard themselves, their future, and their experiences in an idiosyncratic manner; (2) schemas, which are activated in a specific situation and directly determine how the person responds; and (3) faulty information processing in the way the person with depression thinks helps to maintain negative beliefs, despite evidence to the contrary. The model proposes that early experiences provide the basis for forming negative concepts about one's self, the future, and the external world. In response to traumatic situations, the way depression prone people think becomes markedly constricted and negative ideas develop about every aspect of their lives.⁶

⁶ See Chapter 2, Section 2.2.3.2: Psychosocial factors: cognitive theories.

The term resilience refers to the phenomenon of overcoming stress or adversity in order to achieve relatively good outcomes, despite the seriousness of situations. It is evident that the ability to overcome stress or adversity may depend on experiences following the risk exposure; this indicates that a lifespan perspective is necessary. Resilience cannot be reduced to what is involved in the chemistry of the moment of exposure, nor equated with individual psychological traits, however conceptualised. The mediating mechanisms giving rise to resilience might be in personal agency, or coping strategies, that is, what individuals do in order to deal with the challenges they face⁷ (Rutter, 2007).

In response to the increasing prevalence of depressive disorders and related symptomatology, a number of treatments have been developed. The most successful to date are cognitive behavioural treatments, which are supported as effective by several evidence-based systematic reviews (Jorm et al., 2002). Cognitive behavioural therapy (CBT) aims to change distorted thoughts and dysfunctional behaviours. The most common therapeutic intervention used in self-help book form is based on CBT.⁸ Cognitive behavioural bibliotherapy (CBB) can be an effective treatment for mild-to-moderate depression in adults (Scogin et al., 1989). In the treatment of depression, bibliotherapy aims to help individuals identify their distorted and depressed thinking and learn more realistic ways to frame their experiences by reading and conducting exercises that are completed at home with minimal or no supervision from a therapist. It involves engaging individuals in monitoring and increasing their activity

⁷ See Chapter 4, Section 4.2.2: Concept of resilience

⁸ See Chapter 3, Section 3.3.2: Self-help intervention

levels. The purpose of bibliotherapy is to (a) provide information, (b) generate insight, (c) stimulate discussion, (d) create awareness of others' problems, (e) provide solutions to the problems, and (f) troubleshoot problems after finishing using bibliotherapy⁹ (Pantalon et al., 1995).

5.3 RESEARCH DESIGN

A randomised controlled trial (RCT) design was used in the present study. RCTs are the most powerful designs for testing hypotheses of cause-and-effect relationships. There are three key properties of a RCT: control, randomisation, and manipulation. Adhering to these properties enables researchers to rule out other phenomena and, in doing so, enhances the design for assessing cause-and-effect relationships (Whittemore & Grey, 2006). The first property is *control*; RCTs contain strategies for improving the internal validity of studies and, thus, strengthening the quality of evidence (Polit & Beck, 2006). Control is used in two rather different ways: first, as a standard for comparison, and second, as a way of reducing variability. Control is essentially a way of establishing that two individuals (or groups or conditions) are identical except for the variable of interest (McBurney & White, 2007). The second property is *randomisation*, known as random assignment, or random allocation. The allocation of subjects to conditions is random when each subject has an equal and independent chance of being assigned to any particular group in the study (Macnee & McCabe, 2008; McBurney & White, 2007; Polit & Beck, 2006). Because the bias is evenly distributed among the different groups, bias will not unduly affect the outcomes of the study (Macnee & McCabe, 2008). In

⁹ See Chapter 3, Section 3.3.3.2: Goals of bibliotherapy

experimental studies in which a control group is used, participants are randomly selected for the study and then randomly assigned to either an intervention group or a control group (N. Burns & Grove, 2005). The third property is *manipulation*. In experiments involving manipulation, the researcher manipulates the independent variable by introducing a treatment or intervention. The independent variable might be a teaching plan, a treatment programme or a medication and must be clearly defined. It is the effect of this manipulation that is measured to determine the result of the experimental treatment on the dependent variable (Polit & Beck, 2006; Whitemore & Grey, 2006).

This doctoral study is a subset of a larger study. The aims of the larger study were to compare the effectiveness of a CBB self-help intervention programme with the standard approach to promoting resilience, reducing depression and psychological distress in individuals with moderate depression and their caregivers. In light of the nature of the study, and in order to meet ethical obligations, a waiting list control group was used. First, the control group continued to receive the standard approach to the care and treatment of recipients and caregivers, plus a short weekly telephone call lasting approximately 5 minutes, while the intervention group received the CBB self-help intervention programme as well as the standard treatment and the short weekly telephone call. Second, once data collection for the intervention group was completed, the waiting list control group was then given the CBB self-help intervention programme. The larger study used a quasi-experimental design, incorporating a pretest–post-test design, with individuals who had depression and their primary caregivers. The design followed the Consolidated Standards for Reporting of Trials (CONSORT) guidelines for conducting RCTs. The guidelines

provide an evidence-based, minimum set of recommendations for reporting RCTs. They provide a standard way for researchers to prepare reports of trial findings, enable complete and transparent reporting, and facilitate critical appraisal and interpretation of studies. The CONSORT Statement comprises a 22-item checklist and a flow diagram, as well as some brief descriptive text (Appendix A.). The checklist items focus on reporting how the trial was designed, analysed, and interpreted, while the flow diagram displays the progress of all participants through the study.

As indicated earlier, this doctoral study is a subset of larger quasi-experimental study. Hereafter, the primary focus of this thesis report is the individuals diagnosed with moderate depression who were randomly allocated to either the intervention or the control group, as outlined in Figure 5.1. The intervention group worked through the CBB self-help intervention programme in addition to receiving the standard approach to care and treatment for people with moderate depression and the short weekly telephone call (lasting approximately 5 minutes). At the same time, the control group continued to receive the standard approach to care and treatment for moderate depression at the outpatient department, Suan Prung Psychiatric Hospital and the short weekly telephone call. The standard approach to care and treatment comprised pharmacological and basic psychological treatment. The short telephone call focused on answering questions and providing brief support. In addition, the intervention group participants were given basic coaching about using the manual.

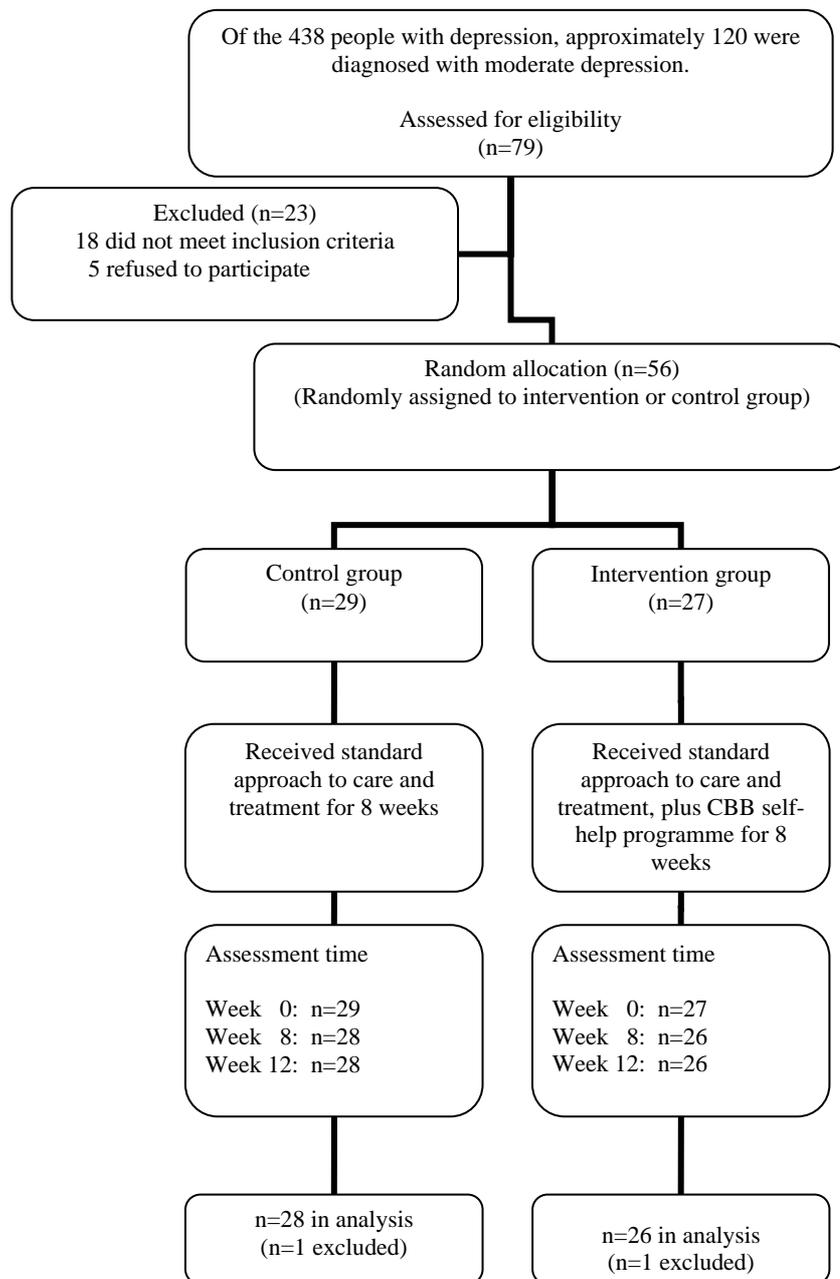


Figure 5.1: CONSORT diagram illustrating the flow of participants in the study

5.4 METHODS OF STUDY

5.4.1 Setting for the Study

The study was carried out at participants' homes in Chiang Mai province in northern Thailand. Participants, who were outpatients, were recruited through the outpatient department at Suan Prung Psychiatric Hospital in Chiang Mai city. Suan Prung Psychiatric Hospital is the only large public psychiatric hospital in the northern region of Thailand.¹⁰ The hospital provides tertiary care for people with mental illness throughout the region. Chiang Mai, the largest province in the northern region, accounts for the highest proportion (63.31%) of psychiatric outpatient appointments at the hospital (Suan Prung Psychiatric Hospital, 2007).

5.4.2 Selection and Recruitment of Participants

Probability sampling was used in the study. The recruitment process for prospective participants with depression was as follows:

1. Initially, mental health staff at the outpatient department gave prospective participants brief information about the study. In order to minimise risk, the staff screened prospective participants for signs of relapse and suicidal thoughts/intent. If the staff considered prospective participants were relapsing and/or expressing suicidal thoughts/intent, they were not permitted to take part in the study. Once staff were satisfied prospective participants were not at risk of relapse and/or expressing suicidal thoughts/intent, and had expressed interest in taking part in the study, they

¹⁰ In the northern region there are several other small psychiatric hospitals and mental health service centres operated by the Department of Mental Health, and psychiatric wards in general hospitals.

were referred to the researcher, who was present at the screening area in the outpatient department.

2. The researcher gave prospective participants an informal explanation about the study and answered their questions at the screening point area at the outpatient department.
3. After ascertaining if they met the inclusion criteria for the study, prospective participants who continued to express interest in taking part were given a more detailed explanation about the study by the researcher, in a private room at the outpatient department. The explanation included information about the purpose, procedure, confidentiality, and usefulness of the study, their rights as participants, and the conditions of consent in the study. Prospective participants were also given a copy of the plain language statement (Information letter) (See Appendix B. for English and Thai versions), prior to giving written consent to participate in the study (See Appendix C. for English and Thai versions). They were able to have their questions answered to their satisfaction, and could ask questions at any stage throughout their participation in the study.

The following inclusion and exclusion criteria were used in the study:

Inclusion criteria:

- being a Thai individual who is diagnosed with a moderate episode of depression (F32.1), according to the ICD-10 classification (World Health Organization, 1993);
- receiving treatment for moderate depression at the outpatient department, Suan Prung Psychiatric Hospital;

- live in Chiang Mai province;
- aged between 18–60 years;
- able to read and write Thai;
- have no previous history of developmental disability or psychosis; and
- have a working telephone at home.

Exclusion criteria:

Before entry to the study:

- undergoing relapse of depression; and/or
- currently experiencing suicidal thoughts/intent.

During the study:

- undergoing relapse of depression; and/or
- exhibiting suicidal thoughts/intent.

5.4.3 Number and Type of Participants

5.4.3.1 Sample size

Probability sampling was used in the study. A power analysis was carried out using SPSS Sample Power method for calculating power. To allow for some attrition, a sample size of 56 participants was recruited and 54 completed the study. The sample of 54 was consistent with a power analysis at the .05 level, a power of .80, and a confidence interval of 95% (Munro, 2005). Meta-analyses of CBB for depression (pretest–post-test control group design) indicated an effect size of .77 (Gregory et al., 2004). Thus, an effect size of .80 was considered the most appropriate estimate for the present study.

5.4.3.2 Randomisation

Fifty-four participants were randomly assigned to either the intervention or the control group by means of independent random allocation, using a table of random numbers (Appendix D). This process was carried out by a second researcher who was not directly involved in the recruitment process for the study. The activity of randomly assigning participants ensured each had an equal chance of being assigned to either the intervention or control group (Altman et al., 2001).

5.4.4 Procedures and Data Collection

It is essential to link CBB with positive outcomes to establish the value of the modality as an effective clinical intervention for people with moderate depression. CBB has been shown to enhance participants' responsibility in treatment and helps control some of their symptoms of depression (Floyd, 2003). An 8-week CBB self-help bibliotherapy manual was used in the present study, incorporating the *Good Mood Guide: A self-help manual for depression* (Phipps et al., 2004), which was developed by Lifeline South Coast (NSW).

Permission was obtained from Lifeline South Coast (NSW) to use the manual and to translate it into a Thai version (see Appendix E for letter of permission). The programme was designed as a self-help manual and workbook for recovery from depression. The manual was based on established principles of CBT and self-help techniques and practices,¹¹ and had eight modules. Each module contained principles and activities to be completed each week (Phipps et al., 2004). All participants were given a short weekly telephone call from the researcher. The

¹¹ See Chapter 3, Section 3.2: Self-help intervention.

purpose of the telephone call was to answer questions, provide brief support, and give basic coaching for using the manual.

To ensure consistency the student researcher used the following telephone protocol:

- Remind participants they would receive a short weekly telephone call.
- Ascertain if there are any issues the participants' wish to discuss.

In addition, for the intervention group:

- Answer questions related to use of the manual.
- Monitor use and encourage completion of the manual.

Overall, an indirect benefit of the weekly telephone call was it may have contributed to the high retention rate in the study.

Individuals with depression could use the programme to help them control negative emotions and encourage them to engage in daily living activities (Phipps et al., 2004). The usefulness of the manual, in people diagnosed with depression, has been assessed in a randomised controlled trial by Bilich et al. (2008) in the Illawarra region of NSW. The results of the study indicated that the self-help manual produced significantly more favourable outcomes in the intervention than in the control group that continued to receive routine care and treatment for their depression¹². A summary of each module in the manual follows (Phipps et al., 2004).

Module 1 Introduction

¹² See Chapter 3, Section 3.3.3.5: Evidence base for bibliotherapy in depression.

Provides an overview of depression and encourages readers to undertake physical exercise. Helps individuals to assess their depression and distress levels.

Module 2 Getting started

Highlights the importance of social contact and physical activity. Individuals plan a weekly activity schedule.

Module 3 Understand your depression

Helps individuals to understand the way they think and feel. Individuals identify and label their automatic thoughts and then link situations and emotions to life events.

Module 4 Learning how to change your thought pattern

Shows how to change thought patterns from negative to positive.

Module 5 Changing your behaviour

Shows how healthy living, problem solving, and social support can help overcome depression and change behaviour.

Module 6 Moving on

Provides individuals with skills for improving sleep, and encourages them to maintain positive thoughts, emotions and behaviours.

Module 7 Keeping your cool

Equips individuals to practise progressive muscle relaxation skills for coping with stress, and time management.

Module 8 Staying on track

Reinforces skills in thought challenging, changing behaviours, and learning to cope with stressful set backs. Individuals are advised to look back over the programme and see how much they have read and how many activities they have attempted.

The manual also contains two self-assessment measures: the adapted short version of the Depression, Anxiety, and Stress Scale (DASS-21) (Phipps et al., 2004), and the Kessler Psychological Distress Scale (K-10) (Kessler et al., 2002). Individuals monitor the progress of their depression and distress with these measures, and plan a weekly activity schedule at the end of each week (Phipps et al., 2004).

The K-10 was used as an outcome measure for psychological distress at the three data collection points in the study. Weekly assessment using the K-10 was used to provide feedback to participant about their individual psychological distress but not to contribute to data collection for the study. A similar approach was taken in the Australian study.

Face-to-face instruction was given to the intervention group participants on how to use the manual, including an overview of the manual, what they were required to do, completion of reading and written exercises, how to manage their time completing each module, and where to locate resources in the manual if an emergency arose. The student researcher monitored the participants' completion of each module in the manual, including written

exercises and self-assessment, through the short weekly telephone call (lasting approximately 5 minutes).

5.4.5 Psychometric Instruments and Evaluation

Four data collection instruments were used in the study: (i) Demographic data, (ii) Resilience Scale, (iii) Centre for Epidemiologic Studies Depression Scale, and (iv) Kessler Psychological Distress Scale.

1. *Demographic data* contained nine items, including gender, age, marital status, occupational status, education level, duration of treatment for depression, current treatment, frequency of attendance at the outpatient department, and frequency of home visits by clinical staff (See Appendix F. for English and Thai versions).
2. *Resilience Scale (RS)* was used to measure the degree of individual resilience (Wagnild & Young, 1993). The RS was chosen because it is a valid and reliable instrument for measuring resilience, has been commonly used in resilience research, but has not been used previously in a Thai context with people who have depression. It contains 25 items rated on a 7-point Likert scale (See Appendix G. for English and Thai versions). Scores range from 25–175, with higher scores reflecting higher resilience. High internal consistency has been reported with Cronbach's alpha coefficients of .80. Construct validity demonstrated direct and significant correlation with self-esteem, family supervision, life satisfaction, and social support.
3. *Centre for Epidemiologic Studies Depression Scale (CES-D)* was used to measure self-reported symptoms associated with depression experienced in

the past week (Trangkasombat, Larbboonsarp, & Havanond, 1997). The CES-D was selected to assess depression levels because it is a valid and reliable instrument, and has been used in depression research and in a Thai context. It contains 20 items rated on a 4-point Likert scale (See Appendix H. for English and Thai versions). Scores range from 0–60, with higher scores indicating more depressive symptoms. The scale has high internal consistency, with Cronbach’s alpha coefficients ranging from .85 to .90 (Radloff, 1977). The Thai version has a Cronbach alpha coefficient of .86.

4. *Kessler Psychological Distress Scale (K-10)* was used to measure non-specific psychological distress (Kessler et al., 2002). The K-10, which is a valid and reliable instrument, was chosen to measure psychological distress because it has been used frequently in research in individuals with moderate depression, and was used in the Australian study of the self-help manual. It contains 10 items rated on a 5-point Likert scale (See Appendix I. for English and Thai versions). The scale has moderate internal consistency, with Cronbach’s alpha coefficients ranging from .42 to .74 (Andrews & Slade, 2001).

5.4.5.1 Translation of instruments and manual

The Thai version of the Centre for Epidemiologic Studies Depression Scale (CES-D) (Trangkasombat et al., 1997) was used in the study. The other data collection instruments (Demographic, Resilience Scale, and Kessler Psychological Distress Scale) were translated into Thai, with permission from the authors of the RS and K-10 scales. The researcher worked through the translation process, informed by the

WHO *World Mental Health Initiative Interview Translation Guidelines* (World Health Organization, 2003) (Appendix J.), using the following procedures:

- Forward translation by a bilingual clinical psychologist whose mother tongue is Thai and who is very knowledgeable about American-English culture.
- Review by expert panel comprising a psychiatrist and another clinical psychologist to identify and resolve inadequate expression/concepts in the translation. The researcher made amendments, as necessary.
- Back translation to English by an independent translator, whose mother tongue is American-English and who has no knowledge of the questionnaires.
- The researcher checked and corrected questionnaires.
- Pre-test the questionnaires on individuals with moderate depression at Suan Prung Psychiatric Hospital, Chiang Mai, Thailand.
- Amendments made and questionnaires finalised by the researcher before using with the research participants.

Permission was obtained from Lifeline South Coast (NSW) to use the *Good Mood Guide: A self-help manual for depression* and to translate it into the Thai version.

The following process was used to translate the manual:

- Obtained written permission from the authors to use and translate the manual.
- Used a bilingual person, whose mother tongue was Thai, to independently translate the English version of the manual into the Thai version;

- Used a bilingual clinician (clinical psychologist and lecturer), whose mother tongue was American-English, to conduct a language accuracy check and edit the Thai version of the manual.
- The researcher piloted the translated manual with four Thai individuals with moderate depression at Suan Prung Psychiatric Hospital.

Finally, the researcher made amendments, as necessary, before using the manual with research participants.

5.4.5.2 Pilot study

Pilot studies are defined as small-scale versions of larger proposed studies, or trial runs of methods and measures in preparation for a major study (Beebe, 2007; Polit & Beck, 2006). Pilot studies help researchers identify design flaws, develop data collection, and plan the analysis. They facilitate assessment of recruitment sites and research settings, and provide information on participant burden (N. Burns & Grove, 2003).

In the present study, a pilot study was carried out with four individuals with depression who met the inclusion criteria for the study. The aim of the pilot study was to trial the protocol and the Thai version of the psychometric instruments, to identify design problems, and to determine if the proposed study was feasible. After the completion of the pilot study, the protocol was modified prior to use in the main study.

5.4.5.3 Data collection in the main study

All participants were evaluated at baseline (Week 0), at the end of the intervention (Week 8), and four weeks after the completion of the intervention (Week 12). Because the fieldwork was conducted in Thailand, and in light of the limited scope of a PhD study, all data collection was conducted by the student researcher. Care was taken, however, to ensure that the participants chose freely the response to each questionnaire item.

5.4.6 Rigour of the Study

RCTs are considered the most reliable form of scientific evidence because they eliminate spurious causality and bias. They are the most powerful design for testing hypotheses of cause-and-effect relationships and are the highest level of research evidence (Matthews, 2006). There are three key properties of RCTs: randomisation, control, and manipulation (Polit & Beck, 2006; Whitemore & Grey, 2006).

Randomisation is the most effective method of controlling participant characteristics. In the present study, random assignment was conducted to control all possible extraneous variables. Participants were randomly assigned to either the intervention or the control group by means of independent random allocation, using a table of random numbers. This process was undertaken by another researcher who was not directly involved in the recruitment process. The activity of randomly assigning participants ensured each had an equal chance of being assigned to either the intervention or control group (Altman et al., 2001)

Control procedures are used in RCTs to enhance internal validity, external validity and strengthen the quality of the study. In the current study, the extraneous variables were controlled by providing participants in both groups with the standard care and treatment approach from the outpatient department, Suan Prung Psychiatric hospital, plus short weekly telephone contact of approximately five minutes' duration.

Accuracy and consistency in measurement and procedures are at the heart of successful quantitative research (Macnee & McCabe, 2008). In the current study, manipulation of the independent variable was carried out using the self-help manual with the intervention group with depression, and the outcomes were then compared with the control group by measuring their resilience, depression, and psychological distress.

Validity and reliability are important canons of rigour in quantitative research. Validity means that the instruments are accurate and actually measure what they are intended to measure, while reliability infers that the results are replicable. In the present study, to enhance validity, the researcher worked through an approved process for translating the self-help manual and psychometric instruments, including review by an expert panel comprising a psychiatrist and a clinical psychologist to identify and resolve translation shortcomings. To promote reliability, the researcher piloted the translated manual and psychometric instruments with Thai individuals with moderate depression at Suan Prung Psychiatric Hospital, before conducting to the main study.

5.4.7 Ethical Considerations

Approval to carry out the study was given by Victoria University Human Research Ethics Committee (see Appendix K. for approval letter) and The Institutional Review Board Approval of the Department of Mental Health, Ministry of Public Health, Bangkok, Thailand (see Appendix L. for approval letter). There were five main ethical considerations in the study: informed consent; withdrawal; privacy, confidentiality and anonymity; data storage, access and disposal; and minimising the risk of harm.

5.4.7.1 Informed consent

An important procedure for safeguarding research participants and protecting their rights to self-determination involves obtaining their voluntary, informed consent (Polit & Beck, 2006). Initially, prospective participants with depression were given an informal explanation about the study by the researcher. Following initial expression of interest, eligible participants were given more information about the study, in a private room at the outpatient department, including details about the purpose, procedure, confidentiality, and usefulness of the study, the rights of participants, and the conditions of consent. Intending participants were given the opportunity to ask questions about matters they did not understand and have them answered to their satisfaction, prior to written consent being obtained. The types of questions intending participants asked included, for instance, “How long does it take to read each module?”, “Can I share this manual with my relative, who is also a person with depression?”, and “Do you want me to give the manual back to you after completing the programme?”

5.4.7.2 Withdrawal

If participants decided not to take part in, or to withdraw from the study, they were assured it would not affect their routine treatment for depression at Suan Prung Psychiatric Hospital. In the event, no participants withdrew from participation in the study¹³.

5.4.7.3 Confidentiality and anonymity

Participant confidentiality and anonymity was protected in the study through the use of numerical codes. Each participant was given a code number, which was stored separately from the data file. Only the researchers (Professor Terence McCann and Mrs Wallapa Songprakun) had access to the names and details of participants.

5.4.7.4 Data storage, access and disposal

Consent forms and a hard copy of data were stored, according to ethical guidelines, in a locked filing cabinet in Professor McCann's office in the School of Nursing and Midwifery, Victoria University. Electronic data files were stored on Professor McCann's computer, protected by a password known only to the investigator, who had responsibility for security of the data. All data files, including questionnaires and consent forms, will be stored for five years post publication and destroyed after this time. The password protected data files will be maintained as electronic files, as per ethical guidelines.

5.4.7.5 Minimising the risk of harm

¹³ See Figure 5.1: CONSORT diagram illustrating the flow of participants in the present study.

There was a minor psychological risk to participants who may have felt uncomfortable working through the self-help manual. While some participants with depression may have contemplated suicide, this was unlikely to have been due to participation in the study but from deterioration in their state of depression. In addition, intending participants were screened clinically for relapse and for suicidal thoughts/intent by the clinical staff at the outpatient department, Suan Prung Psychiatric Hospital, before taking part in the study. As a consequence of the screening process five prospective participants were identified as experiencing suicidal ideation and were excluded from the study.¹⁴ The participants could monitor any suicidal thoughts themselves from the assessment that was presented in the manual. Sources of help were prominently outlined in the self-help manual, including the local mental health services, counselling services, and emergency call services. If the participants informed the researcher that they were experiencing any suicidal thoughts, this was immediately reported to mental health staff at Suan Prung Psychiatric Hospital, and the participants were excluded from the study. In the event, two participants were excluded from the study during the intervention period. One person was unable to concentrate on the manual due to severe family problems. Another person attempted suicide by drug overdose. She was given more intensive treatment and support from the clinical staff at the outpatient department and did not attempt suicide again.

In the event of a participant experiencing some discomfort during the study the researcher would (a) offer basic emotional support, such as listening and empathising; (b) indicate the telephone contact number of the researcher and

¹⁴ See Figure 5.1: CONSORT diagram illustrating the flow of participants in the present study.

sources of help prominently outlined in the self-help manual, including the local mental health services, counselling services and emergency call services at the beginning of the manual; and (c) offer an opportunity to decide whether to continue with the programme. In the present study eight participants experienced discomfort; however, all decided to remain in the study.

5.4.8 Data analysis

Overall, the study hypothesised that individuals with depression who take part in the CBB self-help intervention programme will have greater resilience and a lower level of depression after completing the programme than at baseline and that treatment effects will be maintained at one month follow-up. Furthermore, individuals with depression who take part in the CBB self-help intervention programme will have greater resilience and a lower level of depression than the control group who continue to receive the standard approach care and treatment to living with depression.

Data were analysed using the Statistical Package for Social Sciences (SPSS), Version 16 (SPSS Inc., Chicago, IL, 2008). Data screening was conducted prior to statistical analysis. All variables were examined through various SPSS analyses for accuracy of data entry, normality, missing values, distributions, and the assumptions for appropriate analysis. Descriptive statistics were carried out to detect errors in data entry and out-of-range values. The data were also assessed for skewness¹⁵, kurtosis¹⁶, stem-and-leaf plot, histogram, and outliers

¹⁵ Skewness is a frequency distribution that is asymmetric compared with the normal bell-shaped curve (Howitt & Cramer, 2008).

of dependent variables. Further tests were conducted to check the assumptions of the repeated measures for Analysis of Variance (ANOVA).¹⁷ The results showed that the Mauchly Test of Sphericity assumption¹⁸ was met for the repeated measures ANOVA. Tests of homogeneity of variance assumptions also confirmed this assumption was met. Once these assumptions were met, the two-way repeated measures ANOVA was selected as the most appropriate technique to analyse the primary results.

Cronbach's alpha¹⁹ was used to assess the reliability of each scale at baseline. The Cronbach's alpha coefficient scores indicated each scale had satisfactory reliability: Resilience Scale=.94; Kessler Psychological Distress Scale=.80; and the Centre for Epidemiologic Studies Depression Scale=.91.

The demographic characteristics of the participants with moderate depression were summarised using frequencies and percentages. The independent samples t-test was conducted to make comparisons between the intervention and control groups for the continuous variable of age. The chi-square test (for variables that had cell frequencies of 5 and over) was used to analyse for differences in the number of appointments participants had at the outpatient department. The Fisher's exact test²⁰ (for variables with cell frequencies of less than 5) was used to assess differences of marital status, occupational status, highest education

¹⁶ Kurtosis is the degree of peakedness as an indication of the tendency of values to gather around the mid-point of a frequency distribution (Faherty, 2008).

¹⁷ ANOVA is a parametric procedure used to test whether there is a difference among three or more group means (Fain, 2009a).

¹⁸ Mauchly Test of Sphericity is a test for determining whether the assumption in a repeated measures analysis of variance is spherical or circular (Howitt & Cramer, 2008).

¹⁹ Cronbach's alpha is an index of the extent to which an instrument is internally reliable (Fain, 2009b).

²⁰ Fisher's exact test can be used instead of chi-square where low frequencies are expected (Howitt & Cramer, 2008).

level completed, occupational types, medication treatment, and psychological treatment.

The two-way repeated measures ANOVA²¹ was used to analyse the effect of the intervention on the dependent variables: resilience, psychological distress, and depression. The main effects of time, groups, and interaction effects between the treatment groups on changes over the three time points²² were utilised. Effect sizes were also calculated using the partial eta squared, based on Cohen's criteria (Cohen, 1988): .10 equating to a small effect, .50 a medium effect, and .88 representing a large effect. Pairwise comparisons were undertaken to compare the different combinations between the three time points of the intervention and the control group. Bonferroni adjustments²³ were applied for multiple pairwise comparisons in repeated measures to control for Type I errors²⁴

The Chi-square was also used to analyse the differences in clinical depression and psychological distress cut-off scores at baseline, post-test, and follow-up time points.²⁵ Moreover, The Pearson Product-Moment Correlations was used to explore relationship for the intervention and the control groups, for difference scores between baseline and post-test, and baseline and follow-up,

²¹ Two-way repeated measures ANOVA is a parametric procedure used to compare the means of a dependent variable when there are two independent variables, one of which has repeated measures (Howitt & Cramer, 2008).

²² All participants were evaluated at three time points: baseline (Week 0), immediate post-test (Week 8), and follow-up (Week 12).

²³ The Bonferroni correction is a multiple-comparison correction used when several comparisons are made among a number of group means (McQueen & Knussen, 2006).

²⁴ Type I error is a statistical error that occurs when accepting a null hypothesis that is actually false (Howitt & Cramer, 2008).

²⁵ See details of cut-off score in Chapter 6, Section 6.4: Clinical significance of depression and psychological distress.

for resilience, depression, and psychological distress. The value of the correlation coefficient indicates the strength of the association, which can range from -1.00 to 1.00.²⁶

5.5 SUMMARY

A randomised controlled trial, pretest–post-test design was used in the study. This approach was chosen because it offered the most powerful design for testing the hypotheses of the study with individuals who had moderate depression. A self-help intervention programme was used as the intervention. The translation of the psychometric instruments and the self-help manual was based on the WHO guidelines to ensure accuracy in the translation process. Ethical matters were strictly adhered to throughout the study.

²⁶ See the size of correlation value in Chapter 6, Section 6.5: relationship between variables.

CHAPTER SIX

RESULTS

6.1 INTRODUCTION

The aim of the study was to evaluate the effectiveness of a cognitive behavioural bibliotherapy (CBB) self-help intervention programme in promoting resilience and decreasing depression and psychological distress in individuals with moderate depression (hereafter, depression). In this chapter, the demographic characteristics of the participants with depression are summarised. Then the analyses pertaining to group mean differences in resilience are presented. This is followed by the analyses of group mean differences in depression and psychological distress. Finally, the analyses of the relationships between resilience, depression and psychological distress are outlined.

6.2 DEMOGRAPHIC CHARACTERISTICS

A total of 79 prospective individuals with depression were invited to take part in the study. Eighteen prospective participants did not meet the inclusion criteria. Five refused to take part because they were reluctant to use the self-help manual as the intervention programme. In all, 56 participants took part in the study, and this is consistent with the power analysis for the project.²⁷ The participants were randomly allocated to the intervention group (recipients of the CBB self-help intervention programme, plus standard care and treatment) or the control group (recipients of standard care and treatment), plus a short weekly telephone call lasting

²⁷ See Chapter 5, Section 5.4.3.1: Sample size.

approximately 5 minutes.²⁸ Two participants were excluded from the study during the intervention period (one from the intervention group and one from the control group).²⁹ Thus, at the end of the trial the intervention group comprised 26 participants, while the control group had 28 participants.³⁰

The majority of participants (combined intervention and control groups) were female (73%, n=41), and most were married or in de facto relationships (64.3%, n=36). Their average age was 42.13 years, ranging from 18 to 58 years. The duration of their illness was between 3 and 13 months for the intervention group and 5 and 18 months for the control group. The level of educational attainment of participants was similar in the two groups, and most were employed in skilled occupations. Most (83.9%, n=47) were prescribed a combination of antidepressant (the majority were prescribed SSRIs) and anti-anxiety medications, while a small proportion (17.9%, n=10) received a combination of specialised psychological therapy and medications. Several intervention and control group participants had their antidepressant medication dosage increased or decreased during the period of study. Around 80% (n=44) of participants attended the psychiatric outpatients' department at Suan Prung Psychiatric Hospital on a monthly or more frequent basis, while the remainder attended less frequently (Table 6.1).

²⁸ See Chapter 5, Figure 5.1: CONSORT diagram illustrating the flow of participants in the study.

²⁹ See Chapter 5, Section 5.4.7.5 Ethical considerations: minimising the risk of harm, for more information about the reasons for exclusion from the study.

³⁰ See Chapter 5, Figure 5.1: CONSORT diagram illustrating the flow of participants in the study.

In terms of group equivalence, the demographic characteristics of both groups were compared using non-parametric chi-square analyses for categorical variables (e.g., gender, marital status) and independent samples t-tests for continuous variables (e.g., age). The intervention group participants were significantly younger than the control group ($p=.04$), with mean ages of 39.41 years (range 18–57 years) and 44.60 years (range 22–58 years) respectively. No other significant differences were detected between the two groups on the remaining demographic characteristics, such as gender, marital status, highest level of educational attainment, occupational status, occupational type, medication therapy, psychological therapy, and frequency of appointments at the outpatients' department (Table 6.1).

Table 6.1 Demographic characteristics of participants

Demographic characteristics	Total (n=56) n (%)	Intervention (n=27)		Control (n=29)		Test statistic	Value	df	p value
		n	%	n	%				
Gender						χ^2	1.82	1	.18
Male	15 (26.8)	5	18.5	10	34.5				
Female	41 (73.2)	22	81.5	19	65.5				
Marital status						χ^2	.78	2	.79
Single & other	20 (35.7)	11	40.7	9	30.9				
Married/de facto	36 (64.3)	16	59.3	20	69.0				
Highest level of educational attainment						χ^2	3.53	2	.17
Primary school (years 1–6)	20 (35.8)	6	22.2	14	48.3				
Secondary & high school (years 7–12)	16 (29.4)	8	29.6	8	27.6				
Technical & higher education	20 (35.8)	13	48.1	7	24.1				
Occupational status						χ^2	2.29	2	.33
Studying	4 (7.1)	3	11.1	1	3.4				
Paid employment	46 (82.2)	20	74.1	26	89.7				
Retired or Unemployed	6 (10.7)	4	14.8	2	6.8				
Occupational type						χ^2	1.08	1	.56
Skilled	24 (42.9)	17	62.9	13	44.8				
Unskilled	22 (39.2)	3	11.1	13	44.8				
Others	10 (17.9)	7	25.9	3	10.3				
Medication treatment						χ^2	.23	1	.73
Antidepressant	9 (16.1)	5	18.5	4	13.8				
Antidepressant and anti-anxiety	47 (83.9)	22	81.5	25	86.2				
Combined psychological and medication therapy						χ^2	.33	1	.73
YES	10 (17.9)	4	14.8	6	20.7				
NO	46 (82.1)	23	85.2	23	79.3				
Frequency of outpatient appointments						χ^2	.02	1	.89
Monthly or more frequent	44 (78.6)	21	77.8	23	79.3				
Less frequent than monthly	12 (21.4)	6	22.2	6	20.6				
Age (years)		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	t-test	2.08	54	.04*
<i>M</i>	42.13	39.41	10.12	44.66	8.76				
<i>SD</i>	9.72								
<i>Min</i>	18.00								
<i>Max</i>	58.00								

* $p < .05$

6.3 INTERVENTION OUTCOMES

6.3.1 Resilience

The mean scores on the Resilience Scale for the two groups over the three time points are outlined in Figure 6.1 and Table 6.2. The graph shows similar low mean resilience scores in both groups at baseline, with the mean and standard deviation for the intervention group being 114.7, (SD=27.8) and for the control group 118.9, (SD=31.8). Between baseline and post-test time points, the mean resilience scores increased in both groups. Although each demonstrated improvements in resilience scores during this time period, the intervention group (mean=141.3, SD=19.1) exhibited a more pronounced improvement than the control group (mean=134.9, SD=19.4). Between post-test and follow-up time points, the mean resilience score continued to increase in the intervention group (mean=149.0, SD=15.9), whereas a reduction was apparent in the control group (mean=129.4, SD=21.8). Furthermore, the mean resilience score of the intervention group was higher than the control group at post-test and follow-up time points. The overall improvement in resilience level was also greater in the intervention group than the control group.

There was no significant main effect for group on resilience levels, regardless of time ($F(1,52)=2.42, p=.126$), and the magnitude of the differences in the means was small (partial eta squared (η^2)=.05) (Table 6.3). There was a significant main effect for time on resilience ($F(21.83, 10495.04)=23.18, p<.001$), and the size of the differences in the means was large (partial eta

squared (η^2)=.31) (Table 6.4). Bonferroni³¹ post-hoc analyses indicated a significant difference in resilience scores from baseline to post-test time points (mean difference=-21.15, $p<.001$), and from baseline to follow-up time points (mean difference=-21.98, $p<.001$). There were no significant differences, however, in resilience scores from post-test to follow-up time points (mean difference=-.83, $p=1.00$).

There was a significant interaction between group and time on resilience scores ($F(2, 104)=5.14, p=.007$), and the magnitude of the differences in the means was medium (partial eta squared (η^2)=.09) (Table 6.4). Simple main effects analyses of group within time showed there was a significant difference between the intervention and the control group at the follow-up time point (mean difference=19.61, $p=.001$). No significant differences were observed at baseline (mean difference=4.16, $p=.61$) and post-test time points (mean difference=6.46, $p=.22$). Simple main effect of time within the intervention group showed a significant increase in resilience scores from baseline to post-test time points (mean difference=-26.65, $p<.001$), from baseline to follow-up time points (mean difference=-34.31, $p<.001$), but no significant increase from post-test to follow-up time points (mean difference=-7.65, $p=.298$). While Bonferroni post-hoc comparison in the control group indicated a significant increase in resilience scores from baseline to post-test time points (mean difference=-16.04, $p=.023$), there was no significant increase from baseline to

³¹ See Chapter 5, Data Analysis section, for more information about the Bonferroni multiple comparisons for repeated measures.

follow-up time points (mean difference=-10.54, $p=.143$) and from post-test to follow-up time points (mean difference=5.50, $p=.650$).

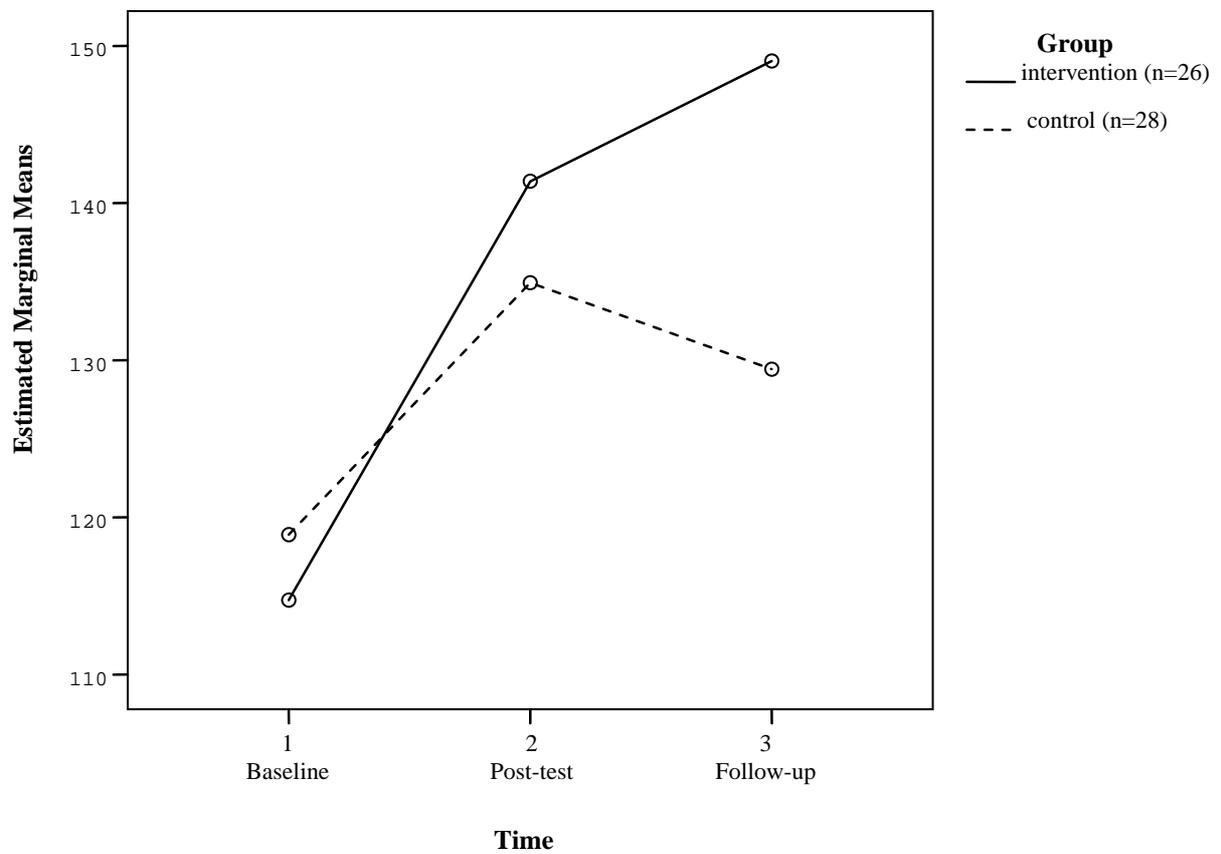


Figure 6.1 Resilience outcomes of intervention and control groups at baseline, post-test, and follow-up time points.

Note: Resilience scores range from 25–175, with higher scores indicating higher levels of resilience.

Table 6.2
Means and standard deviations for resilience of control and intervention groups at each time point

Variable at each time point	Control group (n=28)	Intervention group (n=26)
	<i>M</i> ± <i>SD</i>	<i>M</i> ± <i>SD</i>
Baseline	118.9 ± 31.8	114.7 ± 27.8
Post-test	134.9 ± 19.4	141.3 ± 19.1
Follow-up	129.4 ± 21.8	149.0 ± 15.9

Table 6.3
Main effects of the intervention group and the control group for resilience, depression, and psychological distress

Variables of interest	F(df=1,52)	<i>p</i> value	Effect size (η^2)
Resilience	2.42	.126	.05 (small)
Depression	2.80	.101	.05 (small)
Psychological distress	2.02	.162	.04 (small)

Overall, the size of the differences between the means of both groups was small for resilience (5%), depression (5%), and psychological distress (4%).

Table 6.4
Main effects of time and interaction of time and group for resilience, depression, and psychological distress

Variables of interest	F (df=2,104)	<i>p</i> value	Effect size (η^2)
Resilience			
Main effect of time	23.18	.001***	.31 (large)
Interaction of time and group	5.14	.007**	.09 (medium)
Depression			
Main effect of time	1.29	.281	.02 (small)
Interaction of time and group	6.88	.002**	.12 (medium)
Psychological distress			
Main effect of time	25.09	.001***	.33 (large)
Interaction of time and group	3.86	.024*	.07 (small)

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Overall, the magnitude of the differences between the means of both groups across time was large for resilience (31%) and psychological distress (33%) but small for depression (2%). The size of the interaction between group and time was medium for resilience (9%) and depression (12%) but small for psychological distress (7%).

6.3.2 Depression

The mean depression scores (CES-D) for the two groups over the three time points are displayed in Figure 6.2 and Table 6.5. The graph shows similar high mean depression scores in both groups at baseline (intervention group mean=19.6, SD=9.3; control group mean=17.4, SD=9.7). Between baseline and post-test time points a sharp decrease was evident in the mean depression score in the intervention group (mean=14.3, SD=8.6), whereas the depression score increased in the control group (mean=20.2, SD=10.7). Between post-test and follow-up time points, a decrease was apparent in the mean depression scores in both groups. However, the intervention group showed a much lower mean depression score (mean=13.5, SD=5.9) than the control group (mean=19.4, SD=8.0). Furthermore, the mean depression score of the intervention group indicated a lower depression level than the control group at post-test and follow-up time points. Overall, there seemed to be greater improvement in the depression level of the intervention group than in the control group.

There was no significant main effect for group on depression scores, regardless of time ($F(1,52)=2.80, p=.101$), and the magnitude of the differences in the means was small (partial eta squared (η^2)=.05) (Table 6.3). There was also no

significant difference in the main effect of time on depression levels ($F(2,104)=1.29$, $p=.281$), and the size of the differences in the means was small (partial eta squared (η^2)=.02) (Table 6.4).

There was a significant interaction between group and time on depression scores ($F(2,104)=6.88$, $p=.002$), and the magnitude of the differences in the means was medium (partial eta squared (η^2)=.12) (Table 6.4). While simple main effects analyses of group within time showed there was no significant difference between groups at baseline time point (mean difference=2.184, $p=.403$). There was a significant difference between the intervention and control groups at the post-test time point (mean difference=-5.95, $p=.029$) and at the follow-up time point (mean difference=-5.90, $p=.004$). Simple main effect of time in the intervention group showed a significant decrease in depression scores from baseline to post-test time points (mean difference=5.31, $p=.018$) and from baseline to follow-up time points (mean difference=6.04, $p=.005$), but no significant decrease from post-test to follow-up time points (mean difference=.73, $p=1.00$). Conversely, Bonferroni post-hoc comparison in the control group showed no significant difference in mean depression scores across the three time points.

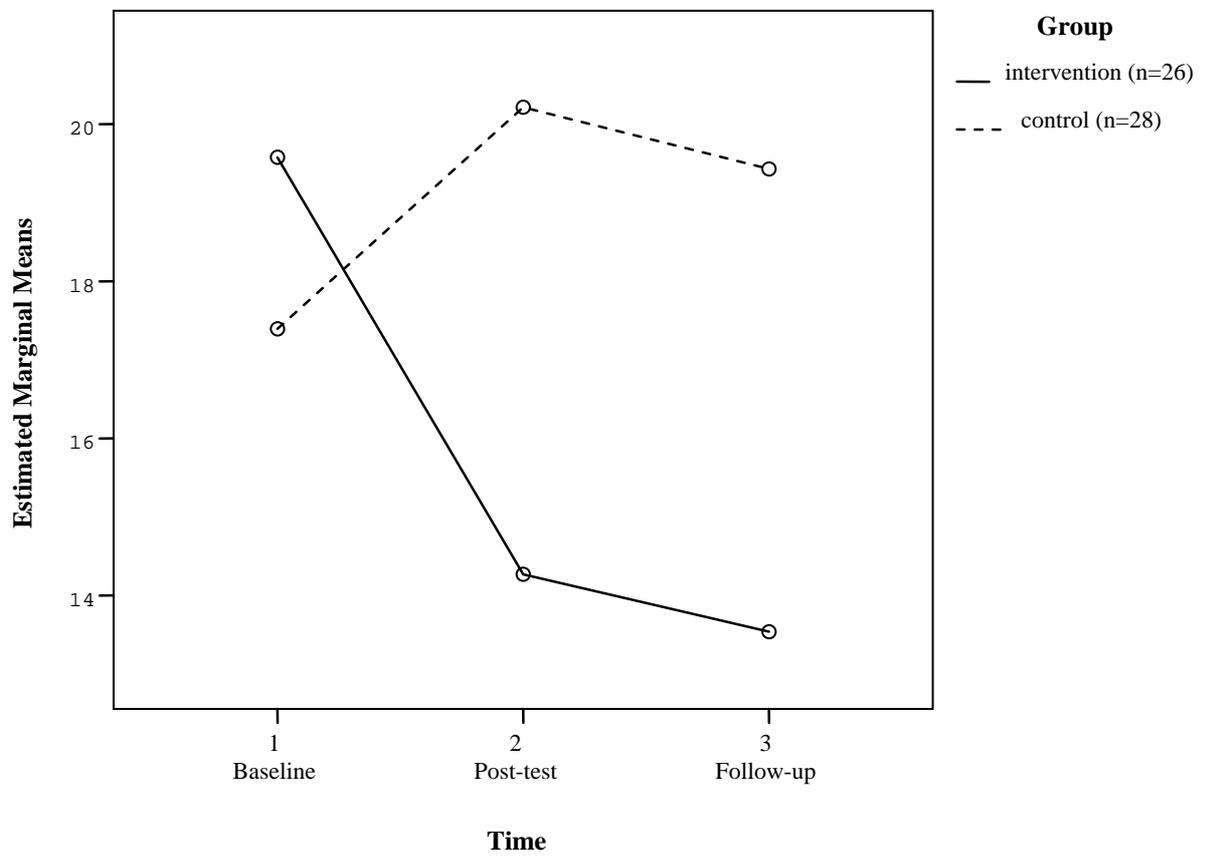


Figure 6.2 Depression outcomes of the intervention and control groups at baseline, post-test, and follow-up time points.

Note: Depression scores range from 0–60, with higher scores indicating more depressive symptoms.

Table 6.5
Means and standard deviations for depression of control and intervention groups at each time point

Variable at each time point	Control group (n=28)	Intervention group (n=26)
	<i>M</i> ± <i>SD</i>	<i>M</i> ± <i>SD</i>
Baseline	17.4 ± 9.7	19.6 ± 9.3
Post-test	20.2 ± 10.7	14.3 ± 8.6
Follow-up	19.4 ± 8.0	13.5 ± 5.9

6.3.3 Psychological distress

The mean scores on the Kessler Psychological Distress Scale for the two groups over the three time points are shown in Figure 6.3 and Table 6.6. The graph shows similar high mean psychological distress scores in both groups at baseline (intervention group mean=28.2, SD=8.9; control group mean=26.9, SD=8.7). Between baseline and post-test time points, a decrease in psychological distress scores occurred in each group. Although both groups showed significant improvement over time, the intervention group exhibited greater improvement in psychological distress over time than the control group. Moreover, the mean psychological distress scores of the intervention group were lower than the control group at post-test (intervention group mean=19.8, SD=6.3; control group mean=22.7, SD=8.3) time points. Between post-test and follow-up time points, the mean psychological distress score continued to decrease in the intervention group (mean=17.0, SD=5.3) but only showed a slight decrease in the control group (mean=22.2, SD=8.4).

There was no significant main effect for group in terms of psychological distress, regardless of time ($F(1,52)=2.02, p=.162$), and the magnitude of the differences in the means was small (partial eta squared (η^2)=.04) (Table 6.3). However, there was a significant main effect for time on psychological distress ($F(2,104)=25.09, p<.001$), and the size of the differences in the means was large (partial eta squared (η^2)=.33) (Table 6.4). Bonferroni post-hoc analyses indicated a significant difference in psychological distress scores from baseline to post-test time points (mean difference=6.32, $p<.001$), and from baseline to follow-up time points (mean difference=7.98, $p<.001$). However, there were no significant differences in psychological distress scores from post-test to follow-up time points (mean difference=1.67, $p=.384$).

There was a significant interaction between group and time on psychological distress scores ($F(2,104)=3.86, p=.024$), and the magnitude of the differences in the means was small (partial eta squared (η^2)=.07) (Table 6.4). This interaction indicated that the effect on the intervention and control groups was dependent on time points (baseline, post-test, and follow-up). Simple main effects analyses of group within time showed there was a significant difference between the intervention and the control group at follow-up time point (mean difference=-5.11, $p=.001$). No significant differences were observed, however, at baseline (mean difference=-1.30, $p=.591$) and post-test time points (mean difference=-2.98, $p=.146$). Simple main effect of time in the intervention group indicated a significant decrease in psychological distress level from baseline to post-test time point (mean difference=8.46, $p<.001$) and from baseline to follow-up time points (mean difference=11.19, $p<.001$), but no

significant decrease from post-test to follow-up time points (mean difference=2.73, $p=.254$). Although Bonferroni post-hoc comparison in the control group showed a significant decrease in psychological distress scores from baseline to follow-up time points (mean difference=4.79, $p=.024$), there was no significant decrease from baseline to post-test time points (mean difference=-3.96, $p=.07$), and from post-test to follow-up time points (mean difference=.607, $p=1.00$).

Table 6.6
Means and standard deviations for psychological distress of control and intervention groups at each time point

Variable at each time point	Control group (n=28)	Intervention group (n=26)
	<i>M</i> ± <i>SD</i>	<i>M</i> ± <i>SD</i>
Baseline	26.9 ± 8.7	28.2 ± 8.9
Post-test	22.7 ± 8.3	19.8 ± 6.3
Follow-up	22.2 ± 8.4	17.0 ± 5.3

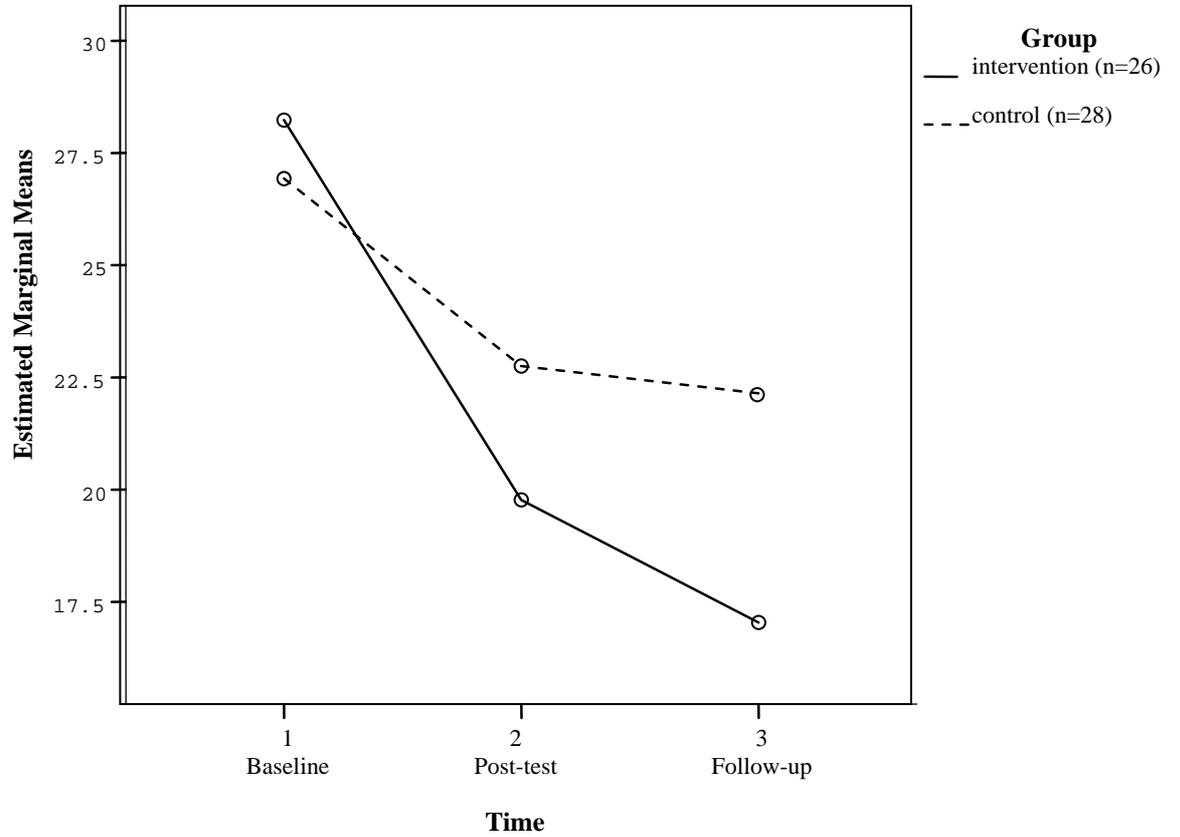


Figure 6.3 Psychological distress outcomes of control group and intervention group at baseline, post-test and follow-up time points.

Note: Psychological distress scores range from 10–50, with higher scores indicating higher levels of psychological distress.

6.4 CLINICAL SIGNIFICANCE OF DEPRESSION AND PSYCHOLOGICAL DISTRESS SCORES

6.4.1 Clinical significance of depression scores

There was no significant difference in the depression scores (CES-D) of the intervention and control groups at baseline ($\chi^2 = .72$, $df=1$, $p=.396$) (Table 6.7). However, there was a significant difference between the depression scores of the two groups at the post-test time point ($\chi^2 = 9.25$, $df=1$, $p<.01$) (Table 6.7). At this time point, 62.2% ($n=23$) of participants who scored below the clinically significant cut-off score for depression,³² were in the intervention group, whereas 82.4% ($n=14$) of participants who scored above the clinical significant cut-off score, were in the control group.

There also was a significant difference in the depression scores of the two groups at the follow-up time point ($\chi^2 = 5.41$, $df=1$, $p<.05$) (Table 6.7). At this time point, 57.5% ($n=23$) of participants who scored below the clinically significant cut-off score for depression, were the intervention group. In contrast, most participants (78.6% ($n=11$)), who scored above the clinically significant cut-off score for depression, were in the control group.

³² The clinically significant cut-off score for the Thai version of CES-D is 22. A score of 23 or above indicates the presence of clinically important signs of depression (Trangkasombat et al., 1997).

Table 6.7 Clinical significance of depression at baseline, post-test, and follow-up time points

Time points	Chi-square (χ^2)	df	Significance (p value)	Clinical score below cut-off point		Clinical score above cut-off point	
				Intervention group n (%)	Control group n (%)	Intervention group n (%)	Control group n (%)
Baseline (n=56)	.72	1	.396	10 (41.7%)	14 (58.3%)	17 (53.1%)	15 (46.9%)
Post-test (n=54)	9.25	1	.002**	23 (62.2%)	14 (37.8%)	3 (17.6%)	14 (82.4%)
Follow-up (n=54)	5.41	1	.020*	23 (57.5%)	17 (42.5%)	3 (21.4%)	11 (78.6%)

Legend

* $p < .05$, ** $p < .01$

6.4.2 Clinical significance of psychological distress scores

There was no significant difference between the psychological distress scores (K-10) of the intervention and control groups at baseline ($\chi^2 = .26$, $df=1$, $p=.609$) (Table 6.8). However, there was a significant difference in the psychological distress scores of the two groups at the post-test time point ($\chi^2 = 4.75$, $df=1$, $p<.05$) (Table 6.8). At the post-test time-point, 63% (n=17) of participants who scored below the clinically significant cut-off score³³ for psychological distress were the intervention group. In contrast, 66.7% (n=18) of participants scored higher than the cut-off score, were the control group.

There also was a significant difference in the psychological distress scores of the intervention and the control group, at the follow-up time point ($\chi^2 = 6.82$, $df=1$, $p<.01$) (Table 6.3). At the follow-up time point, 61.8% (n=21) of

³³ The clinically significant cut-off score for the K-10 in Australian studies is 19. A score exceeding 19 indicates the presence of clinically significant signs of psychological distress (Andrews, 2007).

participants who scored below the clinically significant cut-off point for psychological distress were in the intervention group. However, 75% (n=15) of participants with scores exceeding the cut-off point, were in the control group.

Table 6.8 Clinical significance of psychological distress at baseline, post-test, and follow-up time points

Time points	Chi-square (χ^2)	df	Significance (p value)	Clinical score below cut-off point		Clinical score above cut-off point	
				Intervention group n (%)	Control group n (%)	Intervention group n (%)	Control group n (%)
Baseline (n=56)	.26	1	.609	5 (41.7%)	7 (58.3%)	22 (50.0%)	22 (50.0%)
Post-test (n=54)	4.78	1	.029*	17 (63.0%)	10 (37.0%)	9 (33.3%)	18 (66.7%)
Follow-up (n=54)	6.82	1	.009**	21 (61.8%)	13 (38.2%)	5 (25.0%)	15 (75.0%)

Legend

* $p < .05$, ** $p < .01$

6.5 RELATIONSHIP BETWEEN VARIABLES

6.5.1 Relationship between Baseline and Post-test scores

Table 6.9 shows the Pearson product-moment correlation coefficients for the intervention and the control group, for difference scores between baseline and post-test, for resilience, depression and psychological distress. The correlation coefficients for the intervention group showed a large, negative relationship between resilience and depression ($r = -.57$, $df = 24$, $p < .01$), with higher scores in perceived resilience associated with lower scores in perceived depression. There was a medium, negative relationship between resilience and psychological distress ($r = -.47$, $df = 24$, $p < .05$), with higher perceived resilience levels associated with lower perceived psychological distress levels. There was

also a large, positive relationship between depression and psychological distress ($r=.70$, $df=24$, $p<.01$), with low levels of perceived depression related to low levels of perceived psychological distress.

The Pearson product-moment correlation coefficients for the control group, for difference scores between baseline and post-test, for resilience, depression and psychological distress, were analysed. The analysis showed no significant relationship between resilience and depression ($r=-.13$, $df=26$, $p=.53$), or between resilience and psychological distress ($r=.14$, $df=26$, $p=.49$). However, a large, positive relationship was observed between depression and psychological distress ($r=.61$, $df=26$, $p<.01$), with low levels of perceived depression associated with low levels of perceived psychological distress.

Overall, the findings indicated an association between higher levels of perceived resilience and lower levels of perceived depression and psychological distress in the intervention group participants, between baseline and post-test. However, this relationship was not detected in the control group participants.

Table 6.9 Pearson Product-Moment Correlations between resilience, depression and psychological distress in the intervention and control groups, for difference scores between baseline and post-test

Variables	Pearson correlation coefficients (r) (p value of significance)		
	1	2	3
Intervention group (n=26)			
1. Resilience		-.57** (.00)	-.47* (.02)
2. Depression			.70** (.00)
3. Psychological distress			
Control group (n=28)			
1. Resilience		-.13 (.53)	.14 (.49)
2. Depression			.61** (.00)
3. Psychological distress			

Legend

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

Note: The size of the value of the Pearson correlation (r) ranges between -1.0 and 1.0. A correlation of 0 = no relationship between the two variables, a correlation of 1.0 = perfect positive correlation, and a value of -1.0 = perfect negative correlation (Pallant, 2007). The strength of the correlation coefficient is interpreted as follows: Small ($r = .10$ to $.29$ or $r = -.10$ to $-.29$); Medium ($r = .30$ to $.49$ or $r = -.30$ to $-.49$); Large ($r = .50$ to 1.0 or $r = -.50$ to -1.0) (Cohen, 1988; Pallant, 2007).

6.5.2 Relationship between Baseline and Follow-up scores

Table 6.10 shows the Pearson product-moment correlation coefficients for the intervention and the control group, for difference scores between baseline and follow-up, for resilience, depression and psychological distress. The correlation coefficients for the intervention group showed a large, negative correlation between resilience and depression ($r = -.65$, $df = 24$, $p < .01$), with high levels of perceived resilience associated with lower levels of perceived depression.

There was a large, negative relationship between resilience and psychological distress ($r=-.55$, $df=24$, $p<.01$), with high levels of perceived resilience related to lower levels of perceived psychological distress. There also was a large, positive relationship between depression and psychological distress ($r=.81$, $df=24$, $p<.01$), with low levels of perceived depression associated with low levels of perceived psychological distress.

The Pearson product-moment correlation coefficients for the control group, for difference scores between baseline and follow-up, for resilience, depression, and psychological distress, were analysed. The analysis showed no significant relationship between resilience and depression ($r=-.24$, $df=26$, $p=.22$), or between resilience and psychological distress ($r=.02$, $df=26$, $p=.91$). A large, positive relationship was detected, however, between depression and psychological distress ($r=.52$, $df=26$, $p<.01$), with low levels of perceived depression related to low levels of perceived psychological distress.

Overall, the findings show a relationship between higher levels of perceived resilience and lower levels of perceived depression and psychological distress in the intervention group participants, between baseline and follow-up. However, this association was not observed in the control group participants.

Table 6.10 Pearson Product- Moment Correlations between resilience, depression and psychological distress in the intervention and control groups, for difference scores between baseline and follow-up

Variables	Pearson correlation coefficients (r) (p value of significance)		
	1	2	3
Intervention group (n=26)			
1. Resilience		-.65** (.00)	-.55** (.00)
2. Depression			.81** (.00)
3. Psychological distress			
Control group (n=28)			
1. Resilience		-.24 (.22)	.02 (.91)
2. Depression			.52** (.00)
3. Psychological distress			

Legend

** $p < .01$ (2-tailed)

Note: The size of the value of the Pearson correlation (r) ranges between -1.0 and 1.0. A correlation of 0 = no relationship between the two variables, a correlation of 1.0 = perfect positive correlation, and a value of -1.0 = perfect negative correlation (Pallant, 2007). The strength of the correlation coefficient is interpreted as follows: Small ($r = .10$ to $.29$ or $r = -.10$ to $-.29$); Medium ($r = .30$ to $.49$ or $r = -.30$ to $-.49$); Large ($r = .50$ to 1.0 or $r = -.50$ to -1.0) (Cohen, 1988; Pallant, 2007).

6.6 SUMMARY

Overall, apart from age, the demographic characteristics of both groups were similar. The results of the study showed a higher level of resilience and lower levels of depression and psychological distress in the intervention group than in the control group, at the three-month follow-up period. The rate of improvement

in these parameters was different for the two groups, with the intervention group showing improvement from baseline to the other two time points, whereas improvement was not as great in the control group. The results also showed an improvement in resilience was associated with lower depression and psychological distress in the intervention group over the three time points, a finding not replicated in the control group. The CBB self-help intervention programme was effective in improving resilience, depression, and psychological distress in individuals with moderate depression.

CHAPTER SEVEN

DISCUSSION AND CONCLUSION

7.1 INTRODUCTION

The aim of the study was to evaluate the effectiveness of the cognitive behavioural bibliotherapy (CBB) self-help intervention programme in promoting resilience in adults with moderate depression. Overall, the study hypothesised that individuals with depression, who took part in the CBB self-help intervention programme, would have greater resilience and a lower level of depression after completing the programme than at baseline, and that treatment effects would be maintained at one-month follow-up. In addition, individuals with depression, who took part in the CBB self-help intervention programme, would have greater resilience and a lower level of depression than the control group who only receive the standard care and treatment approach for individuals living with depression.

In this chapter, the findings of the study are discussed. The chapter begins with a discussion of the findings relating to the concept of resilience. Then an examination of depression is provided, and a discussion of psychological distress is presented. This is followed by an overall discussion of the findings and an analysis of the benefits and drawbacks of using bibliotherapy and randomised controlled trials (RCTs) in a Thai context. The strengths and limitations of the study are considered, and the recommendations for clinical practice and further research are outlined. Finally, the conclusions of the study are presented.

7.2. Demographic Characteristics

The majority of the study participants were female, which is consistent with the current literature, confirming a nearly two-fold greater prevalence of depression in women than men (Dubovsky et al., 2004; Puri & Hall, 2004; Townsend, 2008). Similarly in Thailand, the Department of Mental Health (2005) reported the prevalence of depression in the northern region population was 4.3% for women and 2.6% for men. In adolescents, depression is also more common in girls than boys. Several reasons have been hypothesised to explain gender difference in depression, including hormonal or reproductive influences (Dubovsky et al., 2004), differing psychosocial stressors and behavioural models of learned helplessness between women and men (Sadock & Sadock, 2004). A comparison of gender and depression has indicated men report more legal and work-related stressful life events, whereas women report more interpersonal stressors (Kendler et al., 2001). It is possible some males with depression who misuse alcohol are more likely to be diagnosed as suffering from alcohol-related disorders than depression, with the consequence that the true number of depressive disorders is underestimated (Gelder et al., 2001). As a result, women may have a higher prevalence of atypical symptoms of depression (Kornstein et al., 2000; Silverstein, 1999).

The average age of participants in this study was 42.1 years, ranging from 18 to 58 years, and this was outlined in the inclusion criteria for the study of 18-60 years.³⁴ This finding is similar to several literature reviews, which indicate that the average age of onset of major depressive disorder is approximately 40

³⁴ See Chapter 5, Section 5.4.2: Selection and recruitment of participants; inclusion criteria.

years, and 50 percent of all affected individuals have an onset between 20 and 50 years (Diehl & Goldberg, 2004; Puri & Hall, 2004; Sadock & Sadock, 2004). This prevalence is prognostic of later mental illnesses, including anxiety and suicidal behaviours (Fergusson et al., 2007).

In the present study, most participants were married or in a de facto relationship. This finding differs from the literature, which indicates the incidence of depression is higher in separated or divorced people than in married individuals (Dubovsky et al., 2004), and people without close interpersonal relationships (Puri & Hall, 2004; Sadock & Sadock, 2004). The difference might have been due to a combination of competing cultural, social and economic factors in Thailand. Although the country's National Statistics Organisation (2006a) reports a higher divorce rate than in the past, divorce is still frowned upon in Thai culture. Moreover, most families have experienced severe financial problems from recent economic crises affecting the country, and a decrease in attachment and caring between family members (National Statistics Organisation, 2006a). Overall, these competing influences may help explain the higher prevalence of depression in married participants and those in de facto relationships in the present study.

7.3 RESILIENCE

The first main finding of the study that a significantly greater improvement in resilience was observed in adult participants with depression who received the CBB self-help intervention programme than in those who only received the standard care and treatment approach to living with depression. These differences

were apparent from baseline to post treatment, and the treatment effects were maintained at one-month follow-up. Although both groups showed improvements in resilience throughout, the intervention group exhibited a more pronounced improvement than the control group. Moreover, the findings indicated, in intervention group participants with depression, an association between improvement in perceived resilience and lower levels of perceived depression and psychological distress. However, this association was not observed in control group participants who, similar to the intervention group, were recipients of the standard care and treatment approach from the outpatient department and a short weekly telephone call lasting approximately 5 minutes from the researcher. Overall, the differences between the two groups may be attributed to the beneficial effects of the CBB self-help intervention programme in enhancing resilience in the intervention group participants with depression.

As most of the resilience research to date has focused on children and adolescents, an understanding of how adults exposed to personal and work-related stress recover is just emerging (Henderson & Milstein, 2003). Three inferences can be made about the findings of the current study of adults with depression from literature on resilience.

The first inference is that in a Thai cultural context family support might have a favourable effect on the resilience of both groups in the study. Family support plays a major role in maintaining well-being in individuals with depression. The extended Thai family and strongly established family roles are evident

when a member becomes ill and another member takes on the role of primary carer (Ya-orm, 2001). According to Sethabouppha and Kane (2005), Thai caregivers are able to provide compassion and support to relatives with a mental illness. They use three main ways to cope with the stress of their caregiving situation, including consulting with other family members to help solve problems, talking with key people outside the family, and seeking support from religious leaders (Sethabouppha & Kane, 2005). Thai families also may possess particular beliefs about, and response patterns to, illness in family members. This was reported in a study by Rungreangkulkij and Chesla (2001), of culturally specific Buddhist beliefs and response patterns to children with mental illness, where mothers responded by accepting the child's situation and creating a calm environment. Furthermore, the Thai health care system supports caregivers and their ill family members by providing education, skill training and encouraging self-care (Ya-orm, 2001).

The inference from the present study about family support in a Thai cultural context is supported elsewhere by literature which emphasises the social context when considering people with depression. Although resilience is usually considered an individual characteristic, developmental research is increasingly highlighting that the social context of health and illness may be a better predictor of resilience (Sameroff & Rosenblum, 2006). Adaptive functioning in the face of adversity is dependent not only on the characteristics of the individual but is also greatly influenced by processes and interactions arising within the family and from the wider social environment (Schoon, 2006). According to Masten (2001), two of the most important factors that

contribute to resilience are the intellectual ability of individuals and the influence of parents or guardians. Social support is one of the factors that helps predict individual resilience (Earvolino-Ramirez, 2007; Luthar et al., 2000). For adults, social support and meaningful relationships with at least one peer or family member are consistent with resilient outcomes (Earvolino-Ramirez, 2007), and contribute positively to overall well-being. For instance, in the study of resilience in American Vietnam War veterans, by King et al. (1998), social support was identified as an important influence on strengthening resilience.

The second inference is that Thai cultural identification may have had a positive influence on the resilience levels of the intervention and control group participants in the present study. From a cultural perspective, successful family functioning in Thailand is attributable, in part, to parents, grandparents and other relatives emphasising the value of self-compassion³⁵ and interdependence³⁶ to children. This inference is supported in the findings of a study by Neff, Pisitsungkagarn, and Hsieh (2008), which compared self-compassion levels of people from Thailand, Taiwan and the USA. The results indicated that self-compassion is linked to specific differences cultures; it is highest in Thailand, followed by the USA and then Taiwan. Interdependence is

³⁵ Self-compassion involves the entire positive and negative self-evaluation process, focusing on feelings of kindness and understanding toward oneself and recognition of one's common humanity (Neff, Hsieh, & Dejitterat, 2005).

³⁶ Interdependence gives recognition to the fact that positive feelings about one's self are, in part, derived from developing and maintaining close relationships with others (Cross, Bacon, & Morris, 2000)

linked to self-compassion in Thai people, whereas independence³⁷ is linked to self-compassion in individuals from the USA and Taiwan. Neff (2003) claimed that interdependence involves being deeply embedded in a particular social system, and respecting the social norms and expectations about relationships. Moreover, self-compassion is associated with greater emotional resilience and psychological well-being in individuals, and enables them to experience warmth, kindness, and interconnectedness when they are unwell (Neff, 2003; Neff, Kirkpatrick, & Rude, 2007). It may be inferred, therefore, that Thai cultural identification, which is embedded in parenting practice in everyday interactions, and which emphasises self-compassion and interdependence, might have a positive effect on enhancing resilience in participants in the present study.

As a high level of cultural identification can have a positive influence on resilience, this suggests a family is functioning in a cultural context where its members are being reinforced positively by the cultural context in ways that are meaningful to them (Kaplan, 1999). There also may be culturally specific traditions, beliefs, or support systems that protect individual, family, and community functioning in adverse situations (Wright & Masten, 2005), such as individuals with depression. In the midst of adversity, individuals are especially likely to turn to cultural traditions to seek solutions. Hence, a broader understanding of resilience in depression needs to take into consideration cultural influences (Haase, 2009).

³⁷ Independence is the premise that the person acknowledges the centrality of individualizing, personal rights, and autonomy of the individual from social groups (Cross et al., 2000).

Cultural influences may also explain why most participants in the present study were either married or in de facto relationships. Even though the National Statistics Organisation (2006a) reported a higher divorce rate in the decade to 2006 than in the previous decade, divorce is still largely unacceptable in Thai culture. Other literature indicates the incidence of depression is higher in separated or divorced people than in married individuals (Dubovsky et al., 2004), and people without close interpersonal relationships (Puri & Hall, 2004; Sadock & Sadock, 2004). The implication of current study participants being married or in de facto relationships is that this form of social support is an important factor in enhancing individual resilience (Earvolino-Ramirez, 2007; Luthar et al., 2000).

The third inference is that improved individual competence might contribute to greater resilience in intervention group participants with depression in the present study. People can overcome stress or adversity and achieve a relatively good outcome despite the conceptualised experience of a situation. Overcoming stress or adversity may depend on experiences following the risk exposure. The mediating mechanisms giving rise to resilience might be personal capacity or coping strategies (Rutter, 2001). The basic components for strengthening resilience are social competence, autonomy, problem solving, and decision-making skills (Goldstein & Brooks, 2005; Gonzalez, 2007), which increase the sense of control (Goldstein & Brooks, 2005) and mastery (Brooks & Goldstein, 2001).

Possible beneficial effects of the CBB self-help intervention programme are that it strengthened individual competence and self-regulation and these, in turn, enhanced resilience. This inference is consistent with literature in that effective interventions to enhance resilience are based on the belief that individuals can effect positive change when they are able to ascribe new and more positive meanings to adverse events, and draw on supportive resources, such as a safe and secure environment, to reduce the negative effects of the aftermath of adversity (Greene & Armenta, 2007). The promotion of resilience in individuals is premised on building strengths and providing support (Sameroff & Rosenblum, 2006; Wright & Masten, 2005). Some of the more prominent themes which relate to intervention programmes for building resilience include the promotion of significant relations, development of competencies and problem-solving skills, and encouragement of the capacity to discover meaning in life (Rayner & Montague, 1999).

Support for the inference about strengthening individual competence and self-regulation and their effect on resilience also can be drawn from the findings of two studies. First, Dishion and Connell (2006) focused on the concept of self-regulation as a measure of resilience in children and adolescents. The authors found self-regulation moderated adolescent antisocial behaviour and depression. Second, Steinhardt & Dolbier (2008) examined the effectiveness of a programme for enhancing resilience, coping strategies and protective factors while decreasing symptomatology during a period of increased academic stress in college students. Analyses indicated that at post intervention the experimental group had significantly higher resilience and protective

factors scores, more effective coping strategies and lower scores on depressive symptoms than the control group.

The findings of the present study also demonstrated, in intervention group participants with depression, an association between improved levels of perceived resilience and lower levels of perceived depression and psychological distress. This finding is consistent with several studies reporting that resilient people's positive emotions function as a protective factor to moderate the magnitude of their adversity and assist them to cope well in similar circumstances in the future (Ong et al., 2006; Tugade et al., 2004). This is also highlighted in the study by Fredrickson et al. (2003), examining people's emotional responses to the September 11th terrorist attacks in the USA. The findings suggested positive emotions are critical elements in resilient people and acted as a mediator that buffered them from depression following the crisis.

7.4 Depression

The second main finding of the study is that a significantly greater decrease in depression took place in intervention group participants who received the CBB self-help intervention programme than in those in the control group who received the standard care and treatment approach to living with depression. These differences were apparent from baseline to post treatment and the treatment effects were maintained at one-month follow-up. Although both groups showed decreasing depression scores through the study period, the intervention group exhibited a more pronounced decrease than the control group. Moreover, the

findings of the study indicate, in intervention group participants with depression, an association between lower levels of perceived depression and improvement in perceived resilience and reduction in psychological distress. However, this association was not observed in the control group.

In the present study, the greater reduction in depression in the intervention group participants may be due to the helpful effects of the CBB self-help intervention programme, which contains elements of CBT. The CBT approach comprises highly specific learning experiences designed to teach people with depression to understand the links between their thoughts, emotions and behaviours, to monitor negative thoughts, recognise the conjunction between cognition and behaviour, challenge distorted automatic thoughts, replace biased cognitions with more reasonable interpretations, and learn to identify dysfunctional beliefs which can distort perceptions (Beck et al., 1979; Royal College of Psychiatrists, 2008; Semple et al., 2005). The overall purpose of CBT is to help individuals to understand the inaccuracy of their cognitive assumptions, to learn new ways of dealing with issues (Sadock & Sadock, 2004), and to learn to overcome negative thoughts, unhelpful behaviours, and difficult emotions (Royal College of Psychiatrists, 2008). Moreover, one consequence of depression is the perception of a severe reduction in rewarding activities or an increase in unpleasant events in one's life, which, in turn, further decrease the person's enjoyment of pleasurable activities (Wood, 2005). Extrapolating, a possible beneficial effect of the CBB self-help programme for intervention group participants with depression in the present study is that it helped them to challenge their distorted automatic thoughts, interpretations of

biased cognitions, and dysfunctional beliefs, and increased their experience of pleasurable activities.

The results of the current study support the findings of extensive research examining the effectiveness of bibliotherapy incorporating minimal contact for people who have depression. These studies highlight the effectiveness of this type of intervention, in the immediate post-treatment decrease in depression, and in the maintenance of improvement following treatment (Ackerson et al., 1998; Bilich et al., 2008; Kaldo et al., 2007; Scogin, Jamison et al., 1990; Scogin et al., 1989; Smith et al., 1997). In contrast, however, one study found no significant difference between participants with depression who used a guided self-help manual incorporating minimal telephone contact and a waiting list control group (Mead et al., 2006). The authors attributed the adverse finding to the diagnostically heterogeneous sample of participants, and commented that a homogeneous group of individuals with depression might result in more favourable outcomes.

The findings of the present study are similar to meta-analyses examining the efficacy of bibliotherapy for depression. Overall, most meta-analyses indicate there are significant benefits to using this type of approach (Campbell & Smith, 2003; Cuijpers, 1997; Foster, 2006; Gould & Clum, 1993; Gregory et al., 2004; Jamison & Scogin, 1995; Jorm et al., 2002; Marrs, 1995).

7.5 Psychological distress

The third main finding of the study is a significant reduction in psychological distress took place from baseline to post treatment in intervention group participants who received the CBB self-help intervention programme compared to control group participants who only received the standard care and treatment approach to living with depression, and that treatment effects were maintained at one month follow-up. Despite both groups showing a significant improvement in psychological distress over time, the level of improvement was greater in the intervention group. The findings also demonstrate, in intervention group participants with depression, an association between lower levels of perceived psychological distress and improvement in perceived resilience and a reduction in depression. However, this association was not observed in control group participants. The differences between the two groups may be due to the helpful effects of the CBB self-help workbook in contributing to a greater reduction in psychological distress in the intervention group participants.

The workbook provides instruction and encouragement in promoting psychosocial strength and ability to cope with adversity, relaxation skills, and problem-solving skills. There are five precedents for psychological distress to occur in individuals: currently experiencing biopsychosocial adversity, a perceived stressor, perceiving the stressor as a personal threat, lack of problem solving ability, and inefficient coping strategies (Ridner, 2004). It may be inferred that a helpful effect of the self-help programme is to enhance the individual's psychosocial strength against, and ability to cope with, the antecedents of psychological distress.

7.6 Overall discussion of findings

Overall, the findings of the study support the hypotheses that a significantly greater improvement in resilience, depression and psychological distress would take place over the three time points in individuals with moderate depression who received the CBB self-help intervention programme, and in comparison to the control group. The intervention group participants exhibited greater improvement in resilience, depression, and psychological distress at post-test compared to the baseline time point, and the improvement was maintained at one-month follow-up. The findings also showed significant differences between the two groups in the depression and psychological distress cut-off scores, at post-test and one-month follow-up time points. A greater proportion of the intervention group participants recorded scores below the clinically significant cut-off point for these key variables, compared to the control group participants. Moreover, the difference scores for the intervention group between baseline, post-test and follow-up, showed a significant correlation between high resilience scores and low depression and psychological distress scores, but these were not found in the control group.

Overall, while the standard care and treatment approach and Thai cultural context may have had a positive influence on improving resilience and reducing depression and psychological distress in both groups, the intervention group participants exhibited greater improvement than those in the control group. A possible favourable effect of the CBB self-help intervention programme is that through improvement in resilience the participants also developed positive emotions, which, in turn, reduced the levels of depression

and psychological distress. This finding is consistent with the results of several studies that examine the role of positive emotions in the promotion of resilience (Ong et al., 2006; Tugade et al., 2004). Moreover, people with high levels of resilience are likely to show low levels of depression (Bonanno et al., 2007).

The present study's findings indicate, in intervention group participants, an association between low psychological distress and improvement in resilience and reduction in depression. The finding is similar to that of Humphreys (2003), who examined psychological distress in women with a history of physical abuse who were living in sheltered accommodation. The author found greater resilience was related to successful outcomes for women in this situation, despite challenging or threatening circumstances, and women who had higher levels of resilience reported significantly fewer symptoms of physical and psychological distress. There is some incongruence in the data, however, in the depression and psychological distress levels of the control group between baseline and end of study. Depression increased from 17.39 at baseline to 20.21 by end of study, but psychological distress decreased in the corresponding periods from 26.93 to 22.75. Psychological distress is an emotional state experienced by an individual in response to a temporary or permanent specific stressor that results in harm (Ridner, 2004). It may be inferred that a helpful effect of the short weekly telephone contact with the researcher is it helped moderate the control group's level of psychological distress but had no effect on their level of depression.

In the present study, the CBB self-help programme is consistent with the Thai health care system policy of encouraging self-care (Ya-orm, 2001). The self-help manual is suitable for people with moderate depression, but is inappropriate for individuals with severe depression³⁸ (Karpe & Scogin, 2008). The use of self-help material must be carefully monitored by clinicians, however, as misinterpretation of information can exacerbate symptoms, especially among socially withdrawn individuals with depression (Watkins, 2008). This precautionary strategy accords with the approach adopted in the current study, where weekly telephone calls were made to support and encourage intervention group participants to continue reading and complete the exercises in the manual. The benefits of weekly contact are similar to those found in the Bilich et al. (2008) study, where the authors suggested minimal-contact and assisted self-help groups experienced significant reductions in their levels of depression and psychological distress compared with another intervention group who used the manual but did not have regular contact with a researcher.³⁹ The effectiveness of minimal telephone contact is also consistent with the findings of the Cuijpers (1997) study, which reported that bibliotherapy programme participants benefited from weekly telephone contact with a health professional.

7.7 Bibliotherapy in a Thai context

³⁸ Individuals with severe depression often experience difficulty in concentrating and cognitive impairment, and are at greater risk of suicide (Townsend, 2008). These difficulties inhibit the effectiveness of bibliotherapy, and they may require more intensive interventions than in less severe forms of depression (Karpe & Scogin, 2008).

³⁹ While there are similarities between the findings of the Bilich et al. (2008) study and the current study, the latter did not have an intervention group that read the manual but did not have weekly contact with a researcher.

The translation process for the Thai version of the self-help manual focused on language accuracy and cultural appropriateness.⁴⁰ Due to cultural differences between Australia and Thailand, some of the illustrations and content in the original manual were modified in the translated version to forms that were more culturally appropriate. For example, Thai names replaced Australian names in the exemplars, pictures were contextualised to Thai settings, and lists of Thai styles of pleasure and enjoyable activities were included.

The study findings show that the CBB self-help intervention programme is an important adjunct to strengthening resilience and enhancing recovery from depression and psychological distress in individuals with moderate depression. The study used the Thai version of *The Good Mood Guide: Self-help Manual for depression*.⁴¹ The manual contained elements of CBT, such as explaining the relationship between thoughts and feelings; encouraging behavioural change with pleasure activity scheduling and mastery activities; equipping individuals to challenge negative thoughts; and focusing on improving time management, relaxation, and problem-solving skills. It could be inferred that the manual enhanced the intervention group participants' ability to cope with adversity, and supported them to challenge and replace their distorted thoughts with more constructive thoughts and behaviours. In so doing, this helped them improve their resilience and reduce the level of their depression and psychological distress.

⁴⁰ See Chapter 5, Section 5.4.5.1: Translation of instruments and manual.

⁴¹ See Chapter 5, Section 5.4.3: Procedures and Data Collection, for more information about the manual.

To date, only five published bibliotherapy studies have been undertaken in Thailand⁴² (Choonam, 1998; Padee, 1994; Pornchaikate, 1991; Sainamparn, 2003; Siricharoenwong, 1989). Of these, only the non-equivalent control group study⁴³ by Padee (1994) examined the effectiveness of bibliotherapy in reducing anxiety and depression, in this instance in patients with cancer. Overall, the study found bibliotherapy was a useful approach for lowering anxiety and depression.

The present RCT is the first to be carried out in Thailand that has evaluated the effectiveness of a CBB self-help intervention programme in promoting resilience in individuals with moderate depression. There are several advantages in using bibliotherapy as an adjunct to routine treatment in this type of depression. The approach provides specific techniques and homework exercises which individuals are encouraged to undertake between sessions in order to challenge unhelpful thoughts and behaviours and to strengthen their resilience. Bibliotherapy also may help maintain treatment gains because individuals can readily revisit intervention strategies at later points in time. Self-monitoring and self-assessment can assist individuals to assess treatment gains and to alert them about potential problems and the need to consult clinicians. Bibliotherapy also may reduce negative emotions and stigma associated with seeking traditional approaches to care and treatment (Barney et al., 2006; Cuijpers, 1997; Kaldo et al., 2007; Watkins, 2008). It is a cost-effective approach based on CBT, and is more convenient, less expensive,

⁴² See Chapter 3, Section 3.3.3.5: Evidence base for bibliotherapy in depression.

⁴³ While a non-equivalent control group design is similar to a RCT, the participants are not randomly assigned to groups (Lusardi & Fain, 2009; Polit & Beck, 2006).

more widely and easily accessible and portable than standard and specialised treatment modalities (Bower et al., 2001; Watkins, 2008), especially in a Thai context where affected individuals may have to travel considerable distances to outpatient departments and pay for treatment.

There are several limitations, however, to using bibliotherapy. From a cultural perspective, most Thai people, particularly adolescents and adults, dislike reading, preferring to listen to information presented on the radio and watching television (Thai National Statistics Organisation (2006b). This contrasts with, for instance, Australia, where most people regard reading as a pleasurable activity, and read newspapers, magazines and books at least once a week (Australian Bureau of Statistics, 2008).

In the present study, all participants finished reading the manual, while nine (34.61%) re-read sections after completing the post-test time point. Of the 26 intervention group participants, ten (38.46%) finished the written component, eleven (42.30%) completed approximately three-quarters and six (23.08%) finished half of the written component of the manual. The difference in the completion rates for the reading and written parts of the manual may be due to some participants having difficulties with the written component but not with the reading part. The finding about re-reading the manual is similar to the Scogin, Jamison, & Gochneaur (1989) study, which highlighted that 48% of participants re-read parts of their book after completing the study. However, re-reading was not reported in the only publication to date from the Bilich et al.

(2008) study evaluating the Australian version of the self-help manual used in the present study.

Bibliotherapy also may not be appropriate for some individuals with depression who, because of their illness, lack perseverance and ability to concentrate for the prolonged periods of time necessary to complete the reading and writing parts of the self-help manual (Gregory et al., 2004; Karpe & Scogin, 2008). However, the evidence from the current study suggests the bibliotherapy self-help approach, based on CBT, is beneficial for individuals with moderate depression when they are given additional minimal contact to encourage and guide them to continue using the manual. Another limitation of the self-help manual is that impairments in visual acuity, and limited reading and writing ability, may reduce the usefulness of the self-help manual for some people in Thailand as well as in other contexts.

7.8 Randomised controlled trials in a Thai context

Most RCTs undertaken in Thailand have focused on three clinical issues: HIV/AIDS (Ananworanich et al., 2005; Duncombe et al., 2005; Wendler, Krohmal, Emanuel, Grady, & ESPRIT Group, 2008), pharmacology (Kongsakon, Papadopoulos, & Saguansiritham, 2005; Miller et al., 2006; Sanansilp, Mahuntasanapong, & Phoncharoensomboon, 2002; Sripalakit et al., 2005), and self-management of diabetes (Wattana, Srisuphan, Pothiban, & Upchurch, 2007). Considerably less research has been conducted with a mental health focus. This was highlighted in a report by WHO and Ministry of Public Health of Thailand (2007), where only one per cent of health related

publications in the country in the previous five years addressed mental health issues, and of these, even fewer used RCTs.

Several interrelated factors may explain why only a limited number of RCTs have been carried out in Thailand, particularly in the mental health field. First, there are difficulties in recruiting participants to take part in RCTs. Thai people are sometimes reluctant to take part in experimental research, because of perceptions about being “experimented on” (Sethabuth, 2002; Wongwichai, 2006), and perceived concerns about the risk of participation on their well-being (Sethabuth, 2002). Second, there are safety and ethical concerns about the risk of, for instance, self-harm, suicide, and relapse, while conducting RCTs with people who have mental illnesses, especially involving individuals with depression (Research Promotion and Development Center Siam University, 2008). In the present study, this concern was addressed by obtaining ethics approval from Victoria University Human Research Ethics Committee and the ethics committee of Department of Mental Health, Ministry of Public Health of Thailand, conducting the study in an ethically responsible manner, and having procedures in place if a participant needed to be withdrawn from the study.⁴⁴ Third, the time and financial constraints encountered when conducting RCTs can deter researchers (Whittemore & Grey, 2006). This may help explain why most RCTs in Thailand are conducted as part of Masters and PhD studies (Hengsuwanich, 1998).⁴⁵

⁴⁴ See Chapter 5, Section 5.4.7: Ethical considerations, and Section 5.4.7.5 Minimising the risk of harm.

⁴⁵ As far as can be established, the Hengsuwanich (1998) study is the most recent. It covered the years 1984 to 1994 and analysed research works on physical health, mental health and nutrition of Thai youth. The study reported that most research reports (79.22%) in these areas

The translation process for the Thai version of the self-help manual focused on language accuracy and cultural appropriateness. As there were no Thai versions of the Resilience Scale (RS) or the Kessler Psychological Distress Scale (K-10), they were translated in accordance with *WHO World Mental Health Initiative Interview Translation Guidelines* (World Health Organization, 2003)⁴⁶ While both instruments were straightforward to use in the present study, along with the previously translated Centre for Epidemiologic Studies Depression Scale (CES-D), further studies are needed to confirm the reliability of the Thai versions of the RS and K-10, and to validate the clinical cut-off score for the K-10 in a Thai context (Fain, 2009b).

Overall, the current RCT study, conducted in fulfilment of the requirements of a PhD thesis, provides an important contribution to the limited research in Thailand on the use of bibliotherapy with individuals who have moderate depression. The study is the first to evaluate the effectiveness of a CBB self-help intervention programme in promoting resilience, improving depression and reducing psychological distress. As the student researcher, I experienced three main difficulties in conducting the study. I am an international student, a Thai national, in whom English is a recently learned language. This created difficulties for me in reading professional literature, engaging in academic discourse, and writing the thesis. The translation process⁴⁷ for the self-help manual and the psychometric instruments, and conducting the fieldwork part of

were carried out by postgraduate students and were directly related to the production of theses and dissertations.

⁴⁶ See Chapter 5, Section 5.4.5.1: Translation of instruments and manual.

⁴⁷ See Chapter 5, Section 5.4.5.1: Translation of instruments and manual.

the study, was time consuming. Furthermore, even though Victoria University provided some financial support for fieldwork expenses, the costs of the translation process, travelling, and telephone calls were considerable. Overall, however, despite these difficulties, I found the whole process extremely rewarding and satisfying.

7.9 STRENGTHS AND LIMITATIONS

7.9.1 Strengths

The present study has two methodological strengths. The first strength is it used a RCT, the most powerful design for testing hypotheses of cause-and-effect relationships and the highest level of research evidence (Matthews, 2006). There are three key properties of RCTs: randomisation, control, and manipulation (Polit & Beck, 2006; Whitemore & Grey, 2006).⁴⁸ In the present study, random allocation of participants to the intervention or the control group, using a table of random numbers, was undertaken by another researcher who was not directly involved in the recruitment process. The extraneous variables in the study were controlled by providing participants in both groups with (i) the standard care and treatment approach from the outpatient department, Suan Prung Psychiatric hospital, and (ii) a short weekly telephone contact. Manipulation of the independent variable was carried out using the self-help manual with the intervention group with depression, and the outcomes were then compared with the control group by measuring resilience, depression, and psychological distress.

⁴⁸ See Chapter 5, Section 5.3: Research design.

A second strength of the study is the high retention rate (96.4%). This may be attributable to the researcher taking time to build rapport and maintain a professional relationship with participants throughout the study. Furthermore, the incorporation of the five-minute weekly telephone contact with all the participants may have assisted retention. The contact, comprising brief advice, encouragement and, for intervention group participants, answering questions related to the self-help manual, may have positively influenced the high retention rate in the study.

7.9.2 Limitations

There are six methodological limitations to the present study. The first limitation is the recruitment method. Recruitment through known clinical staff at the outpatient department may have affected the nature of the sample that was obtained. Participants may not represent the spectrum of people with moderate depression, because of the limitation of recruitment of individuals diagnosed with a moderate episode of depression (F32.1), and recruitment being limited to those attending the department. However, recruitment through the outpatient department was undertaken in order to minimise risk in the study, by enabling clinical staff to screen prospective participants for signs and symptoms of moderate depression and risk of suicide.⁴⁹

The second limitation is the way the RCT was conducted. Due to the constraint of conducting the RCT within the restricted timeframe of PhD candidature, and with limited personnel and financial resources, I recruited the participants,

⁴⁹ See Chapter 5, Section 5.4.2: Selection and recruitment of participants.

conducted the weekly telephone calls, and collected the data at each time point in the study. This meant I knew which group the participants were in and this could be interpreted as a potential source of response bias when collecting data.

The third limitation is that, due to the limited scope of a PhD study, there was only a four-week period between post-test and follow-up. While the findings showed there were short-term benefits to intervention group participants using the self-help manual (higher level of resilience and lower level of depression and psychological distress than the control group), it is unclear if these benefits were sustained in the long-term. The fourth limitation relates to the use of bibliotherapy, and this was considered earlier in this chapter. The fifth limitation is that several intervention and control group participants had their antidepressant medication dosage increased or decreased during the study. It is unclear what effect, if any, this confounding variable had on their level of depression

A final limitation of the study is that due to the method of recruitment, conduct of the RCT, short-term evaluation, and use of bibliotherapy, attempts to generalise the findings should be treated with caution.

7.10 RECOMMENDATIONS

To support the utilisation of, and further study into, the CBB self-help manual for individuals with moderate depression, recommendations are made for clinical practice and for future research

7.10.1 Clinical Practice

The study findings suggest the minimal contact CBB self-help bibliotherapy programme can be used as an adjunct to standard care and treatment for individuals with moderate depression. In light of the cultural context of Thai families having an important role in promoting well-being in individuals with depression, the self-help book could be shared with other family members, particularly primary caregivers. This might enhance caregivers' ability to obtain a greater understanding of the person with depression and better equip them to support the affected individual.

Overall, bibliotherapy can be used by people with moderate depression, clinical staff, and primary caregivers as an adjunct to standard care and treatment (Karpe & Scogin, 2008), but its use must be carefully monitored by clinicians (Watkins, 2008).

7.10.2 Further Research

While the CBB self-help intervention programme contributed to improvements in individuals with moderate depression, more research is needed to evaluate the effectiveness of this approach with a larger group of participants and with a longer follow-up period than could be obtained within the constraints of PhD candidature. A larger sample would enhance the statistical power of analyses and reduce the risk of Type II error,⁵⁰ and would enable analysis of mediator variables (e.g., a comparison of the presence or absence of weekly telephone contact on resilience, depression and psychological distress, and completion of the manual) and the factors associated with the effectiveness of bibliotherapy

⁵⁰ Type II error is an error in failing to reject a null hypothesis when it is false (Pallant, 2007).

as a self-help approach (e.g., the level of education that is needed to complete the manual). There also is a need for research to support the usefulness and cost effectiveness of self-help materials for individuals with moderate depression in Primary Care Units⁵¹ in Thailand.

Research is needed to ascertain the suitability of bibliotherapy for people from different cultural and educational backgrounds, and to evaluate the usefulness of alternative ways of presenting self-help programmes informed by CBT, such as DVDs and Web-based formats. The limited studies that have been undertaken to date into computer-assisted treatment for people with depression have found it a time-saver for professional staff and a money-saver for those with depression (Karpe & Scogin, 2008). Moreover, it provides a potentially more flexible and interactive approach to therapy for depression than can be obtained in standard bibliotherapy programmes.

Future research should incorporate a stratified random sample to control for unequal distribution of demographic characteristics such as educational level. Moreover, in addition to the short weekly telephone call, weekly homework assignment and discussion with researcher during the study would help ensure the participants actually use the self-help manual.

⁵¹ The Universal Health Coverage (UHC) policy was introduced in rural Thailand in 2006. The policy focuses on the delivery of primary health care at community based primary care units (PCUs) rather than in District Hospitals. The UHC policy aims to reduce inequities and to be located closest to where people live so as to increase service access. PCUs provide health promotion, disease and illness prevention, and treatment of common physical and mental health problems, rehabilitation and palliative care (Hanucharurnkul, 2007).

Finally, future research should incorporate a mixed methods approach to evaluate the participants' satisfaction with, and views about, using a self-help manual.

7.11 CONCLUSION

The findings of this study of people with moderate depression living in Chiang Mai province in northern Thailand show, overall, that the CBB self-help manual with minimal telephone contact is helpful in improving resilience, reducing depression, and lowering psychological distress. There is some indication that the intervention may be successful; however the non-equivalence of the two groups in terms of educational attainment may have accounted for some of the differences in the scores of the two groups. Therefore, the results of the study should be treated with caution. The study expands the body of knowledge and research into the use of bibliotherapy and the promotion of resilience in adults with moderate depression in a Thai context. This is particularly important because of the increasing prevalence of depression in Thailand, similar to other Asian and developed countries. The study also confirms the benefits of bibliotherapy as a relatively new and promising approach in this setting, and broadens the choice of treatment modalities available to support Thai people with moderate depression and increase their resilience. Bibliotherapy is a more accessible, portable, and cost effective approach than standard treatment modalities for Thai people with moderate depression. Moreover, in adapting a translated self-help manual, the study highlights the need for future development and evidence based evaluation of self-help materials that are specifically developed in Thailand

that reflect Thai cultural practices. Finally, the study contributes to the limited but growing number of RCTs that have been carried out in the mental health field in Thailand.

REFERENCES

- Ackerson, J., Scogin, F., McKendree-Smith, N., & Lyman, R. D. (1998). Cognitive bibliotherapy for mild and moderate adolescent depressive symptomatology. *Journal of Consulting and Clinical Psychology, 66*(4), 685-690.
- Altman, D. G., Schulz, K. F., Moher, D., Egger, M., Davidoff, F., Elbourne, D., et al. (2001). The revised CONSORT statement for reporting randomized trials: Explanation and elaboration. *Annals of Internal Medicine, 134*(8), 663-694.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders-text revision* (4th ed.). Washington DC: American Psychiatric Association.
- Ananworanich, J., Siangphoe, U., Hill, A., Cardiello, P., Apatteerapong, W., Hirschel, B., et al. (2005). Highly active antiretroviral therapy (HAART) retreatment in patients on CD4-guided therapy achieved similar virologic suppression compared with patients on continuous HAART : The HIV Netherlands Australia Thailand Research Collaboration [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 29 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/478/CN-00523478/frame.html>.
- Anderson, L., Lewis, G., Araya, R., Elgie, R., Harrison, G., Proudfoot, J., et al. (2005). Self-help books for depression: How can practitioners and patients make the right choice? *British Journal of General Practice, 55*(514), 387-392.
- Andrews, G. (2007). K10 (Kessler psychological distress scale) a measure of current distress [Electronic Version]. Retrieved 25 April 2009 from <http://www.gpcare.org/outcome%20measures/outcomemeasures.html>.
- Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler population. *Australian and New Zealand Journal of Public Health, 25*, 494-497.
- Atkinson, S. (1993). *Climbing out of depression*. Oxford, Oxfordshire, U.K.: Lion Publishing.
- Australian Bureau of Statistics. (2003). *Information paper-Use of Kessler Psychological Distress Scales in ABS Health Survey, Australia, 2001* (No. Cat.4817.0.55.001). Canberra: ABS.
- Australian Bureau of Statistics. (2006). Causes of death (Publication. Retrieved 1 March 2009, from Australian Bureau of Statistics,:

[http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/A8CB1F4BD5385085CA2574100010092A/\\$File/33030_2006.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/A8CB1F4BD5385085CA2574100010092A/$File/33030_2006.pdf)

- Australian Bureau of Statistics. (2007). Year Book Australia, 2007 (Publication. Retrieved 19 February 2009, from Australian Bureau of Statistics <http://www.abs.gov.au/Ausstats/abs@.nsf/7d12b0f6763c78caca257061001cc588/4B4499E66C702262CA2572360002BF7F?opendocument>
- Australian Bureau of Statistics. (2008). Arts and Culture in Australia: A Statistical Overview, 2008 (First Edition) [Electronic Version]. *Reading*. Retrieved 4 May 2009 from <http://abs.gov.au/ausstats/abs@.nsf/Products/0343AB74600287B2CA2574520010738F?opendocument>.
- Barney, L. J., Griffiths, K. M., Jorm, A. F., & Christensen, H. (2006). Stigma about depression and its impact on help-seeking intentions. *Australian and New Zealand Journal of Psychiatry*, 40(1), 51-54.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Beebe, L. H. (2007). What can we learn from pilot studies? *Perspectives in Psychiatric Care*, 43(4), 213-218.
- Bernard, B. (2004). *Resiliency: What we have learned*. San Francisco: WestEd.
- Bilich, L. L., Deane, F. P., Phipps, A. B., Barisic, M., & Gould, G. (2008). Effectiveness of bibliotherapy self-help for depression with varying levels of telephone helpline support. *Clinical Psychology and Psychotherapy*, 15, 61-74.
- Boland, R. J., & Keller, M. B. (2002). Course and outcome of depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 43-60). New York: Guilford Press.
- Boland, R. J., & Keller, M. B. (2009). Course and outcome of depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 23-43). New York: Guilford.
- Bonanno, G. A., Galea, S., Bucchiarelli, A., & Vlahov, D. (2007). What predicts psychological resilience after disaster? The role of demographics, resources, and life stress. *Journal of Consulting and Clinical Psychology*, 75(5), 671-682.
- Bower, P., Rihards, D., & Lovell, K. (2001). The clinical and cost-effectiveness of self-help treatments for anxiety and depressive

disorders in primary care: A systematic review. *British Journal of General Practice*, 51(471), 838-845.

- Brom, D., & Kleber, R. (2008). *Treating traumatized children: Risk, resilience, and recovery*. Retrieved 30 January 2009, from <http://reader.ebib.com.au.wallaby.vu.edu.au:2048/Reader.aspx?p=359049&o=158&u=%2FG%2B1UzyXBTv9N3WQzkWIRw%3D%3D&t=1233741015&h=119dfe7f8ad619d27d2ecff912ea9c5b5087a35&s=1453047&ut=507&pg=1&r=img#>.
- Brooks, R., & Goldstein, S. (2001). *Raising resilient children: Fostering strength, hope, and optimism in your child*. New York: McGraw-Hill.
- Burns, D. D. (1999). *Feeling good-the new mood therapy*. New York: Avon Books.
- Burns, N., & Grove, S. K. (2003). *Understanding nursing research* (3rd ed.). Philadelphia: W.B. Saunders.
- Burns, N., & Grove, S. K. (2005). *The practice of nursing research: Conduct, critique, and utilization* (5th ed.). St. Louis, MO: Elsevier Saunders.
- Campbell, L. F., & Smith, T. P. (2003). Integrating self-help books into psychotherapy. *JCLP/ In Session: Psychotherapy in Practice*, 59(2), 177-186.
- Candy, B., Jones, L., Williams, R., Tookman, A., & King, M. (2008). Psychostimulants for depression [Electronic Version]. *Cochrane Database of Systematic Reviews*. Retrieved 24 January 2009 from <http://-0www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clsysrev/articles/CD006722/frame.html>.
- Chamberlain, D., Heaps, D., & Robert, I. (2008). Bibliotherapy and information prescriptions: A summary of the published evidence-base and recommendations from past and ongoing books on prescription projects. *Journal of Psychiatric and Mental Health Nursing*, 15, 24-36.
- Chiang Mai Municipality. (2008). Population in Chiang Mai municipality year 1999-2008 (Publication. Retrieved 23 March 2009, from Chiang Mai Municipality: <http://www.cmcity.go.th/aboutus/topography.php>
- Chiang Mai Provincial Statistical Office. (2008). *Statistics of population from registration record in Chiang Mai provincial: 1977-2008*. Chiang Mai: Chiang Mai Provincial Statistical Office.
- Chittawon, P. (2003). *Effects of rational emotive behavior therapy on depression in adolescents*. Mahidol University, Bangkok, Thailand.

- Choonam, D. (1998). *A development of the instructional program using bibliotherapy for enhancing self-perception of elementary school students with chronic illness*. Chulalongkorn University, Bangkok, Thailand.
- Chowsilpa, S. (2003). Reliability of State-Trait Resilience Inventory (STRI) in Thai student: A study at Chiang Mai University. *South Asian Journal of Psychiatry*, 1(1), 15-16.
- Christensen, H., Griffiths, K. M., & Jorm, A. F. (2004). Primary care [Electronic Version]. *Delivering interventions for depression by using the internet: Randomised controlled trial*, 1-5. Retrieved 23 November 2008 from <http://moodgym.anu.edu.au/welcome/new/christensen.pdf>.
- Churchill, R., Hunot, V., Corney, R., Knapp, M., McGuire, H., Tylee, A., et al. (2007). Brief cognitive-behavioural therapies versus other brief psychological therapies for depression [Electronic Version]. Retrieved 20 April 2007 from <http://mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004053/frame.html>.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cornwell, C. J. (2003). The client with a mood disorder. In W. K. Mohr (Ed.), *Johnson's psychiatric-mental health nursing* (5th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The Relational-Interdependent Self-Construal and Relationships. *Journal of Personality and Social Psychology* 78(4), 791-808.
- Cuijpers, P. (1997). Bibliotherapy in unipolar depression: a meta-analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, 28, 139-147.
- Cuijpers, P., Straten, A. v., Warmerdam, L., & Andersson, G. (2008). BMC Psychiatry [Electronic Version]. *Database: Psychological treatment of depression: A meta-analytic database of randomized studies*. Retrieved 24 November 2008 from <http://www.biomedcentral.com/content/pdf/1471-244X-8-36.pdf>.
- Davidson, J., & Meltzer-Brody, S. (1999). The underrecognition and undertreatment of depression: what is the breadth and depth of the problem? *Journal of Clinical Psychiatry*, 60(7), 4-9.
- Department of Mental Health. (2005). *The 2003 national epidemiology survey on mental health in Thailand*. Bangkok, Thailand: Wongkamol.

- Department of Mental Health. (2007a). Number and rate per 100,000 populations of mental health consumers of Thailand, as province categories in year 1997 (Publication. Retrieved 19 March 2009: <http://www.dmh.go.th/report/population/province.asp?field24=2540>)
- Department of Mental Health. (2007b). Number and rate per 100,000 populations of mental health consumers of Thailand, as province categories in year 2007 (Publication. Retrieved 27 February 2009, from Department of Mental Health: <http://www.plan.dmh.go.th/download/ict/8disease2550.pdf>)
- Department of Mental Health. (2008). Thai crises year 2009: High risk for mental health and suicide [Electronic Version]. Retrieved 17 March 2009 from http://www.dmh.go.th/sty_libnews/news/view.asp?id=10657.
- Department of Provincial Administration. (2008). The number of provincial population of the year 2008 (Publication. Retrieved 23 March 2009, from Department of Provincial Administration,: http://www.dopa.go.th/stat/y_stat.html)
- Desai, N. G., & Isaac, M. (2006). Regional health forum WHO South-East Asia region [Electronic Version], 5. Retrieved 14 May 2007 from http://www.searo.who.int/EN/Section1243/Section1310/Section1343/Section1344/Section1353_5279.htm
- Diehl, T. S., & Goldberg, K. (2004). *Psychiatric nursing made incredibly easy*. Springhouse, PA: Lippincott Williams & Wilkins.
- Dishion, T. J., & Connell, A. (2006). Adolescents' resilience as a self-regulatory process: Promising themes for linking intervention with developmental science. *Annals of New York Academy of Sciences*, 1094, 125-138.
- Dubovsky, S. L., Davies, R., & Dubovsky, A. N. (2004). Mood disorders. In R. E. Hales & S. C. Yudofsky (Eds.), *Essentials of clinical psychiatry* (2nd ed., pp. 243-337). Washington DC American Psychiatric Publishing.
- Duncombe, C., Kerr, S. J., Ruxrungtham, K., Dore, G. J., Law, M. G., Emery, S., et al. (2005). HIV disease progression in a patient cohort treated via a clinical research network in a resource limited setting [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 29 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/432/CN-00549432/frame.html>.

- Earvolino-Ramirez, M. (2007). Resilience: A concept analysis. *Nursing Forum, 42*(2), 73-79.
- Evans, C. (2007). Cognitive-behavioural therapy with older people. *Advances in Psychiatric Treatment, 13*, 111-118.
- Faherty, V. E. (2008). *Compassionate statistics: Applied quantitative analysis for social services with exercises and instructions in SPSS*. Thousand Oaks, CA: Sage Publications.
- Fain, J. A. (2009a). Analysis the data. In J. A. Fain (Ed.), *Reading, understanding, and applying nursing research* (3rd ed., pp. 149-172). Philadelphia: F.A.Davis Company.
- Fain, J. A. (2009b). Principles of measurement. In J. A. Fain (Ed.), *Reading, understanding, and applying nursing research* (3rd ed., pp. 107-124). Philadelphia: F.A. Davis.
- Fanner, D., & Urquhart, C. (2008). Bibliotherapy for mental health service users Part 1: A systematic review. *Health Information & Libraries Journal, 25*(4), 237-252.
- Fergusson, D. M., Boden, J. M., & Horwood, L. J. (2007). Recurrence of major depression in adolescence and early adulthood, and later mental health, educational and economic outcomes. *British Journal of Psychiatry, 191*, 335-342.
- First, M. B., & Tasman, A. (2006). *Clinical guide to the diagnosis and treatment of mental disorders*. Chichester, West Sussex, U.K.: John Wiley & Sons.
- Floyd, M. R. (2003). Bibliotherapy as an adjunct to psychotherapy for depression in older adults. *Journal of Clinical Psychology, 59*(2), 187-195.
- Foster, T. (2006). Read all about it: Guided bibliotherapy for depression in adults. *Irish Journal of Psychological Medicine, 23*(3), 111-113.
- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2002. *Journal of Personality and Social Psychology, 84*(2), 365-376.
- Freeman, T. M., Leonard, L., & Lipari, J. (2007). The social contextual nature of resilience in school: Organizational structures that facilitate positive school climate-a review. In D. M. Davis (Ed.), *Resiliency reconsidered:*

Policy implications of the resiliency movement (pp. 15-32). Charlotte, NC: Information Age Publishing.

Friend, J. (2007). Educational resilience in young adolescents. In D. M. Davis (Ed.), *Resiliency reconsidered: Policy implications of the resiliency movement* (pp. 33-50). Charlotte, NC: Information Age Publishing.

Gallop, G. C. (2006). Linkages between vulnerability, resilience, and adaptive capacity. *Global Environment Change, 16*, 293-303.

Gelder, M., Mayou, R., & Cowen, P. (2001). *Shorter Oxford textbook of psychiatry* (4th ed.). New York: Oxford University Press.

Gilin, M. J. (2009). Pharmacotherapy and other somatic treatments for depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (2nd ed., pp. 554-585). New York: Guilford Press.

Gitlin, M. J. (2009). Pharmacotherapy and other somatic treatments for depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 554-585). New York: Guilford Press.

Goldman, L. S., Nielsen, N. H., & Champion, H. C. (1999). Awareness, diagnosis, and treatment of depression. *Journal of General Internal Medicine, 14*, 569-580.

Goldstein, S., & Brooks, R. B. (2005). *Handbook of resilience in children*. New York: Springer.

Gonzalez, J. C. (2007). Expanding our thinking of resiliency from K-12 to higher education: Resolute experiences of academic Latinas. In D. M. Davis (Ed.), *Resiliency reconsidered: Policy implications of the resiliency movement* (pp. 103-122). Charlotte, NC: Information Age Publishing.

Gotlib, I. H., & Hammen, C. L. (2002). *Handbook of depression*. New York: Guilford Press.

Gotlib, I. H., & Hammen, C. L. (2009). Introduction. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of Depression* (2nd ed., pp. 1-2). New York: Guilford Press.

Gould, R. A., & Clum, G. A. (1993). A meta-analysis of self-help treatment approaches. *Clinical Psychology Review, 13*, 169-186.

Gournay, K. (2009). Mood disorders: Depression and mania. In R. Newell & K. Gournay (Eds.), *Mental health nursing: An evidence-based*

approach (2nd ed., pp. 76-93). Philadelphia: Churchill Livingstone Elsevier.

Greene, R. R. (2007). The REM: Phase I- Assessment. In R. R. Greene (Ed.), *Social work practice: A risk and resilience perspective* (pp. 43-66). Belmont, CA: Thomson Brooks/Cole.

Greene, R. R., & Armenta, K. (2007). The REM: Phase II-Practice Strategies. In R. R. Greene (Ed.), *Social work practice: A risk and resilience perspective* (pp. 67-90). Belmont, CA: Thomson Brooks/Cole.

Greenfield, S. F., Reizes, J. M., Muenz, L. R., Kopans, B., Kozloff, R. C., & Jacobs, D. G. (2000). Treatment for depression following the 1996 national depression screening day. *American Journal of Psychiatry*, *157*, 1867-1869.

Gregory, R. J., Canning, S. S., Lee, T. W., & Wise, J. C. (2004). Cognitive bibliotherapy for depression: A meta-analysis. *Professional Psychology: Research and Practice*, *35*(3), 275-280.

Haase, J. E. (2009). Resilience. In S. J. Peterson & T. S. Bredow (Eds.), *Middle Range Theories: Application to nursing research* (2nd ed., pp. 326-362). Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins.

Hagerty, B., & Patusky, K. L. (2004). Mood disorders: Depression and mania. In K. M. Fortinash & P. A. H. Worret (Eds.), *Psychiatric mental health nursing* (3rd ed., pp. 195-235). St. Louis, MO: Mosby.

Hanucharunkul, S. (2007). Health Care Industry [Electronic Version]. *Nurses in primary care and the nurse practitioner role in Thailand* Retrieved 15 April 2009 from http://findarticles.com/p/articles/mi_6813/is_1_26/ai_n28469798/?tag=content:coll.

Henderson, N., & Milstein, M. M. (2003). *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA: Corwin Press.

Hengsuwanich, W. (1998). Analysis of reseach works on physical health, mental health and nutrition of Thai youth [Electronic Version]. Retrieved 4 May 2009 from <http://library.uru.ac.th/dbresearch/images/S187a.htm>.

Hetrick, S. E., Merry, S. N., McKenzie, J., Sindahl, P., & Proctor, M. (2007). Selective serotonin reuptake inhibitors (SSRIs) for depressive disorders in children and adolescents [Electronic Version]. *Cochrane Database of Systematic Reviews* Retrieved 27 January 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clsysrev/articles/CD004851/frame.html>.

- Holdsworth, N., & Paxton, R. (1999). *Managing anxiety and depression*. London: Mental Health Foundation.
- Howitt, D., & Cramer, D. (2008). *Introduction to SPSS in psychology for version 16 and earlier* (4th ed.). Harlow, Essex: Pearson Education Limited.
- Hoyert, D. L., Kung, H.-C., & Smith, B. L. (2005). Deaths: Preliminary data for 2003. *National Vital Statistics Reports*, 53(15), 1-48.
- Humphreys, J. C. (2003). Resilience in sheltered battered women. *Issues in Mental Health Nursing*, 24(2), 137-152.
- Ingram, R. E., & Siegle, G. J. (2002). Contemporary methodological issues in the study of depression: Not your father's Oldsmobile. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 86-114). New York: Guilford Press.
- Jamison, C., & Scogin, F. (1995). The outcome of cognitive bibliotherapy with depressed adults. *Journal of Consulting and Clinical Psychology*, 63(4), 644-650.
- Jorm, A. F., Allen, N. B., O'Donnell, C. P., Parslow, R. A., Purcell, R., & Morgan, A. J. (2006). Effectiveness of complementary and self-help treatments for depression in children and adolescents. *The Medical Journal of Australia*, 185(7), 368-372.
- Jorm, A. F., & Griffiths, K. M. (2005). Population promotion of informal self-help strategies for early intervention against depression and anxiety. *Psychological Medicine*, 36(1), 3-6.
- Jorm, A. F., Griffiths, K. M., Christensen, H., & Rodgers, B. (2002). Effectiveness of complementary and self-help treatments for depression. *The Medical Journal of Australia*, 176, 84-95.
- Jorm, A. F., Kelly, C. M., Wright, A., Parslow, R. A., Harris, M. G., & McGorry, P. D. (2006). Belief in dealing with depression alone: Results from community surveys of adolescents and adults. *Journal of Affective Disorders*, 96(1-2), 59-65.
- Jorm, A. F., Winsor, T. D., Dear, K. B. G., Anstey, K. J., Christensen, H., & Rodgers, B. (2005). Age group differences in psychological distress: The role of psychological risk factors that vary with age. *Psychological Medicine*, 35(9), 1253-1263.
- Kaldo, V., Cars, S., Rahnert, M., & Hans Christian Larsen, G. A. (2007). Use of a self-help book with weekly therapist contact to reduce tinnitus

distress: A randomized controlled trial. *Journal of Psychosomatic Research*, 63, 195-202.

Kaplan, H. B. (1999). Toward an understanding of resilience: A critical review of definitions and models. In M. D. Glantz & J. L. Johnson (Eds.), *Resilience and development: Positive life adaptations* (pp. 17-84). New York: Kluwer Academic/ Plenum.

Karpe, J. A., & Scogin, F. R. (2008). Self-help therapies for depression. In P. L. Watkins & G. A. Clum (Eds.), *Handbook of self-help therapies* (pp. 109-128). New York: Taylor & Francis Group.

Keller, M. B., & Boland, R. J. (1998). Implications of failing to achieve successful long-term maintenance treatment of recurrent unipolar major depression. *Biological Psychiatry*, 44, 348-360.

Kendler, K. S. (2001). Twin studies of psychiatric illness: An update. *Archives of General Psychiatry*, 58, 1005.

Kendler, K. S., Thornton, L. M., & Prescott, C. A. (2001). Gender differences in the rates of exposure to stressful life events and sensitivity to their depressogenic effects. *American Journal of Psychiatry*, 158, 587.

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., et al. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32(6), 959-976.

Khan, A., Gardner, C. O., Prescott, C. A., & Kendler, K. S. (2002). Gender differences in the symptoms of major depression in opposite-sex dizygotic twin pairs. *American Journal of Psychiatry*, 159, 1427-1429.

Khan, N., Bower, P., & Rogers, A. (2007). Guided self-help in primary care mental health: Meta-synthesis of qualitative studies of patient experience. *British Journal Psychiatry*, 191, 206-211.

Kilkkinen, A., Kao-Phipot, A., O'Neil, A., Philpot, B., Reddy, P., Bunker, S., et al. (2007). Prevalence of psychological distress, anxiety and depression in rural communities in Australia. *Australian Journal of Rural Health*, 15(2), 114-119.

Kim, H. S. (1998). Concept development of resilience. *Journal of Korean Academy of Nursing*, 28(2), 403-413.

King, D. W., King, L. A., Fairbank, J. A., Keane, T. M., & Adams, G. (1998). Resilience recovery factors in posttraumatic stress disorder among female and male Vietnam veterans: Hardiness, postwar social support,

and additional stressful life events. *Journal of Personality and Social Psychology*, 74, 420-434.

- Kocsis, J. H., Friedman, R. A., Markowitz, J. C., Leon, A. C., Miller, N. L., Gniwesch, L., et al. (1996). Maintenance therapy for chronic depression: A controlled clinical trial of desipramine. *Archives of General Psychiatry*, 53, 769-774.
- Kongsakon, R., Papadopoulos, K. I., & Saguansiritham, R. (2005). Mirtazapine in amphetamine detoxification: A placebo-controlled pilot study [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 28 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/471/CN-00529471/frame.html>.
- Kornstein, S. G., Schatzberg, A. F., Thase, M. E., Yonkers, K. A., McCullough, J. P., Keitner, G. I., et al. (2000). Gender differences in chronic major and double depression *Journal of Affective Disorders*, 60, 1-11.
- Kumper, K. L. (1999). Factors and processes contributing to resilience: The resilience framework. In M. D. Glantz & J. L. Johnson (Eds.), *Resilience and development: Positive life Adaptations* (pp. 179-224). New York: Kluwer Academic/ Plenum.
- Lemmens, G. M. D., Buysse, A., Heene, E., Eisler, I., & Demyttenaere, K. (2007). Marital satisfaction, conflict communication, attachment style and psychological distress in couples with a hospitalized depressed patient. *Acta Neuropsychiatrica*, 19, 109-117.
- Lewinsohn, P. M., Munoz, R. A., & Youngren, M. A. (1992). *Control your depression*. London: Simon & Schuster Books.
- Lorant, V., Croux, C., Weich, S., Deliege, D., Mackenbach, J., & Ansseau, M. (2007). Depression and socioeconomic risk factor: Seven year longitudinal population study. *British Journal of Psychiatry*, 190, 293-298.
- Lovell, K., Bower, P., Richards, D., Barkham, M., Sibbald, B., Roberts, C., et al. (2008). BMC Psychiatry [Electronic Version]. *Developing guided self-help for depression using the Medical Research Council complex interventions framework: A description of the modelling phase and results of an exploratory randomised controlled trial* Retrieved 11 December 2008 from <http://www.biomedcentral.com/1471-224x/8/91>.

- Lurie, A., & Monahan, K. (2001). Prevention principles for practitioners: A solution or an illusion? *Social Work in Health Care*, 33, 385-393.
- Lusardi, P. T., & Fain, J. A. (2009). Selecting a quantitative research design. In J. A. Fain (Ed.), *Reading, understanding, and applying nursing research* (3rd ed., pp. 173-229). Philadelphia: F.A. Davis.
- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12, 857-885.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience : A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- Luthar, S. S., Sawyer, J. A., & Brown, P. J. (2006). Conceptual issues in studies of resilience: Past, present, and future research. *Annals of New York Academy of Sciences* 1094, 105-115.
- Macnee, C. L., & McCabe, S. (2008). *Understanding nursing research: Using research in evidence-based practice*. Philadelphia: Lippincott Williams & Wilkins.
- Marrs, R. W. (1995). A meta-analysis of bibliotherapy studies. *American Journal of Community Psychology*, 23, 843-870.
- Massee, R. (2000). Qualitative and quantitative analyses of psychological distress: methodological complementarity and ontological incommensurability. *Qualitative Health Research*, 10, 411-423.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238.
- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, 19, 921-930.
- Matthews, J. N. S. (2006). *Introduction to randomized controlled clinical trials* (2nd ed.). FL: Chapman&Hall/CRC.
- McBurney, D. H., & White, T. L. (2007). *Research methods* (7th ed.). Belmont, CA: Thomson Wadsworth.
- McCall, W. V. (2001). Electroconvulsive therapy in the era of modern psychopharmacology. *International Journal of Neuropsychopharmacology*, 4, 315-324.

- McKendree-Smith, N., Floyd, M., & Scogin, F. (2003). Self-administered treatments for depression: A review. *Journal of Clinical Psychology*, 59(3), 275-288.
- McQueen, R. A., & Knussen, C. (2006). *Introduction to research methods and statistics in psychology*. London: Pearson Prentice Hall.
- Mead, N., MacDonald, W., Bower, P., Lovell, K., Richards, D., Roberts, C., et al. (2006). The clinical effectiveness of guided self-help versus waiting-list control in the management of anxiety and depression: A randomized controlled trial. *Psychological Medicine*, 36(5), 726-728.
- Merry, S. N., McDowell, H. H., Hetrick, S. E., Bir, J. J., & Muller, N. (2004). Psychological and/or educational interventions for the prevention of depression in children and adolescents [Electronic Version]. *Cochrane Database of Systematic Reviews*. Retrieved 18 January 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clsysrev/articles/CD003380/frame.html>.
- Miller, R. S., Wongsrichanalai, C., Buathong, N., McDaniel, P., Walsh, D. S., Knirsch, C., et al. (2006). Effective treatment of uncomplicated Plasmodium falciparum malaria with azithromycin-quinine combinations: A randomized, dose-ranging study [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 28 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/651/CN-00555651/frame.html>.
- Morgan, A. J., & Jorm, A. F. (2008). Self-help strategies that are helpful for sub-threshold depression: A Delphi consensus study [Electronic Version]. Retrieved 26 November 2008 from <http://www.ncbi.nlm.nih.gov/pubmed/18799220>.
- Munro, B. H. (2005). *Statistical methods for health care research*. Philadelphia: Lippincott William & Wilkins.
- Murray, C. J. L., & Lopez, A. D. (1997). Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study. *The Lancet*, 349, 1498-1504.
- National Statistics Organisation. (2006a). Married and divorce of Thai people [Electronic Version]. Retrieved 22 February 2009 from http://service.nso.go.th/nso/data/02/02_5_files/marry47.pdf.
- National Statistics Organisation. (2006b). Reading of Thai people [Electronic Version]. Retrieved 20 February 2009 from http://service.nso.go.th/nso/data/02/02_5_files/490714read_mm.pdf.

- Neff, K. D. (2003). Development and validation of a scale to measure self-compassion *Self and Identity*, 2, 223-250.
- Neff, K. D., Hsieh, Y.-P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4, 263-287.
- Neff, K. D., Kirkpatrick, K., & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality*, 41, 139-154.
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y.-P. (2008). Self-Compassion and Self-Construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, 39(3), 267-285.
- Nemade, R., Reiss, N. S., & Dombek, M. (2007). Historical understandings of depression [Electronic Version]. *Depression: Major depression & unipolar varieties*. Retrieved 18 March 2009 from http://www.mentalhelp.net/poc/view_doc.php?type=doc&id=12995&cn=5.
- Neukrug, E. (2000). Variety is the spice of life: A developmental and diagnostic approach to choosing homework assignment. In H. Rosenthal (Ed.), *Favorite counseling and therapy homework assignments: Leading therapists share their most creative strategies* (pp. 161-165): Routledge.
- Nintachan, P., & Moon, M. W. (2007). Modification and translation of the Thai version of the youth risk behavior survey. *Journal of Transcultural Nursing*, 18(2), 127-134.
- Norcross, J. C. (2000). Here comes the self-help revolution in mental health. *Psychotherapy: Theory, Research, Practice, and Training*, 37, 370-377.
- Olsen, M. A. (2007). *Bibliotherapy: School psychologists' report of use and efficacy*. Provo, UT: Brigham Young University.
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology*, 91(4), 730-749.
- Padee, W. (1994). *The effect of bibliotherapy on reducing cancer patient anxiety and depression*. Khon Kaen University, Khon Kaen, Thailand.
- Palazidou, E., & Tiffin, E. (2002). *Depression*. London: Mosby.

- Pallant, J. F. (2007). *SPSS survival manual: A step-by-step guide to data analysis using SPSS for Window (Version 15)* (3rd ed.). Crows Nest, NSW, Australia: Allen & Unwin.
- Pantalon, M. V., Lubetkin, B. S., & Fishman, S. T. (1995). Use and effectiveness of self-help books in the practice of cognitive and behavioral therapy. *Cognitive and Behavioral Practice*, 2, 213-222.
- Pardeck, J. T. (1998). *Using books in clinical social work practice*. Binghamton, NY: Hawthorne.
- Patel, V. (2006). Regional Health Forum WHO South-East Asia Region [Electronic Version], 5. Retrieved 14 May 2007 from http://www.searo.who.int/EN/Section1243/Section1310/Section1343/Section1344/Section1353_5271.htm.
- Patterson, J. (2002). Understanding family resilience. *Journal of Clinical Psychology*, 58, 233-246.
- Phipps, A. B., Eldelman, S., Perkins, D. P., Barisic, M. L., Deane, F. P., & Gould, G. V. (2004). *The Good Mood Guide: A self-help manual for depression* (2nd ed.). Wollongong, NSW: Lifeline South Coast (NSW).
- Polit, D. F., & Beck, C. T. (2006). *Essentials of nursing research: Method, appraisal, and utilization* (6th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Pornchaikate, A. (1991). *Effect of bibliotherapy on the self-esteem of the cripples in Srisangwal school*. Chulalongkorn University, Bangkok, Thailand.
- Presbury, J. H., Echterling, L. G., & McKee, J. E. (2008). *Beyond brief counselling and therapy: An integrative approach* (2nd ed.). Upper Saddle River, NJ: Pearson Practice Hall.
- Puri, B. K., & Hall, A. D. (2004). *Revision notes in psychiatry*. London: Arnold.
- Puri, B. K., Laking, P. J., & Treasaden, I. H. (2002). *Textbook of psychiatry* (2nd ed.). London: Churchill Livingstone.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.

- Rayner, M., & Montague, M. (1999). *Resilient children and young people*. Geelong, Vic: Deakin Human Services Australia.
- Reivich, K., Gillham, J. E., Chaplin, T. M., & Seligman, M. E. P. (2005). Handbook of resilience in children. In S. Goldstein & R. B. Brooks (Eds.), *From helplessness to optimism: The role of resilience in treating and preventing depression in youth* (pp. 223-238). New York: Springer.
- Research Promotion and Development Center Siam University. (2008). Ethics of researcher [Electronic Version]. *Ethics in human experimentation*. Retrieved 4 May 2009 from <http://research.siam.edu/manual008.php>.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology, 58*(3), 307-321.
- Ridner, S. H. (2004). Psychological distress: Concept analysis. *Journal of Advanced Nursing, 45*(5), 536-545.
- Riley, J. R., & Masten, A. S. (2005). Resilience in context. In R. D. Peter, B. Leadbeater & R. J. McMahon (Eds.), *Resilience in children, families, communities* (pp. 13-26). New York: Springer.
- Rowe, D. (1996). *Depression: the way out of your prison*. London: Routledge.
- Royal College of Psychiatrists. (2008). Cognitive Behavioral Therapy (CBT) (Publication. Retrieved 2 September 2008: <http://www.rcpsych.ac.uk/mentalhealthinformation/youngpeople/cognitivebehaviouraltherapy.aspx>
- Rungreangkulkij, S., & Chesla, C. (2001). Smooth a heart with water: Thai mothers care for a child with schizophrenia. *Archives of Psychiatric Nursing, 15*(3), 120-127.
- Rutter, M. (2001). *Psychological adversity: Risk, resilience, and recovery*. Retrieved 5 January 2009, from <http://books.google.com/books?hl=th&lr=&id=UhZzofRZ4YoC&oi=fnd&pg=PA13&dq=Psychological+adversity:+Risk,+resilience,+and+recovery&ots=ew46TiBdzR&sig=EkM3qqSLtdlE3uSLBZqUHoxljb8>.
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of New York Academy of Sciences, 1094*, 1-12.
- Rutter, M. (2007). Resilience, competence, and coping. *Child Abuse & Neglect, 31*, 205-209.

- Sadock, B. J., & Sadock, V. A. (2003). *Synopsis of psychiatry: Behavioral science/clinical psychiatry*. Philadelphia: Lippincott Williams & Wilkins.
- Sadock, B. J., & Sadock, V. A. (2004). *Kaplan & Sadock's concise textbook of clinical psychiatry* (2nd ed.). Philadelphia: Lippincott Williams & Wilkins.
- Sainamparn, D. (2003). *The effect of bibliotherapy on self-esteem of cripple children*. Mahidol University, Bangkok, Thailand.
- Salkovskis, P., Rimes, K., Stephenson, D., Sacks, G., & Scott, J. (2006). A randomized controlled trial of the use of self-help materials in addition to standard general practice treatment of depression compared to standard treatment alone. *Psychological Medicine*, 36(3), 325-333.
- Sameroff, A. J., & Rosenblum, K. L. (2006). Psychosocial constraints on the development of resilience. *Annals of New York Academy of Sciences*, 1094, 116-124.
- Sanansilp, V., Mahuntasanapong, W., & Phoncharoensomboon, P. (2002). Starting intravenous morphine in the postanesthesia care unit yielded better postoperative analgesia [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 29 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/732/CN-00411732/frame.html>.
- Schoon, I. (2006). *Risk and resilience: A daptation in changing times*. Cambridge, U.K.: Cambridge University Press.
- Scogin, F. (2003). Introduction: Integrating self-help into psychotherapy. *JCLP/ In Session: Psychotherapy in Practice*, 59(2), 175-176.
- Scogin, F., Bynum, J., Stephens, G., & Calhoon, S. (1990). Efficacy of self-administered treatment programs: Meta-analytic review. *Professional Psychology: Research and Practice*, 21(1), 42-47.
- Scogin, F., Jamison, C., & Davis, N. (1990). Two-year follow-up of bibliotherapy for depression in older adults. *Journal of Consulting and Clinical Psychology*, 58(5), 665-667.
- Scogin, F., Jamison, C., & Gochneaur, K. (1989). Comparative efficacy of cognitive and behavioral bibliotherapy for mildly and moderately depressed older adults. *Journal of Consulting and Clinical Psychology*, 57(3), 403-407.

- Scott, J., & Dickey, B. (2003). Global burden of depression: the intersection of culture and medicine. *British Journal of Psychiatry*, 183, 92-94.
- Scott, J., Palmer, S., Paykel, E., Teasdale, J., & Hayhurst, H. (2003). Use of cognitive therapy for relapse prevention in chronic depression: Cost effective study. *British Journal of Psychiatry*, 182, 221-227.
- Semple, D., Smyth, R., Burns, J., Darjee, R., & McIntosh, A. (2005). *Oxford handbook of psychiatry*. New York: Oxford University Press.
- Sethabouppha, H., & Kane, C. (2005). Caring for the seriously mentally ill in Thailand: Buddhist family caregiving. *Archives of Psychiatric Nursing*, 19(2), 44-57.
- Sethabuth, J. (2002). Alumni Faculty of Political Science Thammasat University [Electronic Version]. *Ethical Issues in social sciences research* Retrieved 18 April 2009 from <http://www.singhadang.org/modules.php?name=Content&pa=showpage&pid=5>.
- Sheridan, S. M., Eagle, J. W., & Dowd, S. E. (2005). Handbook of resilience in children. In S. Goldstein & R. B. Brooks (Eds.), *Families as contexts for children's adaptation* (pp. 165-179). New York: Springer.
- Shives, L. R. (2008). *Basic concept of psychiatric-mental health nursing* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Silverstein, B. (1999). Gender difference in the prevalence of clinical depression: role played by depression associated with somatic symptoms. *American Journal of Psychiatry*, 156, 480-482.
- Siricharoenwong, K. (1989). *The effect of applied-bibliotherapy on separation anxiety from the caregiver in hospitalized preschooler*. Mahidol University, Bangkok, Thailand.
- Smith, N. M., Floyd, M. R., Scogin, F., & Jamison, C. S. (1997). Three-year follow-up of bibliotherapy for depression. *Journal of Consulting and Clinical Psychology*, 65(2), 324-327.
- Solomon, D. A., Keller, M. B., Leon, A. C., Mueller, T. I., Lavori, P. W., Shea, M. T., et al. (2000). Multiple recurrences of major depressive disorder. *American Journal of Psychiatry*, 157(2), 229-233.
- Spangler, D. L., Simons, A. D., Monroe, S. M., & Thase, M. E. (1997). Response to cognitive-behavioral therapy in depression: Effect of pretreatment cognitive dysfunction and life stress. *Journal of Consulting and Clinical Psychology*, 65(4), 568-575.

- Sripalakit, P., Nermhom, P., Maphanta, S., Polnok, S., Jianmongkol, P., & Saraphanchotiwitthaya, A. (2005). Bioequivalence evaluation of two formulations of doxazosin tablet in healthy Thai male volunteers [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 29 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/205/CN-00553205/frame.html>.
- Steinhardt, M., & Dolbier, C. (2008). Evaluation of a resilience intervention to enhance coping strategies and protective factors and decrease symptomatology. (Publication. Retrieved 29 January 2009, from The Cochrane Central Register of Controlled Trials (CENTRAL) <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/600/CN-00630600/frame.html>
- Suan Prung Psychiatric Hospital. (2007). *Annual report 2007*. Chiang Mai, Thailand: Suan Prung Psychiatric Hospital.
- Takviriyannun, N. (2008). Development and testing of the Resilience FactorsScale for Thai adolescents. *Nursing and Health Sciences*, 10, 203-208.
- Talala, K., Huurre, T., Aro, H., Martelin, T., & Prattala, R. (2008). Socio-demographic differences in self-reported psychological distress among 25-to-64 year-old Finns. *Social Indicators Research*, 86(2), 323-335.
- Thase, M. E., Jindal, R., & Howland, R. H. (2002). Biological aspects of depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 192-218). New York: Guilford Press.
- Thompson, M. C., & McNeil, F. M. (2000). Identifying and treating adolescent depression. *Western Journal of Medicine*, 172 (March), 172-176.
- Townsend, M. D. (2008). *Essentials of psychiatric mental health nursing*. Philadelphia: F.A. David Company.
- Trangkasombat, U., Larbboonsarp, V., & Havanond, P. (1997). CES-D as screen for depression in adolescents. *Journal of the Medical Association of Thailand*, 42(1), 2-13.
- Tugade, M. M., Fredrickson, B. L., & Barrett, L. F. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of Personality*, 72(6), 1161-1190.

- Tuntipiwithanasakul, P. (2008). *Resilience package*. Retrieved 2 January 2009, from <http://www.depressionthai.com/download/dl.asp?id=132&uname=>.
- Tusaie, K. (2004). Resilience: A historical review of the construct [Electronic Version]. *Holistic Nursing Practice*. Retrieved 15 December 2008 from <http://www.hnpjjournal.com/pt/re/hnp/abstract.00004650-200401000-00002.htm;jsessionid=JG1JybRv1WQ8Q3Z4X6HDhxpTnnZY14wLkPYNnZchTyyQbT82qKvJ!-269263472!181195628!8091!-1>.
- Tuunainen, A., Kripke, D. F., & Endo, T. (2004). Light therapy for non-seasonal depression [Electronic Version]. *Cochrane Database of Systematic Reviews*. Retrieved 18 January 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clsysrev/articles/CD004050/frame.html>.
- Wagnild, G. M. (2003). Resilience and successful aging: Comparison among low and high income older adults. *Journal of Gerontological Nursing*, 29(12), 42-49.
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1, 165-178.
- Wallace, J., Schneider, T., & McGuffin, P. (2002). Genetics of depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 169-191). New York: Guilford Press.
- Watkins, P. L. (2008). Self-help therapies: Past and present. In P. L. Watkins & G. A. Clum (Eds.), *Handbook of self-help therapies* (pp. 1-24). New York: Taylor & Francis Group.
- Wattana, C., Srisuphan, W., Pothiban, L., & Upchurch, S. L. (2007). Effects of a diabetes self-management program on glycemic control, coronary heart disease risk, and quality of life among Thai patients with type 2 diabetes [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 28 April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/460/CN-00588460/frame.html>.
- Weich, S., Nazareth, I., Morgan, L., & King, M. (2007). Treatment of depression in primary care. *British Journal of Psychiatry*, 191, 164-169.
- Wendler, D., Krohmal, B., Emanuel, E., Grady, C., & ESPRIT Group. (2008). Why patients continue to participate in clinical research [Electronic Version]. *Cochrane Central Register of Controlled Trials*. Retrieved 29

April 2009 from <http://0-www.mrw.interscience.wiley.com.library.vu.edu.au/cochrane/clcentral/articles/407/CN-00640407/frame.html>.

- Werner, E. E. (1995). Resilience in development. *Current Directions in Psychological Science*, 4, 81-85.
- Whittemore, R., & Grey, M. (2006). Experimental and quasiexperimental designs. In G. L. Wood & J. Haber (Eds.), *Nursing Research: Methods and critical appraisal for evidence-based practice* (pp. 220-237). St. Louis, MO: Mosby Elsevier.
- Wilson, K. C. M., Mottram, P. G., Ashworth, L. A., & Abou-saleh, M. T. (2003). Older community residents with depression: long-term treatment with sertraline *British Journal of Psychiatry*, 182, 492-497.
- Wongwichai, C. (2006). Research in human: "it call the human trial" [Electronic Version]. Retrieved 4 May 2009 from <http://www.healthdev.org/viewmsg.aspx?msgid=017ebb06-93ec-40a0-812c-ab83e2a9f3c4>.
- Wood, S. J. (2005). Mood disorders. In M. A. Boyd (Ed.), *Psychiatric nursing: Contemporary practice* (pp. 333-349). Philadelphia: Lippincott Williams & Wilkins.
- World Health Organisation and Ministry of Public Health. (2007). *WHO-AIMS Report on mental health system in Thailand*. Bangkok, Thailand: WHO and Ministry of Public Health.
- World Health Organization. (1993). *The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic criteria for research* (11 ed.). Geneva: World Health Organization.
- World Health Organization. (2001). Fact Sheet: The World Health Report 2001 [Electronic Version]. *Mental and neurological disorders*. Retrieved 16 September 2008 from http://www.who-int/uhr/2001/media_centro/en/whr01_fact_sheet1_eu.pdf.
- World Health Organization. (2003). WHO World Mental Health (WMH) initiative interview translation guidelines: Abridged version.
- World Health Organization. (2006a). Regional Health Forum WHO South-East Asia Region [Electronic Version]. *Mental Health in South-East Asia: Reaching out to the community*, 5. Retrieved 8 November 2008 from http://www.searo.who.int/EN/Section1243/Section1310/Section1343/Section1344/Section1353_5279.htm.

- World Health Organization. (2006b). Regional Health Forum WHO South-East Asia Region [Electronic Version]. *Is depression a Disease of Poverty?*, 5. Retrieved 9 November 2008 from http://www.searo.who.int/EN/Section1243/Section1310/Section1343/Section1344/Section1353_5271.htm.
- World Health Organization. (2007). Mental Health and Human Rights [Electronic Version]. Retrieved 12 May 2007 from http://www.who.int/mental_health/en/.
- Wright, M., & Masten, A. S. (2005). Resilience processes in development: Fostering positive adaptation in the context of adversity. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 17-38). New York: Springer.
- Ya-orm, Y. (2001). *The effect of promoting family participation in patient care of head injury patients on patients' health status*. Mahidol University, Bangkok.
- Zauszniewski, J. A., & Rong, J.-R. (1999). Depression cognitions and psychosocial functioning: A test of Beck's cognitive theory. *Archives of Psychiatric Nursing*, *xiii*(6), 286-293.

Appendix A
CONSORT checklist

CONSORT Statement 2001 - Checklist 
Items to include when reporting a randomized trial

<i>PAPER SECTION And topic</i>	<i>Item</i>	<i>Descriptor</i>	<i>Report ed on Page #</i>
<i>TITLE & ABSTRACT</i>	1	How participants were allocated to interventions (<i>e.g.</i> , "random allocation", "randomized", or "randomly assigned").	
<i>INTRODUCTION</i> Background	2	<u>Scientific background and explanation of rationale.</u>	
<i>METHODS</i> Participants	3	<u>Eligibility criteria for participants and the settings and locations where the data were collected.</u>	
Interventions	4	<u>Precise details of the interventions intended for each group and how and when they were actually administered.</u>	
Objectives	5	<u>Specific objectives and hypotheses.</u>	
Outcomes	6	<u>Clearly defined primary and secondary outcome measures and, when applicable, any methods used to enhance the quality of measurements (<i>e.g.</i>, multiple observations, training of assessors).</u>	
Sample size	7	<u>How sample size was determined and, when applicable, explanation of any interim analyses and stopping rules.</u>	
Randomization -- Sequence generation	8	<u>Method used to generate the random allocation sequence, including details of any restrictions (<i>e.g.</i>, blocking, stratification)</u>	
Randomization -- Allocation concealment	9	<u>Method used to implement the random allocation sequence (<i>e.g.</i>, numbered containers or central telephone), clarifying whether the sequence was concealed until interventions were assigned.</u>	
Randomization -- Implementation	10	<u>Who generated the allocation sequence, who enrolled participants, and who assigned participants to their groups.</u>	
Blinding (masking)	11	<u>Whether or not participants, those administering the interventions, and those assessing the outcomes were blinded to group assignment. If done, how the success of blinding was evaluated.</u>	
Statistical methods	12	<u>Statistical methods used to compare groups for primary outcome(s); Methods for additional analyses, such as subgroup analyses and adjusted analyses.</u>	
<i>RESULTS</i> Participant flow	13	<u>Flow of participants through each stage (a diagram is strongly recommended). Specifically, for each group report the numbers of participants randomly assigned, receiving intended treatment, completing the study protocol, and analyzed for the primary outcome. Describe protocol deviations from study as planned, together with reasons.</u>	
Recruitment	14	<u>Dates defining the periods of recruitment and follow-up.</u>	
Baseline data	15	<u>Baseline demographic and clinical characteristics of each group.</u>	
Numbers analyzed	16	<u>Number of participants (denominator) in each group included in each analysis and whether the analysis was by "intention-to-treat". State the results in absolute numbers when feasible (<i>e.g.</i>, 10/20, not 50%).</u>	
Outcomes and estimation	17	<u>For each primary and secondary outcome, a summary of results for each group, and the estimated effect size and its precision (<i>e.g.</i>, 95% confidence interval).</u>	
Ancillary analyses	18	<u>Address multiplicity by reporting any other analyses performed, including subgroup analyses and adjusted analyses, indicating those pre-specified and those exploratory.</u>	
Adverse events	19	<u>All important adverse events or side effects in each intervention group.</u>	
<i>DISCUSSION</i> Interpretation	20	<u>Interpretation of the results, taking into account study hypotheses, sources of potential bias or imprecision and the dangers associated with multiplicity of analyses and outcomes.</u>	
Generalizability	21	<u>Generalizability (external validity) of the trial findings.</u>	
Overall evidence	22	<u>General interpretation of the results in the context of current evidence.</u>	

Appendix B

Plain Language Statement (English and Thai versions)

Plain Language Statement

INFORMATION TO PARTICIPANTS WITH DEPRESSION:

Project Title: Evaluation of the effect of cognitive behavioural bibliotherapy self-help intervention program on the promotion of resilience in individuals with depression

Principal Investigator: Professor Terence McCann

Co- investigator: Wallapa Songprakun

Dear individual with depression,

My name is Wallapa Songprakun. I am a Registered Nurse with a background in mental health and psychiatric nursing. I would like to invite you to take part in a study about the effectiveness of a self-help manual, for individuals with depression. The study involves you reading a self-help manual with a close family member to assist you to recover from depression. The study is part of a doctoral degree in nursing that I am doing at the School of Nursing and Midwifery, Victoria University, Melbourne, Australia.

This Participant Information letter contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in the project before you decide whether to take part.

Please read this Participant Information carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

Once you understand what the project is about, and if you agree to take part, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand the information and that you give your consent to participate in the research project.

You will be given a copy of the Participant Information and Consent Form to keep as a record.

Purpose and Background

The purpose of this project is to find out how useful a self-help manual and working with a close family member is to assist you recovery from depression.

A total of 52 participants with depression will take part in the project. You are invited to participate in the research if you:

- are a Thai individual who is diagnosed with a moderate depressive episode
- live in Chiang Mai province
- are aged between 18-60 years old
- are able to read and write in Thai language
- have no history of developmental disability or psychosis

- are currently receiving treatment for depression in the outpatient department at Suan Prung Psychiatric Hospital
- have a working telephone

Procedures

The study uses a self-help manual to assist you to recover from depression. The manual takes 8 weeks to work through, and each week the manual will ask you to complete some activities.

You will be placed in one of two groups.

- In the first group, each participant will work through the self-help manual. You will continue to receive the standard treatment from the outpatient department, Suan Prung Psychiatric Hospital. You will be asked to complete questionnaires three times during the study: week 1, week 8, and week 12.
- In the second group, each participant will continue to receive the standard treatment from staff at the outpatients department, Suan Prung Psychiatric Hospital. Later on in the study, each participant in this group will be given the self-help manual to work through. You will be asked to complete questionnaires five times during the study: week 1, week 8, week 12, week 20, and week 24.

Possible Benefits

We cannot guarantee that you will benefit from taking part in this study. However, you may gain some benefit from taking part as the self-help manual is designed to assist you to deal with your depression by reducing your negative thoughts, increasing your positive activities, and improving your behavioural coping and interpersonal skills.

Possible Risks

In the unlikely event of you experiencing an uncomfortable feeling while working through the self-help manual, you will be offered an opportunity to decide whether to continue in the study. If you still feel uncomfortable and would like additional assistance, you will be referred to mental health service for ongoing support.

In addition, the self-help manual asks you to monitor any thoughts that you might have about harming yourself as a result of deterioration in your level of depression. In the unlikely event that you experience these types of thoughts, please seek immediate medical attention at any of the following mental health services:

- Mental Health Crisis Centre, Suan Prung Psychiatric Hospital. This is a 24-hour service (Tel. (66) (053) 201 191 or (66) (053) 203 700)
- Suan Prung Mental Health Counselling Hotline. This is a 24-hour service (Tel. (66) (053) 276 750 or (66) (053) 276 153 ext. 250)
- Suan Prung Psychiatric Hospital (Tel. (66) (053) 280 228)

If you tell Wallapa Songprakun that you are experiencing these thoughts she will immediately report this to mental health staff at Suan Prung Psychiatric Hospital.

Alternatives to Participation

Participation or non-participation in this project will not be detrimental to you and will not affect the treatment that you receive at Suan Prung Psychiatric Hospital.

Privacy, Confidentiality

Your confidentiality will be protected in this study through the use of numerical codes. Any information obtained in connection with this research that can identify you will remain confidential. During the project, consent forms and a hard copy of data will be stored in a locked filing cabinet in Wallapa Songprakun's office in the School of Nursing and Midwifery, Victoria University, Melbourne, Australia. Electronic data files will be stored on Terence McCann and Wallapa Songprakun's computers, protected by a password known only to these investigators, who will have joint responsibility for security of the data, which will be destroyed after five years.

Results of Project

If you wish, a written summary of the results of the study will be sent to you.

Further Information or Any Problems

If you require further information, or have any problems concerning this project, you can contact the researcher:

Terence McCann, International Telephone: +61 3 9919 2325, Mobile phone: +61 4 0320 9453

Wallapa Songprakun, Telephone: (66) (53) 243 373, Mobile phone: (66) (08) 1783 2797

Other Issues

If you have any complaints about any aspect of the research, the procedures are being conducted, or any questions about your rights as a research participant, you may contact:

Name: Paritat Silpakit, Psychiatrist
Position: Vice- Director of Suan Prung Psychiatric Hospital, Chiang Mai, Thailand
Telephone: (66) (053) 280 228
Mobile phone: (66) (08) 1881 2522

Name: Mr Anthony Benka
Position: Secretary, Victoria University Human Research Ethics Committee
International telephone: (61) (3) 9919 4148

Participation is voluntary

Participation in the project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part, you are free to withdraw from the project at any time, but please notify the researcher before you withdraw. If you decide to withdraw, it will not affect the routine treatment that you receive at Suan Prung Psychiatric Hospital.

Before you make your decision, the researcher will give you the opportunity to ask questions about matters you do not understand and have your answered to your satisfaction, prior to written consent being obtained.

Ethical Guidelines

The ethical aspects of this research project have been approved to protect the interests of individuals who agree to participate in human research studies by the Victoria University Human Research Ethics Committee, and the Research Committee of the Department of Mental Health, Ministry of Public Health, Thailand.



(Thai version)

เอกสารแนะนำ

สำหรับผู้เข้าร่วมโครงการวิจัยที่มีภาวะซึมเศร้า

ชื่อโครงการวิจัย: ผลของโปรแกรมช่วยเหลือตนเองเพื่อปรับกระบวนการคิดและพฤติกรรมต่อการเพิ่มระดับความเข้มแข็งทางจิตใจในผู้ที่มีภาวะซึมเศร้า

ชื่อผู้วิจัย: ศาสตราจารย์ ดร. เทอเรนซ์ แมคแคนน์ ผู้วิจัยหลัก
นางวัลลภา ทรงพระคุณ ผู้ช่วยนักวิจัย
นายแพทย์ปริทรรศ ศิลปกิจ ผู้ร่วมวิจัย

เรียน ผู้เข้าร่วมโครงการวิจัยที่มีภาวะซึมเศร้า

ดิฉัน นางวัลลภา ทรงพระคุณ เป็นนักศึกษาระดับปริญญาเอก สาขาการพยาบาล ของ โรงเรียนพยาบาลและผดุงครรภ์ มหาวิทยาลัยวิกตอเรีย ประเทศออสเตรเลีย เป็นพยาบาลวิชาชีพ ที่มีพื้นฐานความรู้และความเชี่ยวชาญทางการพยาบาลสุขภาพจิตและจิตเวช

ดิฉันใคร่ขอเรียนเชิญท่านเข้าร่วมโครงการวิจัยเพื่อทำการศึกษเกี่ยวกับ ประสิทธิภาพของคู่มือการช่วยเหลือตนเอง สำหรับผู้ที่มีภาวะซึมเศร้า โดยการอ่าน ทำความเข้าใจ และทำกิจกรรมตามที่ระบุไว้ในคู่มือ เพื่อเป็นการช่วยฟื้นฟูสภาพท่านจากภาวะซึมเศร้า

เอกสารแนะนำฉบับนี้ ประกอบด้วยรายละเอียดข้อมูลที่ชี้แจงเกี่ยวกับโครงการวิจัย ขอความกรุณาท่านอ่านและทำความเข้าใจเกี่ยวกับรายละเอียดของโครงการวิจัย อย่างชัดเจน ก่อนที่จะตัดสินใจเข้าร่วมโครงการนี้ ท่านสามารถสอบถามข้อมูลต่าง ๆ ที่เกี่ยวข้องกับการเข้าร่วมโครงการวิจัย เพื่อเกิดความเข้าใจอย่างละเอียด ชัดเจน จากผู้วิจัย ตามที่ท่านต้องการได้ตลอดเวลา นอกจากนี้ท่านสามารถปรึกษากับญาติ เพื่อน หรือ เจ้าหน้าที่ทางสุขภาพ ถึงการเข้าร่วมโครงการวิจัย ก่อนที่ท่านจะตัดสินใจในการเข้าร่วม หรือไม่เข้าร่วมโครงการวิจัย

เมื่อท่านเข้าใจข้อมูลของโครงการอย่างดีแล้ว และสนใจที่จะเข้าร่วมโครงการวิจัยนี้ ท่านจะได้รับเอกสารยินยอมเข้าร่วมโครงการวิจัย และลงลายมือชื่อเพื่อยืนยันว่า ท่านได้ทำความเข้าใจในรายละเอียด ข้อมูลต่าง ๆ ของโครงการวิจัยอย่างชัดเจนดีแล้ว ก่อนตัดสินใจเข้าร่วมโครงการนี้ นอกจากนี้ท่านจะได้รับสำเนาเอกสารแนะนำ และเอกสารยินยอมเข้าร่วมโครงการวิจัย เพื่อเก็บไว้เป็นหลักฐานในการเข้าร่วมโครงการวิจัยนี้

วัตถุประสงค์โครงการวิจัย:

การศึกษาวิจัยนี้มีวัตถุประสงค์เพื่อทดสอบประสิทธิภาพของการใช้คู่มือช่วยเหลือตนเองในการฟื้นฟูสภาพท่านจากภาวะซึมเศร้า

ผู้เข้าร่วมโครงการวิจัยนี้มีจำนวนประมาณ 52 คน และท่านได้รับการเชิญเข้าร่วมโครงการนี้ หากท่านมีคุณสมบัติดังนี้

- สัญชาติไทย และได้รับการวินิจฉัยเป็นภาวะซึมเศร้าระดับปานกลาง
- พักอาศัยอยู่ในเขตจังหวัดเชียงใหม่ และเขตพื้นที่ใกล้เคียง
- อายุระหว่าง 18-60 ปี
- สามารถอ่านและเขียนภาษาไทยได้
- ไม่มีประวัติการเจ็บป่วยเป็นโรคจิต หรือ มีปัญหาทางด้านพัฒนาการทางสมอง
- อยู่ระหว่างการรับการรักษาภาวะซึมเศร้า ที่แผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง
- มีโทรศัพท์ที่สามารถติดต่อได้

วิธีการศึกษาวิจัย

การศึกษารั้งนี้ท่านจะได้ใช้คู่มือช่วยเหลือตนเองเพื่อช่วยฟื้นฟูสภาพท่านจากภาวะซึมเศร้า โดยการอ่าน ทำความเข้าใจ และทำกิจกรรมตามที่ระบุไว้ในคู่มือ ซึ่งคู่มือจะประกอบด้วยเนื้อหาและกิจกรรม จำนวน 8 บท ภายในระยะเวลาเวลา 8 สัปดาห์ โดยแต่ละสัปดาห์ จะใช้เวลาประมาณ 3 ชั่วโมง สำหรับทำความเข้าใจ และปฏิบัติตามกิจกรรมที่กำหนดไว้ในคู่มือ จำนวน 1 บท ทั้งนี้ท่านสามารถใช้คู่มือช่วยเหลือตนเองนี้ร่วมกับญาติผู้ดูแลที่บ้านของท่านเอง

ในการเข้าร่วมโครงการวิจัยนี้ ท่านจะถูกสุ่มคัดเลือกให้เข้าร่วมในกลุ่มใดกลุ่มหนึ่งใน 2 กลุ่ม ดังนี้

- กลุ่มที่ 1 : ผู้เข้าร่วมโครงการที่มีภาวะซึมเศร้าแต่ละคน จะใช้คู่มือช่วยเหลือตนเอง โดยได้รับการรักษาอย่างต่อเนื่องจากแผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง ทั้งนี้ท่านจะได้ตอบแบบสอบถามจำนวน 3 ครั้ง ระหว่างการเข้าร่วมโครงการนี้ คือ ในสัปดาห์ที่ 1 สัปดาห์ที่ 8 และสัปดาห์ที่ 12
- กลุ่มที่ 2 : ผู้เข้าร่วมโครงการที่มีภาวะซึมเศร้า จะได้รับการรักษาต่อเนื่องจากแผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง ในช่วง 12 สัปดาห์ แรกของการเข้าร่วมโครงการ หลังจากนั้น ผู้เข้าร่วมโครงการกลุ่มนี้ จะได้รับคู่มือช่วยเหลือตนเองในสัปดาห์ที่ 12 จากนั้นใช้คู่มือช่วยเหลือตนเองร่วมกับญาติผู้ดูแล โดยยังได้รับการรักษาต่อเนื่องจากแผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง ทั้งนี้ผู้เข้าร่วมโครงการกลุ่มนี้ต้องตอบแบบสอบถาม จำนวน 5 ครั้ง ระหว่างการเข้าร่วมโครงการนี้ คือ ในสัปดาห์ที่ 1 สัปดาห์ที่ 8 สัปดาห์ที่ 12 สัปดาห์ที่ 20 และสัปดาห์ที่ 24

ประโยชน์ที่คาดว่าจะเกิดขึ้นต่อผู้เข้าร่วมโครงการวิจัย

ถึงแม้ผู้วิจัยจะไม่สามารถรับรองผลการวิจัยในการฟื้นฟูสภาพจากภาวะซึมเศร้าจากการเข้าร่วมโครงการวิจัยนี้ได้ อย่างไรก็ตาม ท่านอาจได้รับประโยชน์จากการใช้คู่มือช่วยเหลือตนเอง ซึ่งสร้างขึ้นเพื่อช่วยให้ท่านสามารถเผชิญกับภาวะซึมเศร้า โดยคู่มือช่วยเหลือตนเองนี้จะช่วยปรับวิถีคิดทางด้านลบของท่านเป็นความคิดทางด้านบวก กระตุ้นให้ท่านได้ทำกิจกรรมที่ส่งเสริมพฤติกรรมในการเผชิญปัญหา และเสริมทักษะการมีสัมพันธภาพกับผู้อื่นให้มีประสิทธิภาพมากขึ้น

ความเสี่ยงที่คาดว่าจะเกิดต่อผู้เข้าร่วมโครงการวิจัย

จากการเข้าร่วมโครงการวิจัยนี้ ท่านอาจเกิดความรู้สึกไม่สบายใจในขณะที่ใช้คู่มือช่วยเหลือตนเอง หากท่านเกิดความรู้สึกดังกล่าว ท่านสามารถตัดสินใจที่จะใช้คู่มือต่อไป หรือ หยุดการใช้คู่มือ โดยท่านสามารถติดต่อผู้วิจัยเพื่อรับการดูแลช่วยเหลือทางจิตใจ และหากท่านต้องการความช่วยเหลือเพิ่มเติม ท่านจะได้รับการช่วยเหลือนำเสนอเพื่อรับการดูแลช่วยเหลือจากทีมสุขภาพจิต แผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง

การป้องกันความเสี่ยง

ท่านสามารถประเมินความคิดอยากทำร้ายตนเองด้วยตนเองจากแบบประเมินที่ระบุไว้ในคู่มือ ซึ่งความคิดอยากทำร้ายตนเองที่อาจเกิดขึ้นนี้ เป็นผลมาจากระดับภาวะซึมเศร้าที่อาจเพิ่มขึ้นจากอาการของความเจ็บป่วย หากท่านเกิดความคิดอยากทำร้ายตนเองในระหว่างเข้าร่วมโครงการวิจัยนี้ กรุณาติดต่อหน่วยงานที่ให้การช่วยเหลือทางโทรศัพท์โดยเร่งด่วน ดังนี้

- บริการปรึกษาสุขภาพจิตทางโทรศัพท์ ให้บริการ 24 ชั่วโมง ทางเบอร์โทร. (053) 276-750 หรือ (053) 276-153 ต่อ 250
- ศูนย์วิกฤติสุขภาพจิต ให้บริการ 24 ชั่วโมง ทางเบอร์โทร. (053) 201-191 หรือ (053) 203-700
- โรงพยาบาลสวนปรุง ให้บริการในเวลาราชการ เบอร์โทร (053) 280-228 ต่อ แผนกผู้ป่วยนอก

ทั้งนี้หากท่านแจ้งต่อผู้วิจัย (นางวัลลภา ทรงพระคุณ) ถึงกรณีที่ท่านเกิดความคิดอยากทำร้ายตนเอง ขณะเข้าร่วมโครงการนี้ ผู้วิจัยจะรายงานต่อทีมสุขภาพจิต ของแผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง เพื่อส่งตัวท่านเข้ารับการรักษาช่วยเหลืออย่างเร่งด่วนต่อไป

ทางเลือกในการเข้าร่วมโครงการวิจัย

การตัดสินใจเข้าร่วม หรือ ไม่เข้าร่วมโครงการวิจัยนี้ จะไม่ก่อให้เกิดความเสียหายต่อท่าน และไม่มีผลกระทบใด ๆ ต่อแผนการรักษาที่ท่านได้รับต่อเนื่องจากแผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง

ขอบเขตการดูแลและรักษาความลับของข้อมูลต่าง ๆ ของผู้เข้าร่วมโครงการวิจัย

การดูแลและรักษาความลับของข้อมูลของท่านจากการโครงการนี้ จะใช้รหัสตัวเลขแทนการใช้ชื่อและนามสกุลจริงของท่าน และในระหว่างการดำเนินการวิจัย แบบยินยอมเข้าร่วมโครงการวิจัย และเอกสารข้อมูลทุกชนิดของท่าน จะถูกจัดเก็บไว้ในตู้เอกสารที่สามารถล็อกกุญแจได้ ในที่ทำงานของ ศาสตราจารย์ ดร .เทอเรนซ์ แมคแคนน์ ณ .โรงเรียนพยาบาลและผดุงครรภ์ มหาวิทยาลัยวิกตอเรีย ประเทศออสเตรเลีย ส่วนข้อมูลทางอิเล็กทรอนิกส์ จะถูกจัดเก็บไว้ในโปรแกรมคอมพิวเตอร์ โดยใช้รหัสผ่าน ของศาสตราจารย์ ดร .เทอเรนซ์ แมคแคนน์ และเอกสารทั้งหมดจะถูกนำไปทำลายภายหลังโครงการเสร็จสิ้นแล้ว เป็นเวลา 5 ปี

การรายงานผลของการวิจัย

หากท่านต้องการทราบผลการวิจัย ผู้วิจัยจะนำส่งผลการวิจัยโดยสรุป จากการศึกษาครั้งนี้ให้ท่าน

สอบถามข้อมูลเพิ่มเติม หรือกรณีพบปัญหาอื่น ๆ

หากท่านต้องการข้อมูลเพิ่มเติม หรือพบปัญหาต่าง ๆ ที่เกิดขึ้นจากการเข้าร่วมโครงการวิจัย ท่านสามารถติดต่อทีมผู้วิจัยได้ทุกเวลาดังนี้

- ศาสตราจารย์ ดร .เทอเรนซ์ แมคแคนน์
โทรศัพท์ระหว่างประเทศ : ที่ทำงาน (61) (3) 9919-2325
มือถือ (61) (4) 0320-9453
- นางวัลลภา ทรงพระคุณ : ที่บ้าน (053) 243-373
มือถือ (081) 783-2797
(083) 762-4828
- นายแพทย์ปริทรรศ ศิลปกิจ : ที่ทำงาน (053) 228-280
มือถือ (081) 881-2522

ประเด็นอื่น ๆ

หากท่านมีข้อคิดเห็นหรือข้อเสนอแนะ เกี่ยวกับโครงการวิจัย วิธีการวิจัย ที่ใช้ หรือข้อความอื่น ๆ เกี่ยวกับสิทธิของท่านในการเป็นผู้เข้าร่วมโครงการวิจัยนี้ ท่านสามารถติดต่อ ดังนี้

- นายแพทย์ปริทรรศ ศิลปกิจ
รองผู้อำนวยการฝ่ายการแพทย์ โรงพยาบาลสวนปรุง
อ.เมือง จ.เชียงใหม่
เบอร์โทร : ที่ทำงาน (053) 228-280
มือถือ (081) 881-2522

- นายแอนโทนี่ เบนคา
เลขานุการ คณะกรรมการพิจารณาการศึกษาในคน
มหาวิทยาลัยวิกตอเรีย ออสเตรเลีย
โทรศัพท์ระหว่างประเทศ ที่ทำงาน : (61) (3) 9919-4148

ความสมัครใจในการเข้าร่วมโครงการวิจัย

การเข้าร่วมโครงการวิจัยนี้ เป็นไปด้วยความสมัครใจของท่าน ร ท่านสามารถตัดสินใจไม่เข้าร่วมโครงการนี้ได้ถ้าหากท่านไม่ต้องการ นอกจากนี้หากท่านตัดสินใจเข้าร่วมโครงการและต้องการถอนตัว ระหว่างการดำเนินโครงการวิจัยท่านสามารถถอนตัวจากการเป็นผู้เข้าร่วมโครงการได้ทุกเวลาที่ท่านต้องการ ทั้งนี้กรุณาแจ้งให้ผู้วิจัยทราบล่วงหน้าก่อนถอนตัว ทั้งนี้ในการตัดสินใจถอนตัวจากการเข้าร่วมโครงการวิจัยจะไม่มีผลกระทบใด ๆ ต่อการรับการรักษาที่ท่านได้รับจากแผนกผู้ป่วยนอก โรงพยาบาล สวอนปรุง

ก่อนที่ท่านจะตัดสินใจเข้าร่วมหรือไม่เข้าร่วมโครงการวิจัย ท่านสามารถสอบถามรายละเอียดต่าง ๆ ที่ท่านไม่เข้าใจ โดยผู้วิจัย จะตอบคำถามท่านจนท่านเกิดความกระจ่าง ชัดเจน ก่อนที่ท่านจะทำการลงลายมือชื่อ ในแบบยินยอมเข้าร่วมโครงการวิจัย

ประเด็นทางด้านจริยธรรม

เพื่อเป็นการพิทักษ์สิทธิ์ ในฐานะความเป็นบุคคลของผู้เข้าร่วมโครงการทุกท่าน โครงการวิจัยนี้ได้นำเสนอเพื่อพิจารณาอนุมัติ ให้ดำเนินการวิจัยจากคณะกรรมการพิจารณาการวิจัยในคน ของมหาวิทยาลัยวิกตอเรีย ประเทศออสเตรเลีย และคณะกรรมการพิจารณาการวิจัยในคน ของ กรมสุขภาพจิต กระทรวงสาธารณสุข ประเทศไทย

Appendix C

Consent Forms
(English and Thai versions)

Consent Form for participants involved in research

CERTIFICATION BY PARTICIPANT WITH DEPRESSION

I, [Click here & type participant's name]

of [Click here & type participant's suburb]

certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study: **Evaluation of the effect of a self-help intervention program for the promotion of resilience in individuals with depression** and their being conducted at Victoria University, Melbourne, Australia by: **Professor Terence McCann and Wallapa Songprakun**

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by: **Wallapa Songprakun**

and that I freely consent to participation involving the use on me of these procedures:

- Using the self-help manual with the family caregiver
- Completing questionnaires

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:

Witness other than the researcher:

Date:

Any queries about your participation in this project may be directed to the researcher:
Terence McCann, International telephone: (61) (3) 9919 2325, Mobile phone: (61) (04)

0320 9453 and Wallapa Songprakun, Telephone: (66) (053) 243 373, Mobile phone: (66) (08) 1783 2797

If you have any queries or complaints about the way you have been treated, you may contact:

Name: Paritat Silpakit, Psychiatrist
Position: Vice-Director of Suan Prung Psychiatric Hospital, Chiang Mai, Thailand
Telephone: (66) (053) 280 228
Mobile phone: (66) (08) 1881 2522

Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (3) 9919 4710

[*please note: Where the participant/s are aged under 18, separate parental consent is required; where the participant/s are unable to answer for themselves due to mental illness or disability, parental or guardian consent may be required.]

(Thai version)

แบบยินยอมเข้าร่วมโครงการวิจัย

สำหรับ ผู้เข้าร่วมโครงการที่มีภาวะซึมเศร้า

ชื่อโครงการวิจัย: ผลของโปรแกรมช่วยเหลือตนเองเพื่อปรับกระบวนการคิดและพฤติกรรมต่อการเพิ่มระดับความเข้มแข็งทางจิตใจในผู้ที่มีภาวะซึมเศร้า

ข้าพเจ้า.....ร่วมโครงการวิจัยที่มีภาวะซึมเศร้า

ที่อยู่.....

ข้าพเจ้าเป็นผู้เข้าร่วมโครงการวิจัยที่มีภาวะซึมเศร้า และมีอายุ มากกว่า 18 ปี ยินดีเข้าร่วมโครงการวิจัยนี้ซึ่งทำการศึกษาโดย ศาสตราจารย์ ดร .เทอเรนซ์ แมคแคนน์ และ นางวัลลภา ทรงพระคุณ จากโรงเรียนพยาบาลและผดุงครรภ์ มหาวิทยาลัยวิกตอเรีย ประเทศออสเตรเลีย ด้วยความสมัครใจ

ก่อนที่จะลงนามในแบบยินยอมเข้าร่วมโครงการวิจัยนี้ ข้าพเจ้าได้รับการอภิปรายจากผู้วิจัยถึงวัตถุประสงค์ของการวิจัย วิธีการวิจัย ประโยชน์ ที่ได้รับจากการวิจัย และความเสี่ยงที่คาดว่าจะเกิดจากการเข้าร่วมโครงการวิจัย อย่างละเอียด และเกิดความเข้าใจอย่างดีแล้ว โดยผู้วิจัยรับรองว่าจะตอบคำถามต่าง ๆ ที่ข้าพเจ้าสงสัยด้วยความเต็มใจ ไม่ปิดบัง ซ่อนเร้น จนข้าพเจ้าพอใจ

ข้าพเจ้ามีสิทธิที่จะบอกเลิกการเข้าร่วมในโครงการวิจัยนี้เมื่อใดก็ได้ โดยการบอกเลิกการเข้าร่วมโครงการนี้ จะไม่เกิดความเสียหาย และไม่ส่งผลกระทบต่อใด ๆ ต่อการรักษาที่ข้าพเจ้าพึงได้รับต่อเนื่อง จากแผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง

ผู้วิจัยรับรองว่าจะเก็บข้อมูลเฉพาะเกี่ยวกับตัวข้าพเจ้าเป็นความลับ และจะเปิดเผยได้ในรูปที่เป็นการสรุปผลการวิจัย หรือการเปิดเผยข้อมูลต่อผู้มีหน้าที่ที่เกี่ยวข้องกับการสนับสนุนและกำกับดูแลการวิจัย

ข้าพเจ้าได้อ่านข้อความข้างต้นแล้ว และเข้าใจดีทุกประการ และได้ลงนามในใบยินยอมนี้ด้วยความเต็มใจ

ลงนาม.....ผู้ยินยอม

ลงนาม.....พยาน

ลงนาม.....พยาน

หากท่านมีข้อสงสัยเกี่ยวกับการเข้าร่วมโครงการวิจัยนี้ ท่านสามารถติดต่อโดยตรงกับทีมผู้วิจัย ศาสตราจารย์ ดร. เทอเรนซ์ แมคเคนน์ โทรศัพท์ระหว่างประเทศ : ที่ทำงาน (61) (3) 9919-2325 มือถือ (61) (4) 0320-9453 หรือติดต่อ นางวัลลภา ทรงพระคุณ : ที่บ้าน (053) 243-373 มือถือ (081) 783-2797 หรือ (083) 762-4828

หากท่านมีข้อคิดเห็นหรือข้อเสนอแนะใด ๆ เกี่ยวกับโครงการวิจัยนี้ ท่านสามารถติดต่อ

- นายแพทย์ปริทรรศ ศิลปกิจ รองผู้อำนวยการฝ่ายการแพทย์ โรงพยาบาลสวนปรุง อ.เมือง จ.เชียงใหม่
เบอร์โทร ที่ทำงาน (053) 280-228 มือถือ (081) 881-2522
- นายแอนโทนี่ เบนคา เลขานุการ คณะกรรมการพิจารณาการศึกษาในคน มหาวิทยาลัยวิกตอเรีย ออสเตรเลีย โทรศัพท์ระหว่างประเทศ ที่ทำงาน : (61) (3) 9919-4148

Appendix D

Table of randomisation

Table of randomly assign all participants into two groups

Participants sequence	Intervention (n=30)	Control (n=30)
1		B1
2	A1	
3		B2
4	A2	
5		B3
6	A3	
7	A4	
8	A5	
9	A6	
10		B4
11	A7	
12	A8	
13		B5
14		B6
15		B7
16	A9	
17	A10	
18	A11	
19	A12	
20	A13	
21		B8
22		B9
23	A14	
24		B10
25		B11
26		B12
27		B13
28	A15	
29		B14
30	A16	
31		B15
32	A17	
33		B16
34	A18	
35	A19	
36	A20	
37		B17
38		B18
39	A21	
40		B19
41	A22	
42	A23	
43		B20
44		B21
45	A24	
46		B22
47		B23
48		B24
49	A25	
50		B25
51		B26
52	A26	
53		B27
54	A27	
55	A28	
56		B28
57		B29
58	A29	
59	A30	
60		B30

Appendix E

Permission letter from Lifeline South Coast (NSW)

Permission letter from Lifeline South Coast (NSW)

-----Original Message-----

From: Terence McCann [mailto:Terence.McCann@vu.edu.au]

Sent: Thursday, 10 May 2007 2:51 PM

To: grahame gould - Lifeline SouthCoast (NSW)

Subject: Seeking permission to use 'The good mood guide' in a study in Thailand

Dear Grahame,

Further to our conversation a few minutes ago, I would be grateful if you would give me permission to use the above manual for a PhD study in Thailand. Briefly, this is an intervention study, with an intervention and control group, with adults who are being treated for a primary diagnosis of depression on a psychiatric outpatient basis in Chiangmai region of northern Thailand. Ethics approval will be obtained from Victoria University and the Mental Health Department, Public Health Ministry, Bangkok, prior to the study commencing.

I would also like permission to have the manual translated into Thai. I will ensure that Lifeline et al. is acknowledged in the translated version and in the thesis and subsequent publications and conference presentations.

Finally, I would appreciate if you would send me three (3) copies of the manual. Please invoice me for the costs and I will ensure prompt payment.

If you have any queries about the research, please feel free to contact me.

Regards,

Terence McCann

Professor of Nursing Research
School of Nursing & Midwifery
Victoria University
PO Box 14428
Melbourne
Victoria 8001
Australia

Tel.: +61 3 9919 2325

Fax: +61 3 9919 2832

Email: terence.mccann@vu.edu.au

From: grahame gould - Lifeline SouthCoast (NSW)
[mailto:g.gould@llsc.org.au]

Sent: Monday, 14 May 2007 3:23 PM

To: Terence McCann
Cc: Frank Deane (E-mail)
Subject: RE: Seeking permission to use 'The good mood guide' in a study in Thailand

Thankyou Terence

This sound great and very interesting!

Permission to use the Good Mood Guide is granted providing:

- Profit is not made from the sale of the Good Mood Guide
- A copy of the translated version is sent to Lifeline South Coast
- Correct citation on research papers and acknowledgement as outlined in your email.

I have copied Professor Frank Deane to this email so you can discuss current status of research publication with him.

Will be very interested to hear how it progresses

Will send 3 copies of second version (if they don't arrive in the next 7-10 days get bak to me)

Regards

Grahame

Grahame Gould

Executive Director
Lifeline South Coast
PO Box 404
Wollongong NSW 2520
Phone 02 4228 1311 (Reception)
Phone 02 4226 7203 (Direct)
Fax 02 4228 0203

Appendix F

Demographic Data Questionnaire (English and Thai versions)

Demographic Data Questionnaire

For participant with depression

Title: Evaluation of the effect of cognitive behavioural bibliotherapy self-help intervention program on the promotion of resilience in individuals with depression

Please put an **x** mark in the () and give your details, as requested

1. Gender
 Male Female
2. Age(years)
3. Marital status
 Single Married/defacto Divorced Separated
 Widowed
4. Are you currently:
 studying working retired
 home duties unemployed
 Others (please indicate details).....,
5. Highest educational level
 Primary Shool Middle School High School
 Technical certificate Bachelor degree Master degree
 Doctoral degree
6. Approximately, how long do you receive a treatment for depression?
.....
7. Current treatments for depression
 Prescribed Medication
 Antidepressants

Tricyclics SSRIs MAOIs SNRIs

Antianxiety

Benzodiazepines Barbiturates Seductives

other (please specify).....

Psychosocial therapies

Group intervention Therapeutic relationship
 Therapeutic Milieu Cognitive behavioural Therapy
 Family therapy

8. Frequency of attendance at outpatient department , Suan Prung Psychiatric Hospital

weekly fortnightly monthly
 every two months

other (please indicate frequency).....

9. How often do you receive a home visit from the mental health professionals?

weekly fortnightly monthly

every two months

others (please indicate the frequency).....



(Thai version)

แบบสอบถามข้อมูลส่วนบุคคล
สำหรับอาสาสมัครที่มีภาวะซึมเศร้า

โครงการวิจัยเรื่อง: ผลของโปรแกรมช่วยเหลือตนเองเพื่อปรับกระบวนการคิดและพฤติกรรมต่อ

กรุณาทำเครื่องหมาย X ลงในวงเล็บ () เกี่ยวกับข้อมูลส่วนตัวของท่าน ในแต่ละข้อดังนี้

1. เพศ
 ชาย หญิง
2. อายุ.....ปี
3. สถานภาพสมรส
 โสด สมรส หย่า หม้าย แยกกันอยู่
4. สถานภาพปัจจุบัน
 กำลังศึกษา ทำงาน เกษียณอายุ
 แม่บ้าน ว่างงาน อื่น ๆ โปรดระบุ.....
5. ระดับการศึกษาสูงสุด
 ประถมศึกษา มัธยมต้น มัธยมปลาย
 ประกาศนียบัตร ปริญญาตรี ปริญญาโท
ปริญญาเอก
6. ท่านได้รับการรักษาเพื่อบำบัดอาการซึมเศร้ามาเป็นเวลานานเท่าใด?
โปรดระบุระยะเวลา.....
7. อาชีพ
ข้าราชการ พนักงานหน่วยงานเอกชน ธุรกิจส่วนตัว
8. การรักษาที่ได้รับปัจจุบัน
ยาที่ได้รับตามแผนการรักษา
ยาด้านซึมเศร้า
ระบุ.....
.....

() ยาด้านวิตกกังวล

ระบุ.....

.....

() การบำบัดทางจิตสังคม

() กลุ่มบำบัด

() บำบัดรายบุคคล

() ครอบครัวบำบัด

() การบำบัดทางความคิดและพฤติกรรม

9. ความถี่ของการรับการรักษาที่แผนกผู้ป่วยนอก โรงพยาบาลสวนปรุง

() ทุกๆ สัปดาห์

() ทุกๆ 2 สัปดาห์

() ทุกๆ เดือน

() ทุกๆ 2 เดือน

() อื่น ๆ กรุณาระบุ.....

10. ท่านได้รับบริการการเยี่ยมบ้านจากเจ้าหน้าที่ทีมสุขภาพ

() ทุกๆ สัปดาห์

() ทุกๆ 2 สัปดาห์

() ทุกๆ เดือน

() ทุกๆ 2 เดือน

() อื่น ๆ กรุณาระบุ.....

Appendix G

Resilience Scale
(English and Thai versions)

Resilience Scale (RS)

Please circle a number indicating how much you agree or disagree with each statement.

- | | Disagree | | | | | Agree |
|------------|--|---|---|---|---|-------|
| 1. | When I make plans I follow through with them. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 2. | I usually manage one way or another. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 3. | I am able to depend on myself more than anyone else. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 4. | Keeping interested in things is important to me. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 5. | I can be on my own if I have to. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 6. | I feel proud that I have accomplished things in my life. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 7. | I usually take things in my stride. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 8. | I am friends with myself. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 9. | I feel that I can handle many things at a time. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 10. | I am determined. | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 7 |

	Disagree				Agree		
11.	I seldom wonder what the point of it all is.						
	1	2	3	4	5	6	7
12.	I take things one day at a time.						
	1	2	3	4	5	6	7
13.	I can get through difficult times because I've experienced difficulty before.						
	1	2	3	4	5	6	7
14.	I have self-discipline.						
	1	2	3	4	5	6	7
15.	I keep interested in things.						
	1	2	3	4	5	6	7
16.	I can usually find something to laugh about.						
	1	2	3	4	5	6	7
17.	My belief in myself gets me through hard times.						
	1	2	3	4	5	6	7
18.	In an emergency, I'm somebody people generally can rely on.						
	1	2	3	4	5	6	7
19.	I can usually look at a situation in a number of ways.						
	1	2	3	4	5	6	7
20.	Sometimes I make myself do things whether I want to or not.						
	1	2	3	4	5	6	7
21.	My life has meaning.						
	1	2	3	4	5	6	7

22. I do not dwell on things that I can't do anything about.
- 1 2 3 4 5 6 7
23. When I am in a difficult situation, I can usually find my way out of it.
- 1 2 3 4 5 6 7
24. I have enough energy to do what I have to do.
- 1 2 3 4 5 6 7
25. It's okay if there are people who don't like me.
- 1 2 3 4 5 6 7

(Thai version)

**แบบวัดความเข้มแข็งทางจิตใจ
(Resilience Scale)**

Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement, 1*, 165-178.

โปรดวงกลมรอบตัวเลขในแต่ละข้อ เพื่อแสดงว่าท่านเห็นด้วยหรือไม่เห็นด้วยกับข้อความต่อไปนี้เพียงใด

	ไม่เห็นด้วย						เห็นด้วย
1.	เมื่อฉันวางแผนทำอะไรไว้ ฉันจะติดตามทำตามแผนที่คิดไว้จนสำเร็จ						
	1	2	3	4	5	6	7
2.	ฉันมักจะหาวิธีจัดการกับปัญหาให้ได้ไม่ว่าทางใดก็ตาม						
	1	2	3	4	5	6	7
3.	ฉันพึ่งตัวเองได้มากกว่าที่จะไปพึ่งพาคนอื่น ๆ						
	1	2	3	4	5	6	7
4.	การพยายามรักษาความรู้สึกสนใจในสิ่งต่างๆ ไว้เสมอ เป็นเรื่องสำคัญสำหรับฉัน						
	1	2	3	4	5	6	7
5.	ฉันสามารถอยู่ตามลำพังได้ถ้าจำเป็น						
	1	2	3	4	5	6	7
6.	ฉันรู้สึกภูมิใจที่ได้ทำอะไรสำเร็จได้ในชีวิตนี้						
	1	2	3	4	5	6	7
7.	ฉันมักจะจัดการกับปัญหาอย่างสงบเยือกเย็น						
	1	2	3	4	5	6	7

ไม่เห็นด้วย

เห็นด้วย

8. ฉันรู้สึกเป็นมิตรกับตัวเอง
1 2 3 4 5 6 7
9. ฉันรู้สึกว่าคุณสามารถจัดการกับหลายๆ เรื่องได้ในเวลาเดียวกัน
1 2 3 4 5 6 7
10. ฉันมีความมุ่งมั่น
1 2 3 4 5 6 7
11. น้อยครั้งมากที่ฉันจะสงสัยว่ามีชีวิตอยู่ไปเพื่ออะไร
1 2 3 4 5 6 7
12. ฉันจัดการกับชีวิตไปที่ละวัน
1 2 3 4 5 6 7
13. ฉันสามารถเอาตัวรอดผ่านพ้นวันเวลาที่ยากลำบากไปได้หลายครั้งเพราะฉันเคยมีประสบการณ์กับความลำบากมาก่อน
1 2 3 4 5 6 7
14. ฉันเป็นคนมีวินัยในตนเอง
1 2 3 4 5 6 7
15. ฉันเป็นคนที่สนใจอะไรต่างๆ อยู่เสมอ
1 2 3 4 5 6 7
16. ฉันมักหาเรื่องหัวเราะได้เสมอ
1 2 3 4 5 6 7
17. ความเชื่อมั่นศรัทธาในตนเองทำให้ฉันประคองตัวผ่านพ้นวันเวลาที่ยากลำบากไปได้
1 2 3 4 5 6 7
18. ในยามฉุกเฉิน ฉันเป็นคนที่คนอื่นๆ มักพึ่งพาได้
1 2 3 4 5 6 7
19. ฉันมักจะสามารถพิจารณาสถานการณ์ได้จากหลายมุมมอง
1 2 3 4 5 6 7

20. บางครั้งฉันจะบังคับตัวเองให้ทำอะไรต่างๆ ได้ ไม่ว่าจะฉันจะอยากทำมันหรือไม่ก็ตาม
- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
21. ชีวิตของฉันมีความหมาย
- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
22. ฉันจะไม่หมกมุ่นกับสิ่งที่ฉันทำอะไรกับมันไม่ได้
- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
23. ในเวลาที่ฉันตกอยู่ในสถานการณ์ที่ยากลำบาก ฉันมักจะหาทางออกได้เกือบทุกครั้ง
- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
24. ฉันมีพลังมากพอที่จะทำในสิ่งที่ฉันจำเป็นต้องทำ
- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
25. ฉันรู้สึกว่าเป็นไรถ้าจะมีคนไม่ชอบฉันบ้าง
- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Appendix H

Centre for Epidemiologic Studies Depression Scale (CES-D)

(English and Thai versions)



CES-Depression Scale

The following questions ask about your mood. Please circle the response that best describes how you felt DURING THE PAST WEEK

	Rarely or none of the time	Some or little of the time	Occasionally or moderate of the time	Most or all of te time
DURING THE PAST WEEK:	(Less than 1 day)	(1-2 days)	(3-4 days)	(5-7 days)
• I was bothered by things that don't usually bother me.	1	2	3	4
• I did not feel like eating; my appetite was poor.	1	2	3	4
• I felt that I could not shake off the blues even with the help of my family or friends.	1	2	3	4
• I felt that I was just as good as other people.	1	2	3	4
• I had trouble keeping my mind on what I was doing.	1	2	3	4
• I felt depressed.	1	2	3	4
• I felt everything I did was an effort.	1	2	3	4
• I felt hopeful about the future.	1	2	3	4
• I thought my life had been a failure.	1	2	3	4
• I felt fearful.	1	2	3	4
• My sleep was restless.	1	2	3	4
• I was happy.	1	2	3	4
• I talked less than usual.	1	2	3	4
• I felt lonely.	1	2	3	4
• People were unfriendly.	1	2	3	4
• I enjoyed life.	1	2	3	4

- I had crying spells. 1 2 3 4
- I felt sad. 1 2 3 4
- I felt that people disliked me. 1 2 3 4
- I could not get "going"
(carry out my normal duties) 1 2 3 4

(Thai version)

แบบคัดกรองภาวะซึมเศร้าฉบับภาษาไทย(CES-D)

รองศาสตราจารย์ แพทย์หญิงอุมาพร ตรังคสมบัติ, นพ. วชิระ ลาภบุญทรัพย์ และปิยสัมพันธ์ การใช้ CES-D ในการคัดกรองภาวะซึมเศร้าในวัยรุ่น วารสารสมาคมจิตแพทย์แห่งประเทศไทย, 2540: 42 (1)

ท่านมีความรู้สึกดังต่อไปนี้บ่อยเพียงใดใน 1 สัปดาห์ที่ผ่านมา กรุณาทำ X ลงในช่องที่ตรงกับความรู้สึกของท่านมากที่สุด

ในระยะ 1 สัปดาห์ที่ผ่านมา	ไม่เคย (น้อยกว่า 1 วัน)	นาน ๆ ครั้ง (1-2 วัน)	บ่อย ๆ (3-4 วัน)	ตลอดเวลา (5-7 วัน)
1. ฉันรู้สึกหงุดหงิดง่าย				
2. ฉันรู้สึกเบื่ออาหาร				
3. ฉันไม่สามารถจัดความเศร้าออกจากใจได้ แม้จะมีคนคอย ช่วยเหลือก็ตาม				
4. ฉันรู้สึกว่าตนเองดีพอ ๆ กับคนอื่น				
5. ฉันไม่มีสมาธิ				
6. ฉันรู้สึกหดหู				
7. ทุก ๆ สิ่งที่ทำให้ฉันกระทำได้ต้องฝืนใจ				
8. ฉันมีความหวังเกี่ยวกับอนาคต				
9. ฉันรู้สึกว่าชีวิตมีแต่สิ่งล้มเหลว				
10.ฉันรู้สึกหวาดกลัว				
11.ฉันนอนไม่ค่อยหลับ				
12.ฉันมีความสุข				
13.ฉันไม่ค่อยอยากคุยกับใคร				
14.ฉันรู้สึกเหงา				
15.ผู้คนทั่วไปไม่ค่อยเป็นมิตรกับฉัน				
16.ฉันรู้สึกว่าชีวิตนี้สนุกसान				
17.ฉันร้องไห้				
18.ฉันรู้สึกเศร้า				
19.ผู้คนรอบข้างไม่ชอบฉัน				
20.ฉันรู้สึกท้อถอยในชีวิต				

Appendix I

Kessler Psychological Distress (K-10) (English and Thai version)

Kessler Psychological Distress Scale (K-10)

Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.L.T., Walters, E.E., & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32(6), 959-976.

The rating scale is as follows:					
0 None of the time					
1. A little of the time					
2. Some of the time					
3. Most of the time					
4. All of the time					
K1. In the past week how often did you feel tired out for no good reason?	0	1	2	3	4
K2. In the past week how often did you feel nervous?	0	1	2	3	4
K3. In the past week how often did you feel so nervous that nothing could calm you down?	0	1	2	3	4
K4. In the past week how often did you feel hopeless?	0	1	2	3	4
K5. In the past week how often did you feel restless or fidgety?	0	1	2	3	4
K6. In the past week how often did you feel so restless you could not sit still?	0	1	2	3	4
K7. In the past week how often did you feel depressed?	0	1	2	3	4
K8. In the past week how often did you feel that everything was an effort?	0	1	2	3	4
K9. In the past week how often did you feel so sad that nothing could cheer you up?	0	1	2	3	4
K10. In the past week how often did you feel worthless?	0	1	2	3	4

(Thai version)

แบบวัด ความทุกข์โศก(K 10)

Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.L.T., Walters, E.E., & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32(6), 959-976.

คำถามต่อไปนี้จะถามเกี่ยวกับความรู้สึกของท่านในระยะเวลา 30 วันที่ผ่านมา สำหรับแต่ละข้อ โปรดวงกลมรอบตัวเลขซึ่งตรงกับคำตอบของท่านว่าท่านมีความรู้สึกแบบนี้บ่อยแค่ไหน

	ไม่เคยรู้สึกเลย	รู้สึกน้อยครั้งมาก	รู้สึกเป็นบางครั้ง	รู้สึกเกือบตลอดเวลา	รู้สึกตลอดเวลา
ในเดือนที่ผ่านมา ท่านมีความรู้สึกดังต่อไปนี้บ่อยแค่ไหน ...					
1. ในเดือนที่ผ่านมา ท่านมีความรู้สึกเหนื่อยเพลีย ไม่มีแรง โดยไม่มีสาเหตุแน่ชัด?	1	2	3	4	5
2. ในเดือนที่ผ่านมา ท่านมีความรู้สึกกระวนกระวายใจ?	1	2	3	4	5
3. ในเดือนที่ผ่านมา ท่านมีความรู้สึกกระวนกระวายมากจนไม่สามารถทำให้สงบได้ไม่ว่าจะพยายามทำอะไรก็ตาม ?	1	2	3	4	5
4. ในเดือนที่ผ่านมา ท่านมีความรู้สึกหมดหวัง?	1	2	3	4	5
5. ในเดือนที่ผ่านมา ท่านมีความรู้สึกกระสับกระส่าย อยู่เฉยไม่ได้?	1	2	3	4	5
6. ในเดือนที่ผ่านมา ท่านมีความรู้สึกกระสับกระส่ายจนนั่งนิ่งๆ ไม่ได้?	1	2	3	4	5
7. ในเดือนที่ผ่านมา ท่านมีความรู้สึกเศร้าซึม?	1	2	3	4	5
8. ในเดือนที่ผ่านมา ท่านมีความรู้สึกเศร้ามากจนไม่มีอะไรที่จะทำให้รู้สึกดีขึ้นได้?	1	2	3	4	5
9. ในเดือนที่ผ่านมา ท่านมีความรู้สึกว่าการทำอะไรแต่ละอย่างเป็นเรื่องที่ต้องใช้ความพยายามเหลือเกิน ?	1	2	3	4	5
10. ในเดือนที่ผ่านมา ท่านมีความรู้สึกว่าตนเองไร้คุณค่า?	1	2	3	4	5

Appendix J

Summary

WHO World Mental Health (WMH) Initiative Interview Translation Guidelines

WHO World Mental Health (WMH) Initiative Interview Translation Guidelines (WHO, 2003)

1. **Forward translation**

One translator, preferably a health professional with substantive experience on language and expressions of person with mental disorders should be given this task. The translator should be very knowledgeable of American English but his/her mother tongue should be the primary language of the target culture. Translators should always aim at the conceptual equivalent of a word or phrase; strive to be simple, clear, and concise in formulating a question; avoid the use of any jargon; and consider issues of gender and age applicability.
2. **Expert Panel**

An expert panel should be convened by editor-in-chief. The goal is to identify the adequate expression/concepts of translation between the forward translation and the existing versions of the questionnaire. The panel should include the original translator, experts in the disorders under study and survey methodologist.
3. **Back translation**

The instruments will then be translated back to English by the independent translator, whose mother tongue is American English and who has no knowledge of the questionnaire
4. **International Harmonization**

This step will require multiple language versions to be distributed to the expert panels in separate countries. It is important to check if all the country versions have made similar decisions in culturally sensitive items and have followed the same directions.
5. **Pre-testing and Cognitive interviewing**

It is necessary to pre-test the questionnaire on individual representative of target population. Pre-test respondents should number 10 minimum for each section of the interview. Each country should also provide a written report of the pre-testing exercise, together with selected information.
6. **Final version**

The electronic version of the final translated questionnaire should be provided to WHO.

Appendix K

Approval letter from Victoria University Human
Research Ethics Committee



MEMO

TO Prof Terence McCann
School of Nursing and Midwifery
St Albans Campus

DATE 9/08/2007

FROM Dr Alan Hayes
A/Chair
Victoria University Human Research Ethics Committee

SUBJECT Ethics Application – HRETH 07/155

Dear Prof McCann

Thank you for submitting this application for ethical approval of the project:

HRETH 07/155 Evaluation of the effect of a cognitive behavioural bibliotherapy self-help intervention program on the promotion of resilience in individuals with depression and their caregivers (HREC 07/119)

The Victoria University Human Research Ethics Committee at its meeting on 9th August 2007 approved your application. Approval has been granted from 9 August 2007 to 31 August 2008. The Committee also requested copies of certified Thai translations of the self-help manual and the standardized psychometric instruments when these became available.

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious or unexpected adverse effects on participants, and unforeseen events that may effect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes.

Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date (by 9 August 2008) or upon the completion of the project (if earlier). A report proforma may be downloaded from the VUHREC web site at <http://research.vu.edu.au/hrec.php>

If you have any queries, please do not hesitate to contact me on 9919 4625.

On behalf of the Committee, I wish you all the best for the conduct of the project.

Dr Alan Hayes
A/Chair
Victoria University Human Research Ethics Committee

Appendix L

Approval letter from Department of Mental Health

Ministry of Public Health, Thailand



**Institutional Review Board Approval
by
Department of Mental Health
Ministry of Public Health
Thailand**

IRB # 17/2007

The Institutional Review Board for
the protection of Human Subjects (Mental Health)
has approved the proposal dealing with

***"Evaluation of effect of a cognitive behavioural self-help
intervention program on the promotion of resilience in
individuals with depression and their caregivers"***

By ***Mrs. Wallapa Songprakun***
as a Site-principle investigator

It's the board's opinion that the study has provided adequate
safeguards for the rights and welfare of the participants.

The study is officially implemented
as of the date of final approval: 17/10/2007
This approval is valid until: 17/10/2008

ML Somchai Chakrabhand
Chair for the IRB
Department of Mental Health