RATIONAL SELF-DIRECTED HYPNOTHERAPY: A THERAPEUTIC INTERVENTION FOR MAJOR DEPRESSION

by

MAUREEN L. MCBRIDE

B.A., The University of British Columbia, 1991

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

Department of Counselling Psychology

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

April, 1994

© Maureen L. McBride, 1994

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Counselling Psychology.

The University of British Columbia Vancouver, Canada

Date <u>Pp91</u> 20, 1994

Abstract

The efficacy of a rational hypnotherapeutic intervention for unipolar major depression is the focus of this study.

Based on a single subject research design, the participant was asked to complete pre-therapy, during and post-therapy assessments of depression, anger and dysfunctional attitudes. Pre-therapy testing, to collect a baseline measure, was conducted two weeks prior to therapy, and therapy lasted 12 weeks. Post-therapy measures were taken one week after therapy, and a follow-up assessment was done six months post therapy.

The intervention was comprised of progressive relaxation, guided imagery, and cognitive restructuring and behavioral rehearsal based on the A-B-C-D-E paradigm. The participant examined his self-defeating or irrational thoughts in critical incidents and his subjective emotional and behavioral reactions. He was then asked to substitute his own more rational thoughts in the same situation.

Post-therapy results from the assessment devices and self-reports demonstrated significant improvement in all areas. Following the rational hypnotherapeutic intervention, the participant showed decreased symptoms of depression, decreased dysfunctional attitudes and decreased anger and irritation. He also reported subjective feelings of emotional well-being. This improvement was maintained in the six-month follow-up.

Rational Self-Directed Hypnotherapy is shown to be an effective, relatively short term intervention that encourages the client to play an active role in finding new ways to successfully deal with problems, and accept control over his/her own life.

TABLE OF CONTENTS

	pag	је				
Abstract	t i	Li				
Table of Contents iii						
List of	Tables	v				
List of	Figures	7i				
Acknowle	edgements vi	Ŀi				
CHAPTER	I INTRODUCTION TO THE STUDY The Problem Hypothesis Definition of Terms Used Rational for Hypothesis Delimitation of the Study Justification of the Study	1 1 2 2 3 3 4				
CHAPTER	Depression History of Depression Cause and Treatment of Depression Cognitive Therapy Rational Emotive Therapy Research Issues in Cognitive Therapy Hypnosis What is Hypnosis? History of Hypnosis Research on the Effectiveness of Hypnosis in Altering Mood States Research Issues in Hypnosis Rational Stage Directed Hypnotherapy(RSDH) Research on RSDH	55578 113 14 15 17 19 122 23				
CHAPTER	Subject Pre-, During and Post-Treatment Procedures Procedure Instruments Barber Suggestibility Scale Beck Depression Inventory Dysfunctional Attitude Scale (Revised) Novaco Anger Scale (Revised) Subjective Symptoms Scale Single Subject Research Design	25 25 25 26 28 29 33 34 35 38 38				

		iv page
CHAPTER IV	RESULTS	40
	Barber Suggestibility Scale	40
	Beck Depression Inventory	40
	Dysfunctional Attitude Scale (Revised)	41
	Novaco Anger Scale (Revised)	45
	Subjective Symptoms Scale	47
CHAPTER V	DISCUSSION AND CONCLUSIONS	59
	Comparisons and Evaluations	59
	Response to Hypothesis	62
	Internal and External Validity	62
	Summary and Conclusions	64
REFERENCES		66
APPENDIXES	A. Criteria for Major Depression	74
	B. Barber Suggestibility Scale	77
	C. Novaco Anger Scale (Revised)	87
	D. Beck Depression Inventory	90
	E. Subjective Symptoms Scale	94
	F. Dysfunctional Attitude Scale (Revised)	96

	LIST OF TABLES	
		page
Table 3-1		27
Table 1-1		4.0

LIST OF FIGURES

		page
Figure	4-1	42
Figure	4-2	46
Figure	4-3	48
Figure	4-4	49
Figure	4-5	51
Figure	4-6	52
Figure	4-7	54
Figure	4-8	55
Figure	4-9	57
Figure	4-10	58

ACKNOWLEDGEMENTS

I wish to acknowledge the guidance of Dr. Du-Fay Der, whose support and encouragement proved invaluable. To the other members of my committee, Dr. John Allen and Dr. Jamie Paredes, I wish to express the deepest gratitude for their time and interest.

CHAPTER I

INTRODUCTION TO THE STUDY

The Problem

This study is designed to investigate the effectiveness of Rational Self-Directed Hypnotherapy in treating unipolar major depression. Depression is the most widespread psychological disorder today, and has been referred to as "the common cold of mental illness" (Rosenhan & Seligman, 1989, p.354). Despite extensive research and various treatments available for this condition, it is increasing in prevalence (Bromberger & Costello, 1992). The consequences of depression can be fatal. Guze and Robins (1970), in summarizing trends in different studies, report an overall risk for suicide in primary affective disorders of 15 percent. Black, Winokur and Nasrallah (1987) report an increased risk of mortality for patients with a major affective disorder, and this is true for deaths from both natural and unnatural causes. Non-bipolar major depression is the most common affective disorder (Boyd & Weismann, 1981).

The life time prevalence rates of depression vary among studies, but Bromberger and Costello (1992), after reviewing several, state that at least one in twenty adults is depressed enough at some point in his or her life to meet the diagnostic criteria.

Depression brings with it great economic and emotional

costs. Munoz (1987) reports that "depression costs the United States an estimated \$16.5 billion per year. Of this amount, approximately \$3 billion are treatment costs, and the rest indirect costs, such as loss of productivity (p.4). There are many techniques available to treat depression, but none of them are entirely satisfactory for all clients. In recent years there has been a growing interest in combining techniques in hopes of finding a more effective method to treat this condition. Rational Self-Directed Hypnotherapy provides such a combination. It is hoped that this intervention will provide the clinician with a short-term effective method of treating depression.

<u>Hypothesis</u>

Rational Self-Directed Hypnotherapy will be effective in reducing the level of depression in the client.

Specifically, pre-and post-test change scores on the Beck Depression Inventory (Beck & Steer, 1978), Novaco Anger Scale (Revised) (Burns, 1981), Dysfunctional Attitude Scale (Revised) (Burns, 1981) and the Subjective Symptoms Scale will show a statistically significant difference following treatment. This improvement will be maintained through a six-month follow up period.

Definition of Terms Used

Major depression is defined according to DSM-III-R

(American Psychiatric Association, 1987) criteria, (Appendix

A). One additional symptom, anger, was added to this

criteia for the purposes of this study.

Rational for Hypothesis

Prior research implementing rational therapy and hypnosis has shown success in reducing emotional stress, anxiety neurosis, test anxiety, lack of assertiveness and psychotic depression (Reardon, Tosi & Gwynne, 1977; Tosi, Howard & Gwynne, 1982). Rational Self-Directed Hypnotherapy has been effective in treating panic attacks (Der & Lewington, 1990). Since major depression shares many features in common with anxiety related concerns, and psychotic depression, the present research will draw on the methods from this body of literature in an effort to determine if Rational Self-Directed Hypnotherapy is also effective in treating major depression.

Delimitation of the Study

A major limitation of this research is that, as a single case design, generalizations of the results are limited. The intervention was successful with this particular client, but we cannot assume that it will be effective in all cases. In an attempt to minimize this concern, strict adherence to methodology guidelines were followed, thus helping to eliminate the effect of unexplained or unpredicted factors (Lewington, 1987).

A second potential limitation is the use of the shortened versions of the Novaco Anger Scale, and the Dysfunctional Attitude Scale. Although the original version of the Novaco Anger Scale (Novaco, 1975) shows adequate

psychometric properties, there is no psychometric information available on this shortened form. Similarly, the psychometric information on the Dysfunctional Attitude Scale (Weissman, 1978) may not apply to the shortened version.

A final limitation is that the A-B-A-B design would have strengthened the research findings. Ethical considerations prevented the use of this design in this case.

Justification of the Study

This study responds to a call from Klerman (1988) to search for new resources for treating depression, and to Petzold (1981) and Matheson's (1979) suggestion of incorporating both conscious and unconscious aspects into therapy. It also recognizes and treats both the affective and ideational components of depression (Gould & Krynicki, 1989), and responds to Nugent's (1985) call for hypnotherapists to improve upon the case study. Rational Self-Directed Hypnotherapy addresses these concerns while allowing the client to remain in control of the therapy. The success of Rational Self-Directed Hypnotherapy in this case suggests that this approach may be effective in other cases, giving clinicians another relatively short-term intervention to choose from when treating depressed clients.

CHAPTER II

REVIEW OF THE LITERATURE

Depression

Depression is one of the oldest human afflictions known (Hales, 1989), and is the most common psychiatric condition to be encountered in North American community surveys (Kovess, Murphy & Tousignant, 1987). Depression strikes people of all racial, ethnic and economic groups, and has been termed "the common cold of mental illness" (Rosenhan & Seligman, 1989, p.354). Depression is an affective disorder involving dysphoric mood, lethargy, fatigue, disturbed concentration, reduced self-esteem and severely reduced activity level (Matheson, 1979). Beck (1967, p.230), refers to the "primary triad of depression," which consists of "a negative view of the world, of self, and of the future."

Each of us experiences times in our lives when we feel down, or blue. Hales (1989) distinguishes between the feeling of depression, which comes and goes, and the disease of depression that persists and deepens over several weeks or months. A major depressive episode, if untreated, typically lasts for 6 months or more, though some symptoms such as depressed mood, and lack of pleasure or appetite, can persist for as long as two years (Hales, 1989). In 20-35% of all cases, symptoms and social impairment persist, and depression never completely lifts (Hales, 1989).

<u>History of Depression</u>

Historically, definitions of depression in modern

psychology began with Freud (1917). According to Freudian theory, depression is hostility turned inward. Depression is seen as a regression to the oral phase of development (Abraham, 1911). Adler (1924) provided a culturalistic view of depression. According to this view, those who suffer from depression have learned to use their weaknesses and complaints in such a manner as to force others into giving them their way. In this way they successfully avoid life's responsibilities (Fuller, 1982).

Seligman (1975) added to the concept of depression in proposing the theory of learned helplessness. He reports many similarities between symptoms of depression in humans and learned helplessness in animals. Seligman's theory states that when there is an expectation that an outcome is independent of any possible response that might be made, the motivation to try to control the outcome diminishes. outcome is traumatic, it produces fear and this fear is then followed by depression. Seligman (1975) outlines six symptoms of learned helplessness, and feels that each of these symptoms parallel depression. The six symptoms are: (1) reduced initiation of voluntary responses; (2) negative cognitive set (difficulty in learning that responses produce outcomes); (3) persistence over time; (4) reduced aggressive and competitive responses; (5) loss of appetite, weight and libido; and, (6) physiological changes (including biochemical changes).

Beck (1967) introduced a more cognitive approach to

depression. He believes that disturbances in thinking may be responsible for depression. Beck recognizes five components of depression: (1) a specific alteration in mood (sadness, loneliness, apathy); (2) a negative self-concept (with self reproach and self-blame); (3) regressive and self-punitive wishes (desires to hide, escape or die; (4) vegetative changes (anorexia and loss of libido); and, (5) change in activity level (retardation or agitation).

Theories regarding the etiology of depression have been, and remain, quite plentiful and diverse. These theories have ranged from implicating biochemical deficiencies and hereditary-constitutional deficits through those involving internal psychological factors, or disruptions in the patterns of interactions between individuals and their environments (Hollon & Beck, 1979).

The diversity of etiological theories has led to a variety of treatment interventions. Recently a significant collection of theoretical and experimental literature detailing the development of various behavioral approaches to the conceptualization of depression has emerged.

Cause and treatment of depression

Current research on the cause of depression indicates that depression is a complex disorder that involves biological (genetic vulnerability), psychological (i.e., developmental trauma) and social factors (i.e., intense life stress) (Hales, 1989). No specific biological cause or deficit has been linked to depression, but there is strong

evidence that the disorder is related to neurotransmitters in the brain. The neurotransmitters most often implicated are serotonin and norepinephrine (Hales, 1989). Abnormal patterns of cortisol secretion may derive from imbalances of serotonin and norepiniphrine in the brain (Hales, 1989).

Traditionally, pharmacological and somatic interventions have been the preferred treatment for clinical depression (Hollon, Shelton & Loosen, 1991). Various groups of drugs are used, but pharmacological treatment is not always satisfactory. Medication may shorten the attack, but does not prevent recurrence. Drugs serve only to eliminate the symptoms, but do not treat the non-biological causes of depression (O'Hara, 1980). In recent years, the field of psychology has shifted the focus of treatment from medical interventions to psychological ones.

Cognitive therapy

In the 1970s, evidence began to be gathered suggesting that psychosocial interventions may be effective in treating depression (Hollon & Beck, 1978). Cognitive therapy, first articulated by Beck (1967), has since become the most predominant psychological model of depression (McNeal & Cimbolic, 1986). The cognitive therapist believes that depression is the result of negative patterns of thinking and conducts therapy by helping clients identify their self-defeating thoughts through a variety of techniques and helps to replace these negative thoughts with more optimistic ones (Harrel, Beiman & LaPointe, 1981).

The rational concepts of cognitive theory have been discussed throughout history, probably beginning with the ancient stoic philosophers of Greece and Rome (Fuller, 1982). Epictetus (1899) states "men are disturbed not by things, but by the views they take of them." Shakespeare, in <u>Hamlet</u> wrote: "Things are neither good nor bad but thinking makes it so." Spinoza can also be considered an early contributor to cognitive philosophy (Watson, 1971), in his statement that things did not disturb him, save the effect they had on his mind.

Psychodynamic theory also shows the influences of cognitive philosophy. Freud (1900) believed that psychic structures are causal factors of human behaviour. Adler (1933) stated: "In a word I am convinced that man's behaviour springs from his ideas."

Cognitive therapy for the treatment of depression has generated substantial research indicating its effectiveness and is currently considered among the most viable conceptualizations of depression. It is not without criticism, however, as its methods do not directly address emotional symptoms in depressed clients.

The cognitive therapy of depression by Aaron Beck (1967) is a cognitive-behavioral approach to treatment that is designed to identify, evaluate and alter a client's maladaptive belief systems and dysfunctional styles of information processing. The cognitive theory of depression asserts that the depressive syndrome involves an interaction

of the biochemical, behavioral, affective and cognitive systems. While the involvement of multiple physiological and psychological factors is recognized, depression is viewed by Beck as primarily a disturbance in cognitions. Cognition and emotion are considered to interact continually and thus to account for the concurrent processes of distorted thinking and dysphoria. Cognitive disturbances influence all other functions in depression, and that influence is seen in affective, emotional, motivational, behavioral and vegetative manifestations (Rush, 1982).

A negative cognitive set is the basis of depression. This cognitive set has been conceptualized by Beck (1964) as the cognitive triad, and its components are: (a) a negative view of self, (b) a negative view of one's current situation in the environment, and (c) a negative view of the future. The depressed individual maintains a belief in the validity of these negative views, despite any contradictory environmental evidence, through systematic distortions in information processing.

Cognitive therapy attempts to assist the client in identifying the assumptions and schemas that are supporting recurrent patterns of negative thinking and in uncovering specific stylistic errors in cognition (Rush & Beck, 1978). Therapy involves cognitive and behavioral tasks in an attempt to provide successful experiences and consequent challenges to the validity of the client's negative schemas. In cognitive therapy the client learns that there are many

ways of interpreting any given situation and that a particular interpretation will lead to particular feelings and behaviours.

Rational Emotive Therapy (RET)

Rational Emotive Therapy (Ellis, 1977) (RET) is a popular form of cognitive therapy. Ellis's basic belief is that early learned irrational and magical beliefs are responsible for a person's emotional and behavioral Individuals are thought to talk themselves disturbances. into unhappiness by allowing irrational thoughts to permeate their thinking. According to RET, three basic components are inherent in the development of an emotion: (A) the person becomes aware of an event or a situation in his/her environment; (B) the person thinks specific thoughts and has basic attitudes or beliefs about the situation at point (A); and (C) the person experiences a resulting emotion or affective response. The cognitions at point (B) are seen as directly responsible for the emotive responses at point (C) (Ellis, 1977).

RET can be best summarized by the A-B-C-D-E paradigm that describes the sequence of therapy:

- A= Activating event
- B= Belief. Depression is initiated and reinforced by beliefs regarding what should have been.
- C= Emotional or behavioral consequences of the belief.
- D= Disputing the faulty belief.
- E= Effect of a new self-statement to counter the old

faulty one (Petzold, 1981).

Ellis (1977) believes that there are learned, irrational beliefs that are common to the majority of people within our culture. Among these are (1) I must have sincere love and approval almost all of the time from those persons whom I find significant; (2) I must prove myself thoroughly competent, adequate and achieving, or at least have real competence or talent in something important; (3) my emotional misery comes almost completely from external pressures that I have little ability to change or control, and, unless these pressures change, I cannot help making myself feel anxious, depressed, self-downing or hostile; (4) my past life influenced me immensely and remains all important, because if something strongly effected me in the past, it has to keep determining my feelings and behaviour today; and (5) I desperately need others to rely and depend upon, because I shall always remain so weak.

Research supports the idea of cognitive control over emotional states. Velton (1968) studied the effects of self statements on mood change. These statements, read to subjects, were positive ("this is great . . . I really feel good"), neutral ("Ohio is the Buckeye state"), or negative ("I have too many bad things in my life"). It was found that there was a direct linear relationship between the change in the content of self-statements and the alteration of mood states. Newmark (1973) found that neurotics endorse more irrational beliefs than do normals, and Goldfried and

Sobocinski (1975) found that individuals experiencing heightened anxiety also endorsed more irrational content than individuals not experiencing such anxiety.

Research Issues in Cognitive Therapy

Cognitive therapy for the treatment of depression has generated much research and has gathered considerable evidence for its effectiveness. Several researchers claim that cognitive therapy is an effective treatment for depression (Kovacs, 1980; Lewinsohn & Hoberman, 1982; Rush, Beck, Kovacs & Hollon, 1977; Simons, Garfield & Murphy, 1984). Since the late 1970s, cognitive therapy appears to at least match the tricyclic pharmacotherapies in terms of overall efficacy, and perhaps provides an even greater protection against the return of symptoms following treatment termination (Hollon & Beck, 1986).

Despite the reports of success, cognitive therapy has been criticized. A major criticism of RET, and other cognitive therapies, is that they address only the conscious mind of the client (Petzold, 1981). Matheson, (1979) reports that while the cognitive approaches allow clients to gain insight into their problems, the inertia and impaired relationships that characterize depression remain. Petzold (1981) suggests that access to the unconscious mind is necessary in treating depression, to reduce any resistance to change that is centred in the conscious mind. Tosi & Baisden (1984), state that "no psychological model that seeks to explain how human beings know, learn, or behave can

ignore the concept of unconscious psychological processes" (p. 160).

Hypnosis

Hypnosis has long been considered an effective way to reach the unconscious level of mind, "Shamans, religious leaders and various 'medical workers' from almost all ages and cultures have employed techniques to enhance suggestibility to overcome physical and emotional difficulties" (Deltito & Baer, 1968 p. 923). Hypnotic occurances have been reported by the early histories of most cultures including Egyptian, Greek and Hebrew recordings (Udolf, 1981). The hypnotic experiences were confined primarily to a role in religious experiences and healing.

What is hypnosis?

James Braid, an English physician in the 1840s borrowed from the Greek word for sleep, 'hypnos,' and coined the word hypnotism. This term, though widely used, is somewhat misleading, as a hypnotic state does not represent sleep, but rather represents the near opposite of it (Lewington, 1987). Hypnosis is "an altered state of consciousness" (Erickson, 1976, p.5), and in this altered state the client can interact with his or her environment in a novel manner (Bandler & Grinder, 1975). Hypnosis allows the person to be more suggestible than usual, and thus will accept ideas more wholeheartedly and uncritically than usual (Petzold, 1981).

The hypnotic state involves an almost complete focusing of one's attention on an idea, image or sensation. This

degree of absorption creates a masking of events that are normally monitored by the conscious mind, resulting in the distractions to learning becoming minimized (Lewington, 1987). At the same time, awareness of processes normally outside of conscious influence may be heightened.

Researchers in the Ericksonian school of thought
(Posner, 1973; Sternberg, 1975) believe that cognitive
activity that is outside conscious awareness, precedes and
influences conscious psychological processes. This suggests
that the unconscious mind acts as a filter, or censor,
monitoring and screening what enters conscious awareness
(Lewington, 1987).

The trance state is not a foreign state that the therapist imposes on the client. It is, rather, a natural phenomenon that occurs spontaneously, and "replicates natural mental processes while respecting and promoting individuality" (Lewington, 1987, p.18). Araoz, (1985) sees hypnosis as "ideal to facilitate the process by which people can learn to activate their own unique resources and potentials to resolve their own problems in their own ways" (p.x-xi).

<u>History of hypnosis</u>

The modern history of hypnosis is usually considered to originate in the work of Franz Anton Mesmer (Lucas, 1985).

His "scientific" explanation proposed that pathology was a result of disequilibrium in magnetic forces (Ellenberger, 1965). This explanation was accepted by medical and

scientific researchers because the removal of magical or religious themes fit much better in the developing age of reason of that time (Lucas, 1985). This acceptance, however, was somewhat uneasy. In 1784 the French Academy of Science appointed a committee of prominent scientists to investigate Mesmerism. They concluded that it was the patients imagination and beliefs about the treatment, rather than the actual treatment methods, that produced the relief from symptoms (Pattie, 1967). The scientific community at that time was focused toward explaining all natural phenomenon in terms of chemical or physical principals, so any theory involving mentalism or subjectivity was rejected (Lucas, 1985). The committee not only concluded that Mesmer's methods were worthless, but labelled them as potentially harmful because of the "immoral" nature of the close physical contact between the therapist and patient (Lucas, 1985). These findings were damaging to the development of hypnosis, and it became unpopular for scientists to investigate Mesmerism. There were, however, some disciples of Mesmer who continued their study of Mesmerism. Some physicians continued to use trances to control surgical pain. Among these was James Braid. was a conservative and an accepted member of the medical community, which helped legitimize the study of hypnosis (Watson, 1971). He conceptualized the hypnotic experience as "a narrowing of the patient's perceptual field through concentration on a single idea and as a state that was

possible to induce independent of any formal or ritualistic procedure" (Lucas, 1985 p.4).

Other major contributors to hypnosis are Jean Charcot and Hippolyte Bernheim of the Nancy School of Paris. Sigmund Freud was intriqued by hypnosis and its potential to remove symptoms through direct suggestion and its application in uncovering developmental incidences in the patient's history (Pattie, 1967). Freud discontinued his use of hypnosis, however, in favour of free association. Some authors have come to question Freud's abandonment of hypnosis and have suggested that his actions were motivated by misunderstandings of applications (Hermsmeyer, 1976), discomfort with an unexpected sexual response by a female patient (Udolf, 1981), lack of understanding of hypnotic recall (Pattie, 1967), and poor skills as a hypnotist (LeCron, 1971). The effects of Freud's abandonment of hypnosis were severe because of the powerful and unchallenged position his theory and methods had attained.

The rise of psychology in the last century has had an effect in repopularizing hypnosis for both professionals and the public.

Research on the effectiveness of hypnosis in altering mood states

Research on hypnotic alteration of mood reveals a separation in focus between clinical and experimental literature. Experimental research generally examines the effect of hypnotically *inducing* and manipulating affective

states, as measured by various cognitive, affective, physiological and performance measures. The clinical case research is more focused on the treatment of existing problematic affective states through mood alteration methods. The goal in such applied research is the development of general mood change, rather than systematically altering moods for empirical evaluation of such interventions (Bower, Gilligan & Monteiro, 1981).

Research in the early 1950s by Girdo-Frank and Bull (Gilligan, 1982) indicate the effectiveness of hypnotic induction for emotions of sadness, happiness, and anger. The hypnotic induction of happiness, calm, fear and depression has been demonstrated by both physiological and psychological assessments (Damasa, Shor & Orne, 1963; Dudley, Holmes, Martin & Ripley, 1964). Additional research indicating the effectiveness of the hypnotic induction of moods has been given by Hepps and Brady (1967), Kehoe and Ironside (1964), Martin and Grosz (1964) and Zimbardo, Maslach and Marshall (1972). In two reviews of the research on hypnotic induction of mood, both Barber (1965) and Sarbin and Slagle (1972) concluded that such procedures are effective.

Hypnosis may be viewed as one of several effective techniques for mood manipulation, and one that offers the additional advantages of being particularly effective in sustaining moods over longer periods, and in providing a means for developing generalized, free floating affective

states (Gilligan, 1982).

Research issues in hypnosis

Research has been conducted to assess the effectiveness of hypnosis in treating clinical depression, and there are reports of success (Deltito & Baer, 1986). This literature, however, is "largely anecdotal; adequate diagnostic criteria for depression, adequate control groups and valid statistical methods have been lacking" (Deltito & Baer, 1986, p.925). These authors feel that hypnosis is a "potentially useful" (p.923) approach to treating depression, but controlled research is necessary to empirically demonstrate the extent of its usefulness.

Matheson (1979) provides a summary of clinical case studies in which hypnosis was used in treating chronic depression. The results showed that posthypnotically released emotion is effective in increasing the level of predetermined behaviours, even when those behaviours have previously occurred infrequently or not at all. In addition, the clients in the Matheson study demonstrated significant improvement in general activity level and mood.

Golden, Dowd and Friedberg (1987) caution that hypnotic procedures that involve inducing a relaxed state can lower an already low arousal state and intensify depression. They suggest using "alert hypnosis" (p.35) that provides energizing suggestions and imagery which increases the arousal level of depressed clients. They report success in using alert hypnosis in treating depressed clients, but do

not provide details of the studies.

Gould and Krynicki (1989) conducted a study that compared the effectiveness of hypnosis on several different psychological symptoms. They found that hypnosis was not as effective in treating depression as in treating other disorders, such as anxiety. They recognize that depression involves both affective and cognitive or ideational components, and suggest that hypnosis is effective in reducing the affective component of depression, but is less effective in treating the cognitive component. The more a symptom entails cognitive dysfunction, the less the symptom can be influenced by a brief course of hypnosis when hypnosis is used alone (Gould & Krynicki, 1989).

Hypnosis, by itself, is not a treatment. It is the counselling and therapy that is important (Barber, 1969).

Diamond (1986) also cautions that "hypnosis is not a therapy in itself and the subsequent dimensions may be facilitative or inhibitory among various theoretical and technical orientations to treatment" (p.239).

While cognitive therapy has been criticized for dealing with only the conscious level of mind, hypnosis, when used alone, is similarly limited in accessing only the unconscious level of mind. Otani (1990) explains that "conscious experience and unconscious information processing . . . provide mutual feedback" (p.35) and suggests that the therapist should incorporate both the cognitive and the unconscious aspects of the client. Petzold (1981) suggests

such a synthesis of hypnosis with RET. "There are many occasions on which an approach which addresses only the unconscious or only the conscious mind will not be sufficient, by itself, to produce the desired therapeutic changes" (Petzold, 1981, p.27). He stresses the need for such a synthesis, which would allow us to draw from the strengths, and compensate for the weaknesses of both cognitive therapy and hypnosis.

Similarly, Deltito and Baer, (1986) suggest an approach where under hypnosis, the therapist can give the client suggestions to visualize themselves leading more competent and rewarding lives, and can also argue with the nihilistic self-concepts, and suggest that in the future they will no longer see things as negatively. They claim to have had success in treating clients who have shown "improvement in world view and diminished neurovegitative signs within two weeks of treatment" (p. 926) using this approach, but no details regarding the specific studies nor follow up data are reported.

Rational Stage Directed Hypnotherapy (RSDH)

RSDH, a therapeutic technique originated by Tosi (1974) and Tosi and Marzella (1975), is a cognitive experiential therapy that successfully combines hypnosis and RET (Reardon, Tosi & Gwynne, 1977). RSDH is a stage oriented, directive, psychotherapeutic technique that employs hypnosis/relaxation and guided imagery to help the client recondition negative cognitive, affective, physiological or

behavioral states (Fuller, 1982).

RSDH emphasizes cognitive control over affective, physiological and behavioral processes. In the RSDH model, cognitive restructuring skills are developed, implemented and reinforced while the client is hypnotized. The client also uses imagery to focus on negative emotional, physiological and behavioral sequences, and then uses more positive sequence grounded in rational and realistic cognitions associated with more positive outcome states (Fuller, 1982).

Techniques of RSDH involve: 1) a hypnotic trance state;
2) identification and vivid imagining of self-defeating and self-enhancing thoughts, emotions and behaviours; 3) cognitive restructuring of irrational ideas and 4) directing these processes through the stages of awareness, exploration, commitment, implementation, internalization and change (Reardon et al., 1977). The client, under hypnosis, is directed through each stage and is taught and encouraged to apply logical, critical thinking to internal and external events associated with the disturbance. RSDH is then suplemented by in-vivo behavioral tasks that correspond to the content of the imagery (Reardon et al., 1977).

Research on RSDH

Research has supported the effectiveness of RSDH.

Marzalla (1975) reports success in reduction of emotional stress using RSDH. Boutin and Tosi (1983) found a reduction of test anxiety in nursing students using this approach.

Howard (1979) found RSDH to enhance self-concept.

There is also support found in case studies. Tosi,
Howard and Gwynne (1982) report RSDH as being effective in
treating anxiety neurosis. Gwynne, Tosi and Howard (1978)
report effectiveness in treating psychological nonassertion.
Reardon, Tosi and Gwynne (1977) report success in the
treatment of depression. This case study involved a
depressed client who also suffered from schizophrenia, and
was on medication during the RSDH treatment.

Rational Self-Directed Hypnotherapy

Der and Lewington (1990) "continue in the line of rational hypnotherapy" (p. 161) by introducing a collaborative, self-directed intervention. This approach "enables the rational, cognitive capacities of the client to be combined with conscious and unconscious learnings via hypnotherapy in a manner which allows the client to explore and make changes in his or her own way and in a variety of ways" (p.161).

This approach is similar to RSDH in that both therapies combine rational/cognitive approaches that serve to heighten and intensify the therapeutic experience. There are, however, two important differences between Rational Self-Directed Hypnotherapy and RSDH. First, Rational Self-Directed Hypnotherapy is not as structured. It provides guidelines that encourage the active participation of the client, and offers a flexibility that "values the clients' unique personality and situation" (Der & Lewington, 1990).

The A-B-C-D-E paradigm described on page 11 is explained to the client, and is then used for cognitive control and change. Secondly, the Self-Directed approach "rejects the need to reexperience negative affect in an attempt to identify self-defeating behaviours in a situation chosen by the therapist" (Der & Lewington, 1990, p. 165). These authors prefer a client directed approach, trusting the client's unconscious mind to select an appropriate event (Haley, 1973). This is consistent with Erickson's belief that you don't tell yourself what you are going to do in a trance state. The unconscious mind is best left to use its own wisdom in selecting an event (Erickson, 1980). requires allowing the client to choose their own scene, under hypnosis. Rather than just exposure to this scene, both the therapist and the client challenge the irrational thinking connected to the scene, and rehearse new and more effective responses to that situation. A study by Der and Lewington (1990), based "not on anecdotal descriptions, but on a sound methodological framework" (Der & Lewington, 1990, p. 161), finds Rational Self-Directed hypnotherapy to be effective, as measured by objective and subjective measures, in treating panic attacks. Improvement was maintained over a 6 month follow-up period.

CHAPTER III

METHODOLOGY

Subject

This research was conducted in the form of a single case research design, The subject is a 47 year old man. He is married with two teenage children, and has been employed at a bank for 15 years. He has completed a high school education.

Through an employee assistance program at his place of employment, he was referred for treatment. He showed many of the symptoms of major depression, such as sleep disturbance, poor appetite and weight loss, flat affect, and loss of interest in almost all activities. He had tried antidepressant medication, prescribed by his physician, but discontinued this because of the unpleasant side effects. He had been on a leave of absence from his job for two weeks prior to therapy, and did not work during therapy.

This gentleman had no prior history of mood disorder, and had never been for psychiatric treatment or therapy in the past. He had come for therapy now, hoping to find relief from these symptoms.

Pre-, During and Post-Treatment Procedures

Before beginning treatment, the subject was asked to complete pre-treatment testing procedures. Two weeks before treatment he filled out the Beck Depression Inventory (BDI) (Beck & Steer, 1978), Novaco Anger Scale (Revised) (Burns, 1981), Dysfunctional Attitude Scale (Revised) (Burns, 1981),

and the Subjective Symptoms Scale. The Subjective Symptoms Scale was taken weekly throughout treatment. All tests were completed one week after treatment ended, and again at the follow up assessment six months after treatment.

Procedure

This study follows the guidelines for single subject experimental design (Barlow & Hersen, 1984; Kazdin, 1982; Mott, 1986; Nugent, 1985), including continuous assessment, baseline assessment, and stability of performance (Kazdin, 1982). Assessment was performed under an A-B-A time-series design (Hartmann et al., 1980; Jones, Vaught & Weinrott, 1977).

The subject came in for weekly sessions lasting one hour each. The first session, to gather baseline data, was conducted two weeks prior to beginning active therapy.

Therapy lasted 12 sessions, and one more session was added to collect post therapy data. A follow-up session was conducted after six months.

The first one-hour session involved an introduction to hypnosis, an explanation or clarification of any misconceptions or doubts, and a preliminary hypnotic induction. During this hour, he was asked to complete the Barber Suggestibility Scale (Barber, 1969), and the A-B-C-D-E theory (Tosi, Howard & Gwynne, 1982), and its application to therapy was explained.

Table 3-1: Tosi's A-B-C-D-E Paradigm

A - Situation

B - Cognition

C - Emotional response

D - Physiological concomitant

E - Behavioral response

The hypnotic induction, based on that used by Der and Lewington (1990), involved progressive relaxation, and the subject was given the option to choose whether he wanted background music included or not. The first scene was a 'pleasant scene' in which the subject envisioned himself in a scene (real or imaginary) in which he experienced feelings of comfort, relaxation and contentment. The subject had selected a place and described it to the therapist prior to induction. The subject was directed to be aware of the positive associations with this place and reminded that he may return to it at any time.

The subject was then asked to imagine a television screen. When he was ready he was instructed to turn on the screen and visualize or recall any incident in which he experienced negative feelings. In this way, he was able to watch the screen rather than relive the unpleasant experience, thereby allowing him to watch himself in a safer, less emotional, and more detached way. The A-B-C-D-E components were identified, and the subject was encouraged to identify any irrational or self-defeating thoughts. When this was completed, the subject was instructed to return to the pleasant scene described earlier, where he felt comfortable and confident.

The subject was then asked to visualize the same incident, but this time to substitute more rational thoughts and eliminate self-defeating attitudes. Throughout this sequence, he was asked by the therapist to describe the events and the application of the rational self-management skills. Occasionally, the therapist prompted him for ideas that would lead to different behavioral and emotional responses, but the subject guided most of the cognitive restructuring himself. After recreating the incident and generating new options and possible consequences, and if time allowed, the subject was asked if he wanted to explore another incident. If so, the sequence continued, and if not, he was directed to come out of the trance state, feeling refreshed and energized. The remainder of the session was spent debriefing his reaction to the session.

An audiotape was prepared so that the participant could listen to it each day between appointments. This cassette included a recording of relaxation and guided imagery exercises.

<u>Instruments</u>

The measurements of treatment efficacy are based on data collected from the Barber Suggestibility Scale (Barber, 1969), Beck Depression Inventory (Beck & Steer, 1978), Novaco Anger Scale (Revised) (Burns, 1981), Dysfunctional Attitude Scale (Revised) (Burns, 1981), and the Subjective Symptoms Scale.

Barber Suggestibility Scale

The Barber Suggestibility Scale (BSS) (Barber, 1969) was administered to the participant prior to treatment (Appendix B) to determine the participant's level of suggestibility.

The Barber Suggestibility Scale is significantly correlated with the Stanford Susceptibility Scale, Form A, at 0.62 for the objective portion and 0.78 for the subjective portion (Ruch, Morgan & Hilgard, 1974). The BSS (Barber, 1969) involves eight standardized test suggestions with corresponding objective score criterion including post-experimental objective scoring of test suggestions. Subjective scores are also tallied from the responses to a questionnaire that assesses the subjective experience of each of the eight test suggestions.

The eight items are: arm lowering (right arm); arm
levitation (left arm); hand lock; thirst hallucination;
verbal inhibition; body immobility; post-hypnotic response;
and selective amnesia. The participant will receive a point
in each of the items if; the right arm drops four inches or
more; the left arm rises four inches or more; the
participant is unable to unclasp his hands; swallows and
moistens his lips in response to thirst suggestion; is
unable to speak his name; and is unable to
stand fully erect. The fourth, seventh and eighth
suggestions are scored post-hypnotically, receiving one
point each if the subject reports feeling thirsty during the

test; clears his throat or coughs when the designated cue is presented; and fails to recall one specified item while remembering at least four others.

The subjective questionnaire measures, on a 4-point scale, the degree to which the participant experiences each suggestion. This is also confirmed in an interview following the test, when the participant is asked if the responses were as a result of simply following instructions or an attempt to please the therapist.

Beck Depression Inventory

The Beck Depression Inventory (BDI) (Beck & Steer, 1987) was administered to the participant two weeks prior to treatment, one week following treatment termination, as well as once more in the six-month follow up study (Appendix D). The BDI is a standardized, consistent measure that "is not sensitive to the theoretical orientation or ideosyncracies of the person administering it" (Gallagher, 1968, p. 150). It does not reflect any one particular theory of depression (Beck, Steer & Garbin, 1988).

The BDI is one of the most frequently used self-report depression inventories in contemporary clinical research (Hatzenbuehler & Matthews, 1983). Support is given for the BDI's usefullness in assessing depression in both psychiatric and normal populations (Beck, Steer & Garbin, 1988).

The BDI consists of 21 statements of feelings, each of which is presented with a four point scale to represent the

degree of intensity of the feeling. The participant is asked to indicate which of the four choices most accurately reflects his/her feelings for the past week, including today (Beck et al., 1988). A choice is made for each of the 21 feelings. When the test is completed, a total score for each of the 21 questions can be calculated. This score can then be evaluated according to Table 4-1.

Extensive research supports the adequacy of the BDI's psychometric properties. In a review of several studies that have addressed the internal consistency of the BDI, Beck et al. (1988) report a mean alpha of 0.86, with a range from 0.73 to 0.92 among non-psychiatric samples. has been shown to have strong construct validity (Beck et al., 1988), and is used to support the construct validity of other instruments (Steer et al., 1986). Studies measuring the relationship between the BDI and other psychological tests give correlations ranging between 0.50 and 0.80 (Meyer, 1977; Meites, Lovallo & Pishkin, 1980). The BDI has also been shown to discriminate between different types of depression (Davies, Burrows & Poynton, 1975), and is sensitive to detecting changes in depression produced by different therapies (Steer et al, 1986). Beck et al. (1988) present 35 studies that demonstrate that the BDI shows concurrant validity with a number of other measures of depression. The BDI reflects six of the nine DSM-III-R (American Psychiatric Association, 1987) criteria well, two (sleep disturbance and change in appetite) are partially

addressed, and one (psychomotor activity and agitation) is not included (Moran & Lambert, 1980).

Dysfunctional Attitude Scale (Revised)

Cognitive theory stresses the importance of uncovering the "silent assumptions" that lead to mood swings (Burns, 1980, p.241). The Dysfunctional Attitude Scale (DAS) (Weissman, 1978) is designed to elicit these assumptions. The original scale consists of one hundred self defeating attitudes that commonly occur in individuals who experience emotional disorders. Weissman's research indicates that while there is a dramatic reduction of "negative automatic thoughts" between episodes of depression, a "self-defeating belief system" remains constant during times of depression and remission (Burns, 1980, p.241). This research suggests that these silent assumptions represent a predisposition to emotional problems that are carried with an individual at all times.

Burns (1980) recommends the use of a shortened version of the Dysfunctional Attitude Scale (Appendix F). Thirty-five of the most common attitudes found in his practice with depressed clients are used in this scale. The participant rates, on a 5-point scale, how much he or she agrees with each of the 35 attitudes. An answer key is provided and a profile of the individuals' value system is generated. It is emphasized that there is no 'right' or 'wrong' answer to any statement, and instructions are given to answer according to "how you look at things most of the time"

(Burns, 1980, p.241).

As this is a shortened version of the original DAS, the psychometric information may not apply, but the original DAS shows adequate psychometric properties. Weissman (1979) reports good internal consistency, using coefficient alpha, with values ranging from r=0.89 to r=0.92 (p.9). A stability coefficient is reported of 0.84 over an 8 week period (p.10). Correlation coefficients are reported = 0.40 (p<.001) with the D-Scale of the Profile of Mood States (McNair, Lorr & Droppleman, 1971) and 0.36 (p<.001) with the BDI (Weissman, 1979, p.11).

This scale was administered 2 weeks prior to therapy, one week after therapy and at the 6-month follow-up.

Novaco Anger Scale (Revised)

Anger and hostility are commonly observed among depressives (Novaco, 1977). Because this participant was concerned about the anger that he felt, the Novaco Anger Scale (Revised) (Burns, 1981) was used to monitor any changes in the amount of anger that the participant experienced. The Original Novaco Anger Inventory (Novaco, 1975) is made up of 80 statements of provocation incidents. The participant rates, on a five-point scale, the degree of anger he or she would experience had the incident actually happened. Novaco (1975) reports that this scale shows good internal consistency (Cronbach alpha =0.94 for males and 0.96 for females) (p.16).

The original version of the scale was partially based

on interviews with university students who were asked about the twenty things that make them angry. Burns (1981) recommends using the shortened version of this scale which has omitted the student related questions (Appendix C).

This scale was used to provide a measure for pre- and post-treatment comparisons of the participants reactions to a wide range of provocations. The Novaco Anger Scale was administered two weeks prior to therapy, one week following therapy, and at the six-month follow up assessment.

Subjective Symptoms Scale

The Subjective Symptoms Scale (Appendix E), compiled by the co-researcher, borrows from the DSM III-R (American Psychiatric Association, 1987) criteria for major depression. In collaboration with the subject, the most commonly experienced symptoms were chosen for the scale. Each week the participant rated the frequency of each symptom on a 5-point scale, with 1 being 'low' to 5 being 'high'.

This scale was given at pre-therapy, weekly during therapy, post-therapy and at the six-month follow up assessment, thus providing a continuous measure throughout the study.

The frequency and severity of symptoms before therapy was compared with the frequency and severity during and following therapy.

In addition to the inventories used, the participant was asked to keep a journal, or therapy log, throughout

therapy to record his subjective reactions to therapy.

Single-Subject Research Design

This study employed a single-subject research design which must be distinguished from case studies. Case studies are threatened by the "multitude of rival hypotheses" (Heppner, Kivlighan & Wampold, 1992), and "represent an almost total lack of experimental control" (p.190). Case studies are also anecdotal in nature, tend to have poor internal validity and are often impossible to replicate. The case study has been criticized for it's reliance on inferences drawn from uncontrolled reports (Kazdin, 1982; Kratochwill, 1992; Mott, 1986; Nugent, 1985). These researchers recommend the use of the single subject research design over case studies.

In contrast to the case study, the single subject experimental design involves more systematic observations and experimental control. By using repeated objective measures, including continuous assessment over time, and requiring stable performance levels prior to and following treatment, the single subject design can provide stronger empirical evidence, and allow fewer rival hypotheses, thus allowing more definitive conclusions than the case study (Hersen & Barlow, 1976).

In this study, guidelines suggested by Kazdin (1982) and Kratochwill (1992) were followed, and criticisms outlined by Nugent (1982) were addressed. The researcher borrowed from the examples set by Gwynne, Tosi and Howard

(1978), and Der and Lewington (1990).

The first requirement of a single subject research design is continuous assessment (Kazdin, 1982). This allows the researcher to examine the pattern and stability of performance before treatment and following the intervention. This design operates on the assumption that if no treatment were given, the behaviour would continue as recorded in baseline. If a change is noted during treatment, then it may be due to the intervention (McMillan & Schumacher, 1989; Nugent, 1985). In this study, the continuous assessment was based on the Subjective Symptoms Scale, and the participants subjective feelings of change.

The second requirement, according to Kazdin (1982), is baseline assessment. In this study a pre-therapy assessment was conducted, using the previously mentioned tests, beginning two weeks prior to therapy. A two week baseline period was chosen following examples set by Gwynne, Tosi and Howard (1978), Tosi, Howard and Gwynne (1982), and Der and Lewington (1990). As well as the tests given prior to therapy, a history of the condition was taken, including its frequency, severity, duration and periods of improvement or remission from symptoms.

Nuggent (1985), in his framework for evaluation of single subject design, suggests four components. First, the use of objective data is required to counter the problems associated with reliance on the therapist's opinion of anecdotal information. Secondly, a pre-and post treatment

measurement design is recommended, requiring objective measures of the problem taken once before and once after treatment. In the present research, the pre- and post treatments were administered two weeks before therapy and one week after completion of therapy.

Nugent's (1985) third and fourth components are the use of repeated measures and stability information. These correspond to Kazdin's (1982) continuous assessment and baseline assessments, and have been discussed previously.

Kazdin (1982) recommends the use of an A-B-A-B design that involves a baseline condition, intervention, withdrawal of treatment and reinstatement of the intervention. This was rejected, however, in the current study because the removal of treatment is thought to be unethical in this case. As Lewington (1987) points out, "it [becomes] an ethical question when the withdrawal of treatment (possibly prematurely) serves to answer researcher's questions but is not in the best interests of their clients" (p.44-45).

This study employed an A-B single case design. Nugent (1985) feels that use of this design is "particularly well suited for use with hypnotic interventions" (p.196), and he calls on hypnotherapists to adhere to guidelines for single case designs so that effective therapeutic technology may develop.

Bloom and Fisher (1982), Kazdin (1982) and Nugent (1985) feel that "use of repeated measures before and during treatment, essentially an A-B single case design, appears a

minimum requirement for making data-based causal inferences" (Nugent, 1985, p.196).

Analysis

The analysis of the data was based on an interrupted time-series A-B-A withdrawal design (Kazdin, 1982; Tawney & Gast, 1984), following the example set by Der and Lewington (1990). For the visual analysis of graphic data, Tawney and Gast's (1984) considerations were followed: (1) the number of data points plotted within a condition, (2) the number of variables changed between adjacent conditions, (3) level stability and changes in level with and between conditions, and (4) trend direction, trend stability, and changes in trend within and between conditions (p.159).

The amount of variability indicated on the ordinate scale was examined, and the level of change was calculated by comparing the first and last data points within a condition, providing a change score value. The level of change between conditions was also studied. The trend direction, or slope, indicated whether there was improvement or decay of the ordinate value, and its steepness over time.

The trend in data was estimated using the split-middle level of progress method (White & Haring, 1980), as this is considered to provide a more reliable and accurate estimate than the freehand method.

In addition to isolating and analyzing the data patterns, the therapy log highlighting significant events or circumstances was employed in an attempt to explain any

sudden changes, unexpected variability, or potentially confounding variables which may have occured and that would threaten the internal validity of the study.

CHAPTER IV

RESULTS

Barber Suggestibility Scale

The participant responded positively to seven out of eight test suggestions and scored 24 out of 24 on the subjective responses. The missed item was test item #8 (selective amnesia). To recieve a point for this item, the participant must not refer to the Arm Levitation item (Test suggestion 2), but recall at least four other items. The participant, in this case, did not refer to the Arm Levitation item, but did not recall four other items.

This is considered to be a high score, and is indicative of highly suggestible clients who respond well to hypnosis.

Beck Depression Inventory

The results of the BDI are illustrated in Figure 4-1. Information for interpretation of scores is provided in Table 4-1 (Burns, 1980, p.23).

Table 4-1: Interpreting the BDI

Levels of Depression
These ups and downs are considered normal
Mild mood disturbance
Borderline clinical depression
Moderate depression
Severe depression
Extreme depression

A persistent score of 17 or above may indicate a need for professional treatment.

The pre-therapy total score of 36 indicates severe

depression, calling for professional treatment. The posttherapy score of 5 falls within the range which is
considered to reflect the normal ups and downs in life. The
six-month follow-up score of 0 indicates a complete absence
of depression. The graph shows the presence of symptoms of
depression at pre-therapy for all items except suicidal
thoughts (item 9), concern for appearance (item 14), and
concerns regarding physical health (item 20). In these
cases the change scores were 0. All other symptoms showed a
marked reduction with the most extreme changes (change score
= 3) in irritability (item 11), loss of interest in others
(item 12), decision making ability (item 13), ability to
work (item 15), insomnia (item 16) and libido (item 21).

<u>Dysfunctional Attitude Scale (Revised)</u>

The results of the DAS are illustrated in Figure 4-2. Scoring information is provided in Appendix F.

The first five attitudes on the DAS (I on abscissa) assess the need for approval. The participants' pre-therapy score of -7 indicates excessive dependence on external approval. This results in being prone to manipulation, and vulnerable to anxiety and depression. The post-therapy score of -4 shows that the participant is still "emotionally vulnerable" in this area (Burns, 1981, p. 250). By follow-up, however, the score of +5 shows that he is well within the area of "psychological strength" (Burns, 1981, p. 250). This score suggests that he is now independent, with a positive sense of his worth, even when facing criticism and

The Beck Depression Inventory

Score Totals

Pre-therapy = 36 Post-therapy = 5 Follow-up = 0

Legend:

Pre-therapy
Post-therapy
Follow-up

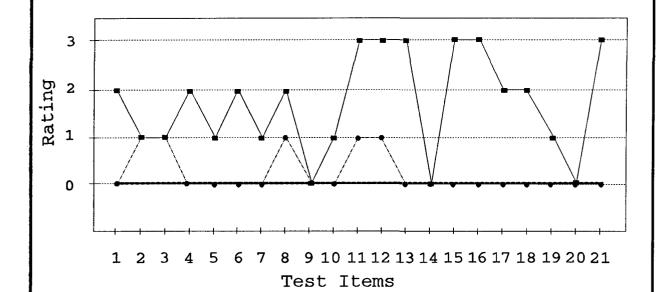


Figure 4-1
The participant's BDI profile for pre-therapy post-therapy and follow-up.

disapproval.

The second set of five attitudes (II on abscissa) assess the tendency to base self-worth on whether or not you are loved. The pre-therapy score of -2 indicates that love is seen as a "need" without which one cannot survive, let alone be happy. This results in poor relationships and lonliness. The post-therapy score of +5 shows a marked change in these attitudes. This score is now well within the range of "psychological strength", and this is improved even further by the follow-up score of +6. This indicates that the participant now views love as desirable, but not as a requirement for happiness or self-esteem.

The next five attitudes (III on the abscissa) assess beliefs and attitudes regarding achievement. The pretherapy score of -8 indicates workaholism; a tendency to view self as a commodity in the workplace. Self-worth and capacity for joy are dependent on productivity. The post-therapy score of +5 shows a significant change in this tendency, which is improved even more by the follow-up score of +8. The positive scores indicate an enjoyment of creativity and productivity, but these things are not seen as the exclusive or necessary road to self-esteem and satisfaction.

Test items 16 through 20 (IV on abscissa) measure the tendency to perfectionism. The pre-therapy score of -6 indicates that the participant is living with unrealistic standards. Expectations are not in line with reality, and

life has become a "joyless treadmill" (Burns, 1981, p. 252). The post-therapy and follow-up scores of +2 and +3, respectively, show a shift into the area of psychological strength in this area. This shows that the participant has begun to develop the capacity to set meaningful, flexible and appropriate standards, and to gain satisfaction from experiences, rather than fixating exclusively on outcomes.

Attitudes 21 through 25 (V on abscissa) assess the sense of entitlement. The pre-therapy score of -7 reflects the belief that one's wants (success, love, happiness, etc.) should be met by other people. When this does not happen, the tendency is to become angry, frustrated and bitter. The post-therapy score of +4 reflects a shift in attitudes, suggesting a willingness to negotiate for wants and needs, and a realization that negative outcomes may be disappointing, but need not be tragic. Patience, persistence and frustration tolerance have increased. This score shows further improvement (+7) at the six month follow-up assessment.

Attitudes 26 through 30 (VI on abscissa) measure the tendency to place self as the center of one's personal universe, and to take responsibility for what goes on around one's self. The pre-therapy score of -8 indicates that the participant blames himself inappropriately for the behavior and attitudes of others. This results in guilt and self-condemnation. The post-therapy and follow-up scores of +1 and +6 show a substantial move into the area of

psychological strength. This suggests that he realizes that he is ultimately responsible only for himself. He is now less threatened when others disagree with him, and is able to develop relationships characterized by "mutuality" rather than "dependency" (Burns, 1981, p. 254).

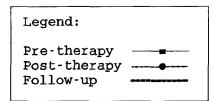
Items 31 through 35 (VII on abscissa) assess level of autonomy. This refers to the ability to find happiness within one's self. The pre-therapy score of -8 suggests the belief that the potential for joy and self-esteem are external to self. His moods are dependent on outside factors. The post-therapy and follow-up scores of +4 and +6, respectively, suggest that the participant is now able to take responsibility for his feelings, and realizes that they are ultimately created by himself, and not external factors.

Overall, the results of the DAS show a shift from "emotional vulnerability" in all 7 areas assessed, to "psychological strength" in 6 of the 7 areas by post-therapy. This improvement is furthered even more by the six-month follow-up assessment, which shows higher positive scores than post-therapy in all 7 areas.

Novaco Anger Scale (Revised)

The results of the Novaco Anger Scale (Revised) are illustrated in Figure 4-3. A scoring guide is provided in Appendix C. The pre-therapy score of 82 suggests that the participant frequently reacts in an angry way to annoyances in life. This score is considered to reflect a person who

The Dysfunctional Attitude Scale (Revised)



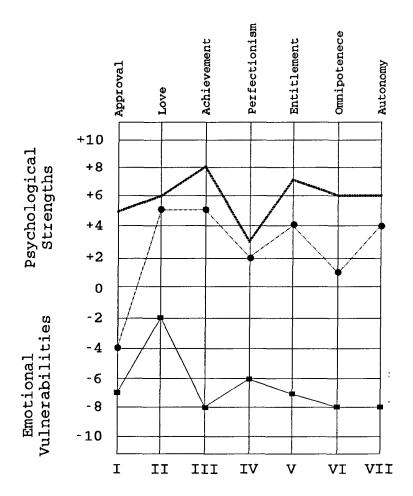


Figure 4-2
The participant's DAS profile for pre-therapy post-therapy and follow-up.

is "substantially more irritable than the average person" (Burns, 1981, p.138). The post-therapy score of 33 shows a marked reduction in the degree of irritation felt, and falls within the range that indicates a "remarkably low degree of anger and annoyance." Only a few percent of the population are said to score this low (Burns, 1981, p.137). The follow-up score of 38 shows a slight increase since post-therapy, but still falls within the remarkably low range.

Subjective Symptoms Scale

The results of the Subjective Symptoms Scale are illustrated in Figures 4-4 through 4-10. Figure 4-4 illustrates the participants' profile for pre-therapy, post-therapy and follow-up. This shows a significant decrease in all symptoms between baseline and follow-up, with the exception of item #10 (suicidal feelings), which shows zero celeration from pre-therapy through follow-up. A discussion of the pattern shown for each individual symptom will follow.

Figure 4-5 illustrates the results for insomnia, loss of appetite and lonliness. Insomnia is initially at a high stable rate, which gradually decreases throughout therapy. The split-middle line of progress (White & Haring, 1980) shows a decelerating trend (decreasing in ordinate value over time). The change score, from pre-therapy to follow-up, of 3 indicates improvement.

Loss of appetite shows a stable high rate, but follows a decelerating trend as therapy progresses. The change

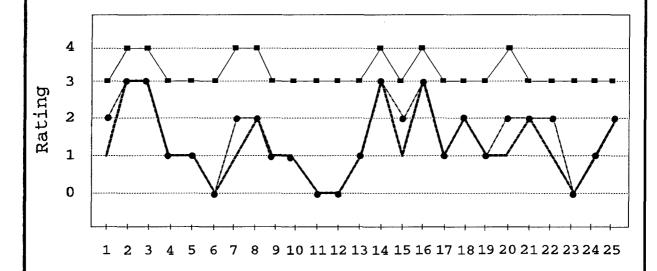
Novaco Anger Scale (Revised)

Score Totals

Pre-therapy = 82 Post-therapy = 33 Follow-up = 38

Legend:

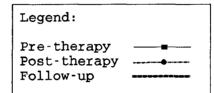
Pre-therapy
Post-therapy
Follow-up



Test Items

Figure 4-3
The participant's NAS profile for pre-therapy post-therapy and follow-up.

The Subjective Symptoms Scale



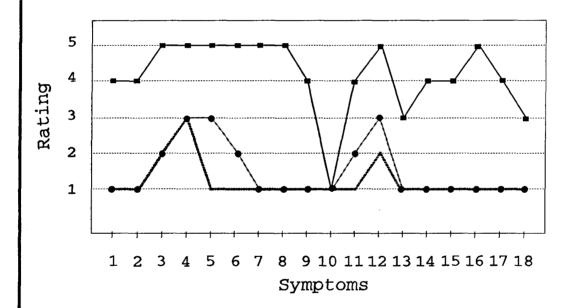


Figure 4-4
The participant's SSS profile for pre-therapy post-therapy and follow-up.

score from baseline to follow-up is 3.

Lonliness starts off with a very high, stable rate, but shows a decelerating trend throughout therapy, ending with the low score of 2. The change score between baseline and follow up is 3.

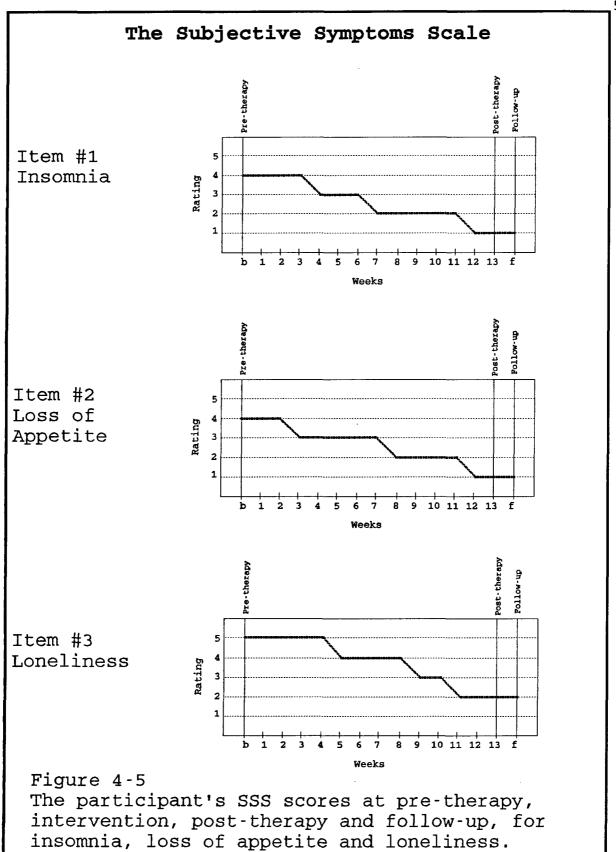
Figure 4-6 illustrates the results for poor cencentration, apathy and loss of libido. Poor concentration begins with a very high, stable trend that does not begin to show improvement until the seventh week of therapy. The split-middle line of progress, however, indicates a decelerating trend over the 12 weeks. The follow up score shows further improvement. The change score is 3.

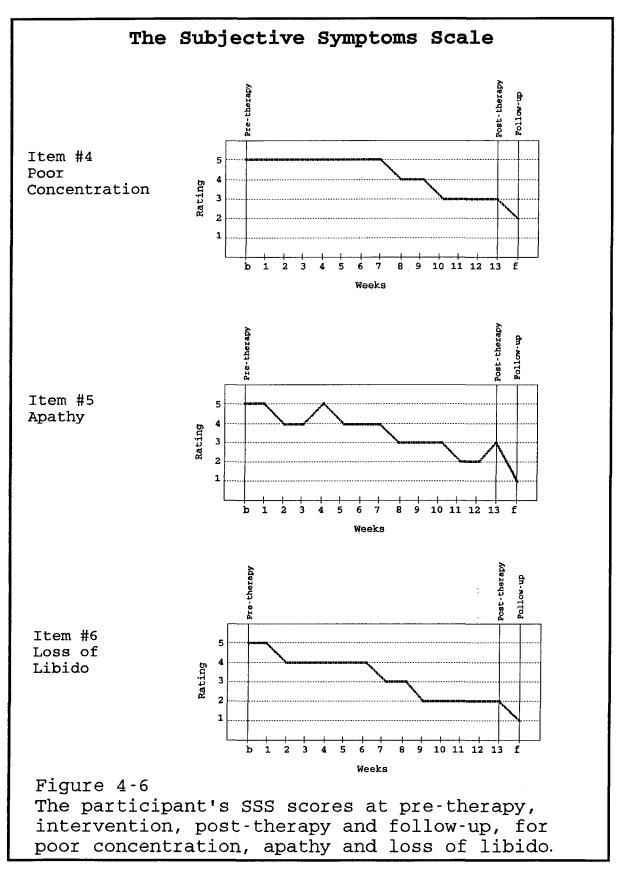
Apathy displays a decelerating trend overall, but also displayed more variability than the other symptoms. Of particular interest is the slightly increased score at post-therapy. This could possibly reflect the participant's anxiety regarding therapy ending. The follow-up score shows continued improvement in this area. The change score between baseline and follow-up is 4.

Loss of libido shows a decelerating trend over the 12 weeks, and further improvement at follow-up. The change score is 4.

Figure 4-7 illustrates the results for anger, irritability and guilt. Anger begins at a very high, stable rate, but shows a decelerating trend overall, ending with a very low score. The change score is 4.

Irritability follows a similar path to anger, with a





decelerating trend and very low follow-up score. The change score is 4. Guilt shows a decelerating trend overall, with an initial increase in score from pre-therapy to the first session. The end of therapy shows a stable very low score which is maintained at follow-up. The change score from pre-therapy to follow-up is 4.

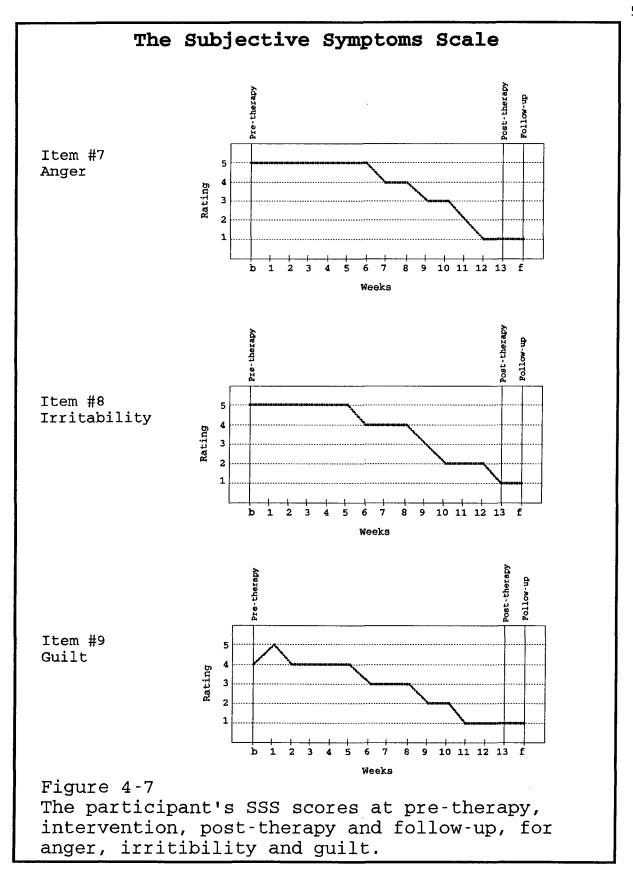
Figure 4-8 illustrates the results for suicidal feelings, low energy and lack of ambition. Suicidal feelings showed a trend of zero celeration. The participant never experienced suicidal feelings, but the test item was retained for ethical reasons.

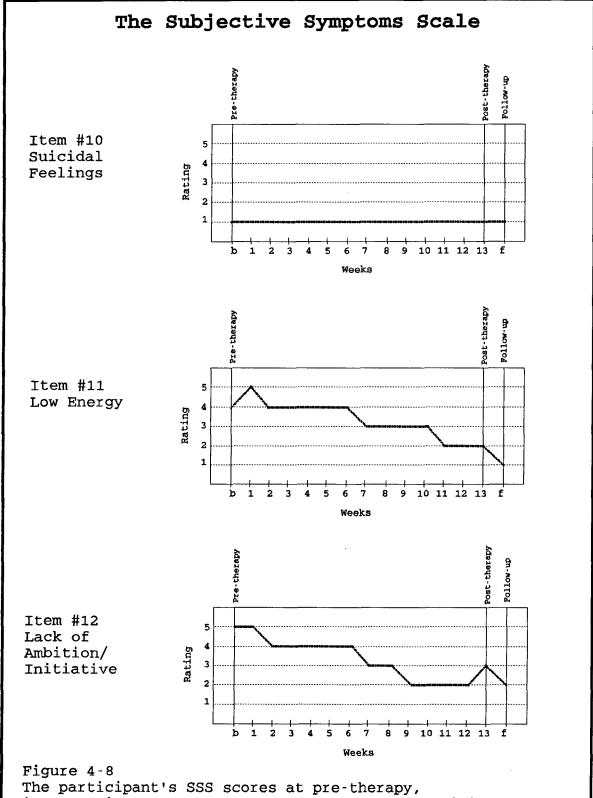
Low energy showed a decelerating trend, beginning at a high rate and ending at a low rate. By follow-up this was reduced further to a very low score. The change score is 3.

Lack of ambition begins at a very high rate, and shows a decelerating trend. The increased score at post-therapy may reflect the participant's anxiety about terminating therapy. The follow-up score shows a return to the previous low score. The change score between pre-therapy and follow-up is 3.

Figure 4.9 displays the results for hopelessness, worthlessness and self-reproach. Hopelessness begins with a moderate score and shows a decelerating trend, ending with a stable, very low score which is maintained through follow-up. The change score is 2.

Worthlessness follows a decelerating trend, beginning high and ending with a stable very low score. The change





intervention, post-therapy and follow-up, for suicidal feelings, low energy and lack of ambition/initiative.

score is 3.

Self-reproach shows a decelerating trend, beginning with an increase between pre-therapy and the first session, but ending with a stable very low score. The change score between pre-therapy and follow-up is 3.

Figure 4-10 illustrates the results for weight loss, sadness and crying. Weight loss begins at a very high score and follows a decelerating trend, ending with a stable very low score. This is maintained at follow-up. The change score is 4.

Crying began at a moderate rate and showed a decelerating trend throughout therapy, ending with a stable, very low rate. The change score is 2.

Sadness showed a decelerating trend, with an initial increase between pre-therapy and the first session. The last half of therapy shows a stable, very low rate. The change score between pre-therapy and follow-up is 3.

Overall, all assessment devices indicate significant improvement, or reduction of symptoms between pre-therapy and follow-up.

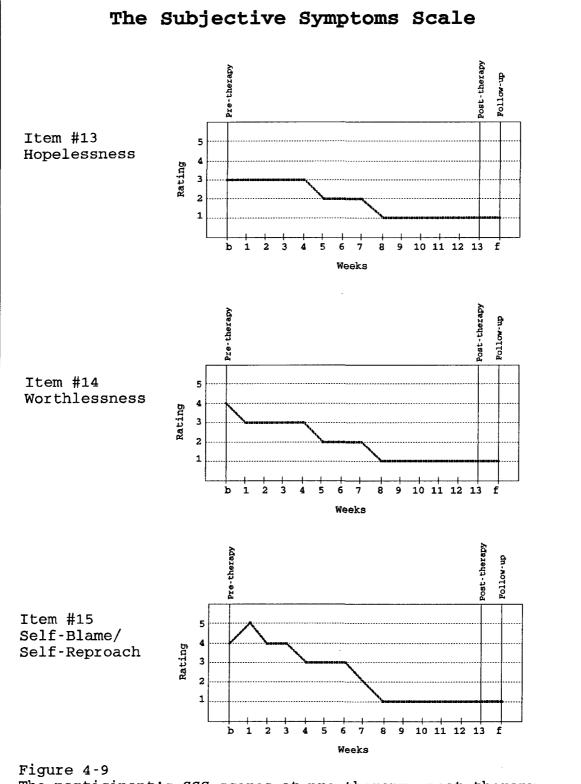
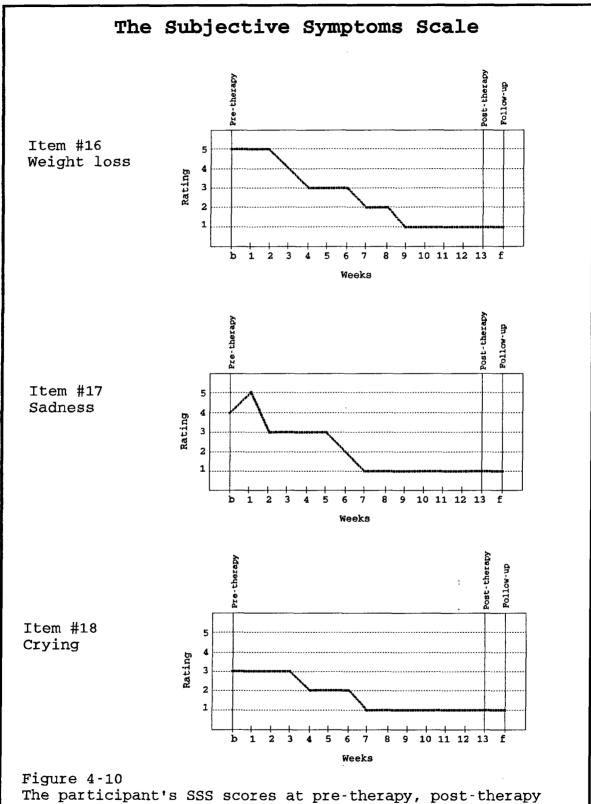


Figure 4-9
The participant's SSS scores at pre-therapy, post-therapy and follow-up for hopelessness, worthlessness and self-blame/self-reproach.



The participant's SSS scores at pre-therapy, post-therapy and follow-up for weight loss, sadness and crying.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Comparisons and Evaluations

The scales and inventories used in this study were intended to pinpoint problem areas, to monitor changes throughout therapy, to provide a clearer picture of the participant than would have been possible from interviews alone, and to confirm or contradict reports from other tests. Any assessment tool may provide incomplete or misleading information if used in isolation (Lewington, 1987). From the comparison and evaluation of the scales and inventories used, we can generate an efficient clinical and research description of the participant's progress throughout the intervention.

The pre-therapy profiles of the BDI, Dysfunctional Attitude Scale (Revised), Novaco Anger Scale (Revised) and the Subjective Symptoms Scale present consistent pictures of the participant, and all suggest great improvement. The BDI pre-therapy total score (36), indicating severe depression, fits with the DAS pre-therapy profile showing emotional vulnerability in all seven areas assessed. These results support the notion that self-defeating attitudes and depression are related. The pre-therapy profile of the NAS (total score = 82) indicates that the participant is frequently more irritable and angry than the average person. This is consistent with the participant's reported sense of more irritability and anger than was usual for him. The

Subjective Symptoms Scale pre-therapy profile shows high scores on 15 of the 18 symptoms assessed. This is consistent with the elevated BDI scores in the same or similar areas.

From a clinical perspective, the first task of therapy was to identify the sources which were interfering with the participant's emotional well-being. The results of the DAS provided clues as to some of the self-defeating attitudes that may have been contributing to the depression.

By post-therapy, all assessment devices show significant improvement. The BDI post-therapy score of 5 indicates normal mood swings, and no presence of clinical depression. The DAS profile has shifted into the area of "psychological strength" in six of the seven areas assessed. The one exception was Approval, which although improved, remained in the area of "emotional vulnerability." This suggests that the participant still tends to evaluate himself according to external sources, leaving him vulnerable to anxiety and depression when faced with criticism from others. The areas of love, achievement, perfectionism, entitlement, omnipotence and autonomy, however, all showed marked improvement. The NAS total score at post-therapy has dropped to 33, showing significant improvement. The post-therapy score falls within the "remarkably low" range which represents only a few percent of the population. The Subjective Symptoms Scale similarly showed improvement in all 18 symptoms at post-therapy, with

the exception of suicidal feelings, which was low at pretherapy and remained low throughout therapy. The weekly assessments with the SSS show a gradual, steady reduction of symptoms over the 12 weeks.

Overall, the post-therapy results indicate significant The follow-up study, change between pre- and post-therapy. six months after treatment termination further confirms the success of the intervention. The BDI follow-up profile shows the complete lack of depressive symptoms (total score The DAS shows continued improvement from post-therapy in all seven areas. Approval, which was still problematic at post-therapy, has improved significantly, now well within the range of "psychological strength." The NAS shows a slightly higher total score (38) than at post-therapy (33), indicating some increase in irritability over the six months, but is still substantially lower than the pretherapy score (82), and still within the "remarkably low" range of anger and irritation. The Subjective Symptoms Scale also shows that the improvement at post-therapy has been maintained, and shows even further improvement in loss of interest, loss of libido, low energy and lack of ambition/initiative.

In addition to the test results, which indicate that therapy was effective, the participant stated in his therapy log that his values had changed as a result of treatment. At the six-month follow up appointment he reported examples of what he referred to as a change in values: "Material

things are not as important as family and personal relationships. I have changed many relationships. Many people I thought were important (supervisors, etc.) are now less important, and other people became more valued (family, children, parents, personal friends). Those relationships that are more genuine are more valued (some friends) than other superficial relationships (other friends and coworkers). I have changed my outlook in life, changed my world view. I have also changed at work, become more human, not just business to get things done; more human -- more understanding -- and aware of their [co-workers] feelings."

In summary, all of the assessment devices indicate significant positive changes after the therapeutic intervention, and the follow-up scores show that this improvement has been sustained over the six-month follow-up.

Response to Hypothesis

Results indicate that the therapy was effective in reducing the level of depression in the client. The change scores between pre-therapy and follow-up were significant in all cases. The assessments showed reduced level of depression, reduced dysfunctional attitudes, and reduced anger and irritation.

Internal and External Validity

Therapy in this study was successful, but can we assume from this that Rational Self-Directed Hypnotherapy was responsible for the improvement in the participant? Kazdin (1982) isolates five threats to internal validity: History,

maturation, testing, statistical regression to the mean and multiple interventions. The therapy log was included to help guard against these threats. Had any unusual occurances interfered during the course of therapy, they would have been reported in this log. No unusual events were reported, either by the participant during sessions, or in the therapy log.

Mott (1986) suggests that when symptoms are severe, even an ineffectual intervention may show regression toward the mean. The results presented in the previous chapter show that improvement reflected more than mild changes as a result of regression to the mean. In almost all cases the profiles went from substantially problematic to healthy, well balanced profiles.

Mott (1986) cautions that therapies using hypnosis represent multiple interventions that could threaten internal validity. Whether hypnotherapy is a multiple intervention, though, is debatable. Lewington (1987) describes Rational Self-Directed Hypnotherapy as "not a potpourri of RET, hypnosis and supportive psychotherapy. Rather it is a unified whole in which the subject uses rational self-evaluation in and out of trance and the therapist facilitates this with direct supportive learning, in and out of trance" (p.82/83).

Attempts were made to present the theoretical framework of this intervention in such a way as to allow replication of this study. It must be noted, however, that the

underlying issues and the client's degree of motivation and external support systems may not be the same. The interaction between the client and the therapist will also differ.

As a single subject design, the generalizability of these results are limited. It cannot be assumed that because the intervention was successful in this case, it will be successful in all cases. An area for future research may be to apply this intervention to other subjects and other conditions.

Summary and Conclusions

This study tested a form of rational hypnotherapy that emphasizes cognitive restructuring to reduce major depression. The intervention was made up of relaxation exercises, guided imagery, subconscious direction of critical incidents and rational self-evaluation through cognitive restructuring.

A single subject research design was employed to test whether this model, which has been successfully applied to other conditions, is similarly effective in treating depression. This study attempts to take another small step towards testing a design that maintains both sound methodology and clinical priorities.

The participant was a man in his mid-forties who was suffering from depression. He sought out therapy and was motivated to change. He agreed to complete all tests and inventories, and did so without exception.

Pre-therapy assessment showed his condition to be severe. Improvement was seen throughout therapy, evidenced by the gradual decelerating trend shown by the continuous assessment measure, and the pre- and post-therapy measures. By the end of the intervention period, all symptoms were in a "normal" or "healthy" range. The participant reported that he no longer felt depressed and was no longer concerned about the degree of anger and irritation that he felt. This was confirmed by the post-therapy assessment. The participant returned to work two weeks after therapy termination, and was still working at the six-month follow up. The follow-up test profiles show that improvement was maintained, and even furthered over the six month period.

Rational Self-Directed Hypnotherapy is shown to be effective in this case, as evidenced by the assessment results and the participant's self-reported satisfaction. It has the advantage of being a relatively short-term intervention that encourages the client, in collaboration with the therapist, to play a major role in resolving his/her own problems.

References

- Aaroz, D.L. (1985). The new hypnosis. NY: Brunner/Mazel
- Abraham, K. (1960, originally 1924). A short study of libido, viewed by the light of mental disorders. Selected papers on psychoanalysis. NY: Basic Books.
- Adler, A. (1933), <u>Social interest</u>, a challenge to mankind. London: Faber and Faber, Ltd.
- Adler, A. (1924). The practice and theory of individual psychotherapy. NY: Harcourt Brace.
- American Psychiatric Association. (1987). <u>Diagnostic and statistical manual of mental disorders</u>, (3rd edition, revised). Washington, D.C.
- Bandler, R., & Grinder, J. (1975). <u>Patterns of the hypnotic technique of Milton H. Erickson, M.D.</u> Cupertino, CA: Meta Publications.
- Barber, T.X. (1969). <u>Hypnosis: A scientific approach.</u> NY: Van Nostrand Reinhold.
- Barber, T.X. (1965). Physiological affects of hypnotic suggestions. <u>Psychological Bulletin</u>, <u>63</u> (4), 201-221.
- Barlow, D.H. & Hersen, M. (1984). Single case experimental designs: Strategies for studying behavior change (2nd ed.). NY: Pergamon Press.
- Beck, A.T. (1964). Thinking and depression: 2, theory and therapy. Archives of General Psychiatry, 10, 561-571.
- Beck, A.T. (1967). <u>Depression: Causes and treatment</u>. Philadelphia: University of Pennsylvania Press.
- Beck, A.T. & Steer, R.A. (1987). <u>Beck Depression</u>
 <u>Inventory</u>. San Antonio: The Psychological Corporation Harcourt, Brace, Jovanovich.
- Beck, A.T., Steer, R.A., & Garbin, M.C. (1988).

 Psychometric properties of The Beck Depression Inventory:
 Twenty-five years of evaluation. Clinical Psychology
 Review, 8, 77-100.
- Black, D.W., Winokur, G., & Nasrallah, A. (1987).

 Mortality in patients with Primary Unipolar Depression,
 Secondary Unipolar Depression, and Bipolar Affective
 Disorder: A Comparison with general population mortality.

 International Journal of Psychiatry in Medicine, 17, 351-360.

- Bloom, M. & Fischer, J. (1982). <u>Evaluating practice:</u>
 <u>Guidelines for the accountable professional</u>. Englewood Cliffs: Prentice-Hall. pp. 235-267.
- Boutin, G.E. & Tosi, D.J. (1983). Modification of irrational ideas and test anxiety through Rational Stage Directed Hypnotherapy (RSDH). <u>Journal of Clinical Psychology</u>, 39, 383-391.
- Bower, G.H., Gilligan, S.G., & Monteiro, K.P. (1981).
 Selectivity of learning caused by affective states.

 <u>Journal of Experimental Psychology: General</u>, <u>110</u>, 451-473.
- Boyd, J.H. & Weissman, M.M. (1981). Epidemiology of affective disorders A reexamination and future directions. <u>Archives of General Psychiatry</u>, 38, 1039-1046.
- Bromberger, J.T. & Costello, E.J. (1992). Epidemiology of depression for clinicians. Social Work, 37, 120-125.
- Burns, D.D. (1981). <u>Feeling good: The new mood therapy.</u> Middlesex, Eng.: Penguin Books.
- Damaser, E.L., Shore, R.E., & Orne, M.T. (1963)
 Physiological effects during hypnotically requested emotions. Psychosomatic Medicine, 25, 334-343.
- Davies, B., Burrows, G., & Poynton, C. (1975). a comparative study of fair depression rating scales.

 <u>Australia and New Zealand Journal of Psychiatry</u>, 9, 21-24.
- Deltito, J. & Baer, L. (1986). Hypnosis in the treatment of depression: Research and theory. <u>Psychological</u> <u>Reports</u>, <u>58</u>, 923-929.
- Der, D. & Lewington, P. (1990). Rational Self-Directed Hypnotherapy: A treatment for panic attacks. American Journal of Clinical Hypnosis, 37, 160-167.
- Dudley D.L., Holmes, T.H., Martin, G.J., & Ripley, H.S. (1964). Changes in respiration associated with hypnotically induced emotion, pain and exercise. <u>Psychosomatic Medicine</u>, <u>26</u>, 46-57.
- Ellenberger, H.F. (1965). Mesmer and Puysegur: From magnetism to hypnotism. <u>Psychoanalytic Review</u>, <u>52</u>, 137-153.
- Ellis, A. (1977). <u>Handbook of Rational Emotive Therapy</u>. NY: Springer Publishing Co., Inc.

- Epictetus. (1899). <u>The works of Epictetus</u>. Boston: Little Brown and Company.
- Erickson, M.H. (1980). A teaching seminar with Milton H. Erickson. J.K. Zeig, (Ed). NY: Irvington.
- Erickson, M.H. (1976). Hypnotic Realities. NY: Irvington.
- Freud, S. (1957, originally, 1917). Mourning and melancholia, standard edition. London: Hogarth Press.
- Fuller, J.K. (1982). Rational Stage Directed Hypnotherapy in treatment of self-concept and depression in a geriatric nursing home population -- A cognitive-expriential approach. Unpublished doctoral dissertation, Ohio State University.
- Gallagher, D. (1986). The Beck Depression Inventory and older adults; Review of its development and utility. Clinical Gerontologist, 5, 149-163.
- Golden, W.L., Dowd, E.T., & Friedberg, F. (1987).

 Hypnotherapy: A modern approach. NY: Pergamon Press.
- Goldfried, M.R. & Sobocinzki, D. (1975). Effect of irrational beliefs and emotional arousal. <u>Journal of Counseling and Clinical Psychology</u>, 43, 504-510.
- Gould, R.C. & Krynicki, V.E. (1989). Comparative effectiveness of hypnotherapy in different psychological symptoms. <u>American Journal of Clinical Hypnosis</u>, <u>32</u>, 110-117.
- Guze, J.B. & Robins, E. (1970). Suicide and Primary Affective Disorder. <u>British Journal of Psychiatry</u>, <u>112</u>, 437-438.
- Gwynne, P.H., Tosi, D.J. & Howard, L. (1978). Treatment of nonassertion through Rational Stage Directed Hypnotherapy (RSDH) and behavioral rehearsal. <u>American Journal of Clinical Hypnosis</u>, 20, 263-270.
- Hales, D. (1989). <u>Depression</u>. NY: Chelsea House Publishers.
- Haley, J. (1973). Uncommon therapy. NY: W.W. Norton.
- Harrel, T.H., Beiman, I,, & LaPointe, K.A. (1981). Diadic persuasion techniques in cognitive restructuring. <u>American Journal of Psychotherapy</u>, 35, 86-92.
- Hartmann, D.P., Gottman, J.M., Jones, R.R., Gardner, W., Kazdin, A.E., & Vaught, R.S. (1980). Interrupted time

- series analysis and its application to behavioral data. Journal of Applied Behavior Analysis, 13, 543-559.
- Heppner, P.P., Kivlighan Jr., D.M., & Wampold, B.E. (1992).

 <u>Research Design in Counseling</u>. Pacific Grove, CA:

 Brooks/Cole.
- Hepps, R.B. & Brady, J.P. (1967). Hypnotically induced tachycardia: An experiment with simulating controls.

 <u>Journal of Nervous and Mental Disease</u>, 145, 131-137.
- Hermsmeyer, C.A. (1976). <u>Hypnosis: Learning and-or motivation</u>. Unpublished doctoral dissertation, St. Louis University, Ann Arbor.
- Hersen, M. & Barlow, D.H. (1976). <u>Single-case experimental</u> <u>designs: Strategies for studying behavior change.</u> NY: Pergamon Press.
- Hollon, S.D. & Beck, A.T. (1986). Cognitive and cognitivebehavioral therapies. In S.L. Garfield & A.E. Bergin (Eds.), <u>Handbook of psychotherapy and behavior change: An</u> <u>empirical analysis</u> (3rd ed., pp. 443-482). NY: Wiley.
- Hollon, S.D. & Beck, A.T. (1979). Cognitive therapy of depression. In P.C. Lendall & S.D. Hollon (Eds.), Cognitive-behavioral interventions: Theory, research and procedures. NY: Academic Press.
- Hollon, S.D. & Beck, A.T. (1978) Psychotherapy and drug therapy: Comparisons and combinations. In S.L. Garfield & A.E. Bergin (Eds.), The handbook of psychotherapy and behavior change: An empirical analysis (2nd ed., pp. 437-490). NY: Wiley.
- Hollon, S.D., Shelton, R.C., & Loosen, P.T. (1991).
 Cognitive therapy and pharmacotherapy for depression.

 Journal of Consulting and Clinical Psychology, 59, 88-99.
- Howard, W.L. (1979). The modification of self-concept, anxiety and neuro-muscular performance through rational stage directed hypnotherapy: A cognitive experiential perspective using cognitive restructuring and hypnosis. Unpublished doctoral dissertation, The Ohio State University.
- Jones, R., Vaught, R.S., & Weinrott, M. (1977). Time series analysis in operant research. <u>Journal of Applied Behavior Analysis</u>, 10, 151-166.
- Kazdin, A.E. (1982). <u>Single-case research designs:</u>
 <u>Methods for clinical and applied settings.</u> NY: Oxford

- University Press.
- Kehoe, M., & Ironside, W. (1964). Studies on the experimental evocation of depressive responses using hypnosis. <u>Psychosomatic Medicine</u>, <u>26</u>, 224-249.
- Klerman, G.L. (1988). The current age of youthful melancholia: Evidence for increase in depression among adolescents and young adults. British Journal of Psychiatry, 152, 4-14.
- Kovacs, M. (1980). The efficacy of cognitive and behavior therapies for depression. <u>American Journal of Psychiatry</u>, 137, 1495-1501.
- Kovess, V., Murphy, H.B.M., & Tousignant, M. (1987).
 Urban-rural comparisons of depressive disorders in French
 Canada. <u>Journal of Nervous and Mental Disease</u>, <u>175</u>, 457465.
- Kratochwill, T.R. (1992). Single-case research design and analysis: An overview. In T.R. Kratochwill & J.R. Levin (Eds.), Single case research design and analysis. Hillsdale, NJ: Lawrence Erlbaum Associates.
- LeCron, L.M. (1971). The complete guide to hypnosis. L.A.: Nash Publishing.
- Lewington, P. (1987) <u>Rational hypnotherapy: A therapeutic intervention for anxiety and panic attacks.</u> Unpublished masters thesis, University of British Columbia, Van. B.C.
- Lewinsohn, P.M. & Hoberman, H.M. (1982). Behavioral and cognitive approaches. In E.S. Paykel (Ed.), <u>Handbook of affective disorders</u>. NY: The Guilford Press.
- Lucas, S.G. (1985). The effect of hypnotically-induced mood elevation as an adjunct to cognitive treatment of depression. Unpublished doctoral dissertation, North Texas State University, Denton, Tx.
- Martin, I, & Grosz, H.J. (1964). Hypnotically induced emotions: Automatic and skeletal muscle activity in patients with affective illnesses. <u>Archives of General Psychiatry</u>, 11, 203-213.
- Matheson, G. (1979). Modification of depressive symptoms through posthypnotic suggestion. American Journal of Clinical Hypnosis, 22, 61-64.
- McMillan, J.H. & Schumacher, S. (1989). Research in Education: A conceptual introduction, 2nd Ed. USA: Harper Collins.

- McNair, D.M., Lorr, M. & Droppleman, L.F. (1971). <u>Profile of mood states</u>, Education & Industrial Testing Service, CA.
- McNeal, E.T. & Cimbolic, P. (1986). Antidepressants and biochemical theories of depression. <u>Psychological Bulletin</u>, 99, 361-374.
- Meyer, J.M. (1977). Assessment of depression. In P.M. Reynolds, (Ed.), <u>Advances in psychological assessment</u>, <u>Vol. 4</u>, (pp. 358-425). San Francisco: Jossig-Bass.
- Meites, K., Lovallo, W. & Pishkin, V. (1980). A comparison of four scales for anxiety, depression and neuroticism.

 <u>Journal of Clinical Psychology</u>, 36, 427-432.
- Mott, T. (1986). Guidelines for writing case reports for the hypnosis literature. American Journal of Clinical Hypnosis, 27, 1-7.
- Munoz, R. (1987). Depression prevention and practical considerations. In R. Munoz (Ed.), Depression prevention: Research directions, (pp. 2-10). Washington DC: Hemisphere.
- Newmark, C. (1973). Characteristics of hospitalized patients who produce floating MMPI profiles. <u>Journal of Clinical Psychology</u>, 28, 74-76.
- Novaco, R.W. (1977). Stress inoculation: A cognitive therapy for anger and its application to a case of depression. <u>Journal of Consulting and Clinical</u>
 <u>Psychology</u>, 45, 600-608.
- Novaco, R.W. (1975). Anger control: The development and evaluation of an experimental treatment. Lexington, MA: Lexington Books.
- Nugent, W.R. (1985). A methodological review of case studies published in the American Journal of Clinical Hypnosis, American Journal of Clinical Hypnosis, 27, 101-200.
- O'Hara, M. (1980). <u>New hope through hypnotherapy</u>. Turnbridge Wells, Kent: Abacus Press.
- Otani, A. (1990). Characteristics of change in Ericksonian hypnotherapy: A cognitive-psychological perspective.

 <u>American Journal of Clinical Hypnosis</u>, 33, 29-39.
- Pattie, F.A. (1967). A brief history of hypnotism. In J.E. Gordon (Ed.), <u>Handbook of clinical and experimental hypnosis</u>, NY: McMillan.

- Petzold, C. (1981). Erickson and Ellis: An elegant integration based on the innovative techniques of both. Behavior Technology, Methods and Therapy, 27, 27-34.
- Posner, M. (1973). Coordination of internal codes. In W. Chase (Ed.), <u>Visual information processing</u>. NY: Academic Press.
- Reardon, J.P., Tosi, D.J. & Gwynne, P.H. (1977). The treatment of depression through Rational Stage Directed Hypnotherapy (RSDH): A case study. <u>Psychotherapy:</u> Theory, Research and Practice, 14, 96-103.
- Rosenhan, D.L. & Seligman, M.E.P. (1989). <u>Abnormal Psychology</u>, (2nd Ed.). NY: W.W. Morton and Co.
- Rush, A.J. (1982) Short term psychotherapies for depression. NY: The Guilford Press.
- Rush, A.J. & Beck, A.T. (1978). Behavior therapy in adults with affective disorders. In M. Herson & A. Bellak (Eds.), Behavior therapy in the psychiatric setting. Baltimore: Williams and Wilkins.
- Rush, A.J., Beck, A.T., Kovacs, M., & Hollon, S. (1977). Comparative efficacy of cognitive therapy and imipramine on the treatment of depressed outpatients. Cognitive Therapy and Research, 1, 17-37.
- Sarbin, T.R. & Slagle, R.W. (1972). Hypnosis and psychophysiological outcomes. In E. Fromm & R.E. Shor (Eds.), Hypnosis research developments and perspectives. Chigago: Aldine, Atherton.
- Seligman, M.E.P. (1975). <u>Helplessness: On depression</u>, <u>development and death</u>. San Francisco: W.H. Freedman.
- Simons, A.D., Garfield, S.L. & Murphy, G.E. (1984). The process of change in cognitive therapy and pharmacotherapy for depression. <u>Archives of General Psychiatry</u>, 42, 45-51.
- Steer, R.A., Beck, A.T., Riskind, J.H. & Brown, G. (1986). Differentiation of generalized anxiety and depression disorders by the Beck Depression Inventory. <u>Journal of Clinical Psychology</u>, 42, 475-478.
- Sternberg, S. (1975). Memory scanning: New findings and current controversies. <u>Quarterly Journal of Experimental Psychology</u>, <u>27</u>, 121-129.
- Tawney, J. W. & Gast, D.L. (1984). <u>Single subject research</u> in special education. Ohio: Merrill.

- Tosi, D.J. (1974). Youth toward personal growth: A rational emotive approach. Columbus, Ohio: Merrill.
- Tosi, D.J. & Baisden, B.S. (1984). Cognitive-experiential therapy and hypnosis. In W.C. Wester & A.H. Smith, Jr. (Eds.), Clinical hypnosis: A multidisciplinary approach, (pp. 155-178).
- Tosi, D.J., Howard, L. & Gwynne, P.H. (1982) The treatment of anxiety neurosis through Rational Stage Directed Hypnotherapy: A Cognitive Experiential Perspective.

 Psychotherapy: Theory, Research and Practice, 41, 95-101,
- Udolf, J.D. (1981). <u>Handbook of hypnosis for professionals</u>. NY: Van Nostrand Reinhold Co.
- Velton, E.A. (1968). A laboratory task for induction of mood states. Behavior Research and Therapy, 6, 473-482.
- Watson, R.I. (1971). <u>The great psychologists</u>. Philadelphia: J.B. Lippincott Co.
- Weissman, A.N., & Beck, A.T. (1978). Development & validation of The Dysfunctional Attitude Scale: A preliminary investigation. Paper presented at the annual meeting of the American Educational Research Association Research Association, Toronto, Canada.
- White, O.R. & Haring, N.G. (1980). Exceptional teaching. Columbus, Ohio: Merrill.
- Zimbardo, P.G., Maslach, C., & Marshall, G. (1972).
 Hypnosis and the psychology of cognitive and behavioral
 control. In E. Fromm and R.E. Shor (Eds.), <u>Hypnosis:</u>
 Research developments and perspectives. Chicago: Aldine.

APPENDIX A

Diagnostic Criteria for Major Depressive Episode

American Psychiatric Association
Diagnostic and Statistical Manual of Mental Disorders, Third
Edition
Washington, D.C. APA, 1980

Diagnostic Criteria for Major Depression

- A. At least five of the following symptoms have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood, or (2) loss of interest or pleasure. (Do not include symptoms that are clearly due to a physical condition, mood-incongruent delusions or hallucinations, incoherence, or marked loosening of associations).
- (1) depressed mood (or can be irritable mood in children and adolescents) most of the day, nearly every day, as indicated either by subjective account or observation by others
- (2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly everyday (as indicated either by subjective account or observation by others of apathy most of the time)
- (3) significant weight loss or weight gain when not dieting (e.g., more than 5% of body weight in a month), or decrease or increase in appetite nearly every day (in children, consider failure to make expected weight gains)
 - (4) insomnia or hypersomnia nearly every day
- (5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of being slowed down)
 - (6) fatigue or loss of energy nearly every day
 - (7) feelings of worthlessness or excessive or

inappropriate guilt (which may be delusional) nearly every day (not merely self reproach or guilt about being sick)

- (8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
- (9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
- B. (1) It cannot be established that an organic factor initiated and maintained the disturbance
- (2) The disturbance is not a normal reaction to the death of a loved one (Uncomplicated Bereavement)
- C. At no time during the disturbance have there been delusions or hallucinations for as long as two weeks in the absence of prominent mood symptoms (i.e., before the mood symptoms developed or after they have remitted).
- D. Not superimposed on Schitzophrenia,
 Schizophreniform Disorder, Delusional Disorder, or Psychotic
 Disorder NOS.

APPENDIX B

Barber Suggestibility Scale

Barber, T.X.
Hypnosis: A Scientific Approach
New York: Van Nostrand Reinhold, 1969.

The Barber Suggestibility Scale

The BSS can be administered under a variety of experimental conditions: with and without hypnotic induction, with and without Task Motivational Instructions, by means of a tape-recording or by oral presentation.

Generally the scale has been administered to subjects with their eyes closed.

Eight Test Suggestions

1. Arm lowering. "Hold your right arm straight out in front of you like this," (Guide the subject to extend the right arm directly in front of body at shoulder height and parallel to the floor). "Concentrate on your arm and listen to me."

(Begin timing) "Imagine that your right arm is feeling heavier and heavier and moving down and down. It weighs a ton! It's getting heavier and heavier. It's moving down and down, more and more, coming down and down, more and more; it's heavier and heavier, coming down and down, more and more, more and more." (End 30 seconds).

"You can relax your arm now." (If necessary, ask the subject to lower the right arm).

Objective score criterion: 1 point for responses of 4 inches or more. (Response is measured by placing a ruler near the subject's hand at the beginning of the suggestions and noting degree of displacement at the end of the 30-second suggestion period).

2. Arm levitation. "Keep the eyes closed and put your

left arm straight out in front of you in the same way. Concentrate on your arm and listen to me."

(Begin timing) "Imagine that the arm is becoming lighter and lighter, that it's moving up and up. It feels as if it doesn't have any weight at all, and it's moving up and up, more and more. It's as light as a feather, rising and lifting more and more. It's lighter and lighter, moving up and up, more and more, higher and higher." (End 30 seconds).

"You can relax your arm now." (If necessary, ask the subject to lower the arm).

3. Hand Lock. "Keep your eyes closed. Clasp your hands together tightly, and interlace the fingers." (If necessary, the experimenter states, "Press your hands together, with palms touching," and assists the subject to interlock the fingers and to bring the palms together).

"Put them in your lap. Concentrate on your hands and hold them together as tightly as you can."

(Begin timing) "Imagine that your hands are two pieces of steel that are welded together so that it's impossible to get them apart. They're stuck, they're welded, they're clamped. When I ask you to pull your hands apart, they'll be stuck together; they're two pieces of steel welded together. You feel as if your fingers are clamped in a vice. Your hands are hard, solid, rigid! The harder you try to pull them apart the more they will stick together! It's impossible to pull your hands apart! The more you try

the more difficult it will become. Try, you can't." (End 45 seconds).

(5 second pause) "Try harder, you can't." (10 second pause). You can unclasp your hands now."

Objective score criteria: 1/2 point for incomplete separation of the hands after 5 seconds effort; 1 point for incomplete separation after 15 second effort.

4. Thirst Hallucination. "Keep your eyes closed."

(Begin timing). "Imagine that you've just finished a long,
long walk in the hot sun. You've been in the hot sun for
hours, and for all that time you haven't had a drink of
water. You've never been so thirsty in your life. You feel
thirstier and thirstier. Your mouth is parched, your lips
are dry, your throat is dry. You have to keep swallowing
and swallowing. You need to moisten you lips. (3 second
pause). You feel thirstier and thirstier, drier and drier.
Thirstier and thirstier, dry and thirst. You're very very
thirsty! Dry and thirsty! Dry and thirsty! (End 45
seconds). "Now, imagine drinking a cool, refreshing glass
of water." (5 second pause).

Objective score criteria: 1/2 point if the subject shows swallowing, moistening of lips, or marked mouth movements: additional 1/2 point if the subject indicates during the "post-experimental" questioning that he or she became thirsty during this test (e.g., "I felt dry." "I was parched." "I felt somewhat thirsty"). (See "postexperimental" questions for final scoring criteria on

this test).

5. Verbal Inhibition. "Keep your eyes closed." (Begin timing). "Imagine that the muscles in your throat and jaw are solid and rigid, as if they're made of steel. They're so solid and so rigid, that you can't speak. Every muscle in your throat and mouth is so tight and so rigid that you can't say your name. The harder you try to say your name the harder it becomes. You can't talk! Your larynx has tightened up. Your throat and jaw feel as if they are in a vice. Your throat is clamped so tightly that you can't talk; you can't say your name. The harder you try, the harder it well become. Try, you can't!" (End 45 seconds).

(5 second pause). "Try harder; you can't) (10 second pause). "You can say your name now."

Objective score criteria; 1/2 point if the subject does not say name after 5 second effort; 1 point if subject does not say name after 15 second effort.

6. Body Immobility: "Keep your eyes closed." (Begin timing). "Imagine that for years and years you've been sitting in that chair so long that you're stuck to it! It's as if you're part of the chair. Your whole body is heavy, rigid, solid and you weigh a ton. You're so heavy that you can't budge yourself. It's impossible for you to stand up, you're stuck right there! Your body has become part of the chair. When I ask you to stand up you won't be able to do it! You're stuck tight. The harder you try the tighter you'll be stuck and you won't be able to get up. You're

heavy in the chair! Stuck in the chair you can't stand up. You're so heavy and stuck so tight. You can't stand up and you're stuck, Try, you can't." (End 45 seconds).

(5 second pause). "Try harder, you can't." (10 second pause). "You can relax (or sit down) now."

(The subject is considered not standing if he or she rises slightly from the chair without straightening into an erect posture. In this event, the experimenter says, "Try to stand fully erect. You can't", instead of "Try harder, you can't").

Objective score criteria: 1/2 point if the subject is not standing fully erect after 5 second effort. 1 point if not standing fully erect after 15 second effort.

7. "Post-hypnotic-like Response." (The auditory stimulus consists of tapping once on the metal back of a stop watch with a fountain pen). (Begin timing). "When this experiment is over in a few minutes and your eyes are open, I'll click like this (experimenter presents auditory stimulus) and you'll cough automatically. At the moment I click (stimulus is presented and you'll cough. When I click you'll cough." (End 30 seconds).

Objective score criterion: 1 point if the subject coughs or clears throat "postexperimentally" when presented with the auditory stimulus.

8. Selective Amnesia: "Your eyes are still closed but I'm going to ask you to open them in a minute. When they're open I'm going to ask you to tell me about these tests."

(Begin timing). "You'll remember all the tests and be able to tell me about them, all except for one. There's one that you'll completely forget about as if it never happened! That's the one where I said your arm was becoming lighter and moving up and up. You'll forget all about that and when you try to think about it, it will slip even further away from your mind. You will forget completely that I told you that your arm was becoming lighter. This is the one test that you cannot remember! You will remember that I said your arm was heavy and all the other tests will be perfectly clear but the harder you try to remember that I told you your arm was rising the more difficult it will become. You will not remember until I give my permission by saying "Now you can remember", and then and only then, you will remember that I said your arm was rising!" (End 45 seconds).

Objective score criterion: 1 point if the subject does not refer to the Arm Levitation item (Test-suggestion 2) but recalls at least 4 other items and then recalls Test-suggestion 2 in response to the cue words.

"Postexperimental" Objective Scoring of Test-suggestions 4,
7 and 8

"Open your eyes, the experiment is over."

Scoring of Test-suggestion 7. The "Posthypnotic-like" Response item (item 7) is scored at this point. The experimenter presents the auditory stimulus after the subject has opened his or her eyes and before conversation commences.

Scoring of Test-suggestion 8. The experimenter next asks: "How many of the tests can you remember?"

The experimenter prompts the subject by asking, "Were there any others?" "Can you think of any more?" and "Is that all?," until the subject mentions at least four of the test-suggestions. If the subject verbalizes the Arm Levitation item during the recital, he or she receives a score of zero on Test-suggestion 8 (Selective Amnesia). If the subject does not include the Arm Levitation in the enumeration, the experimenter finally states, "Now you can remember," and , if the subject still does not verbalize the Arm Levitation item, "You can remember perfectly well now!"

The subject receives a score of 1 point on Testsuggestion 8 (Selective Amnesia) if he or she mentions at
least four of the test-suggestions, but does not mention the
Arm Levitation item when given the cue words. "Now you can
remember," or "You can remember perfectly well now!"

Final scoring of Test-suggestion 4. The objective scoring of Test-suggestion 4 is completed when the subject refers to this item during the recital. At this point the experimenter asks: "Did you become thirsty during this test?" If the subject answers "Yes" to this question, he or she receives the additional 1/2 point on Item 4. If the subject answers, "Yes" but adds qualifying statement, e.g., "I had been thirsty to begin with," he or she is asked:
"Did the imaginary glass of water help quench your thirst?"

If the subject answers "Yes", he or she receives the

additional 1/2 point.

The maximum Objective score obtainable on the BSS is 8 points.

"Revised" Subjective Scores

After Objective scores have been assigned, the subject is given a mimeographed questionnaire which assesses subjective responses to the BSS and is worded thus:

Please answer the following questions truthfully.

Place a check mark above the most accurate answer.

- 1. When it was suggested that your right arm was heavy and was moving down, the arm felt: not heavy; slightly heavy; heavy; very heavy.
- 2. When it was suggested that your left arm was light and was moving up, the arm felt: not light; slightly slight; light; very light.
- 3. When it was suggested that your hands were stuck together and you couldn't take them apart, the hands felt: not stuck; slightly stuck; stuck; very stuck.
- 4. When it was suggested that you felt thirsty, you felt: not thirsty; slightly thirsty; very thirsty.
- 5. When it was suggested that your throat was stuck and you couldn't speak, your throat felt: not stuck; slightly stuck; stuck; very stuck.
- 6. When it was suggested that you were stuck to the chair, you felt: not stuck; slightly stuck; stuck; very stuck.
 - 7. When the experiment was over and the experimenter

clicked his fingers (presented the posthypnotic cue), you felt: not like coughing; slightly like coughing; like coughing; very much like coughing.

8. When the experiment was over and you were recalling the tests, you felt that you remembered the test item about the arm rising (the test S was told to forget): with no difficulty; with slight difficulty; with great difficulty (or did not remember at all).

Each of the above eight items receives a score of 0 to 3; 0 for the first answer ("not"), 1 for the second ("slightly"), and so on. The total Subjective scores on the eight items thus range from 0 to 24.

APPENDIX C

Novaco Anger Scale (Revised)

Burns, D.D. Feeling Good: The New Mood Therapy Middlesex, England: Penguin Books, 1981.

Novaco Anger Scale (Revised)

Read the list of twenty-five potentially upsetting situations described below. In the space provided after each incident, estimate the degree it would normally provoke you, using this simple rating scale:

- 0- You would feel very little or no annoyance.
- 1- You would feel a little irritated.
- 2- You would feel moderately upset.
- 3- You would feel quite angry.
- 4- You would feel very angry.

Mark your answer after each question as in this example:

You are driving to pick up a friend at the airport, and you are forced to wait for a long freight train. 2

The individual who answered this question estimated his reaction as 2 because he would feel moderately irritated, but this would quickly pass as soon as the train was gone. As you describe how you would ordinarily react to each of the following provocations, make your best general estimate even though many potentially important details are omitted (such as what kind of day you were having, who was involved in the situation, etc.).

Novaco Anger Scale (Revised)

- 1. You unpack an appliance you have just bought, plug it in, and discover that it doesn't work. ____
- Being overcharged by a repairman who has you over a barrel.
- 3. Being singled out for correction, when the actions of others goes unnoticed. ____
- 4. Getting your car stuck in the mud or snow.
- 5. You are talking to someone and they don't answer you. ____
- 6. Someone pretends to be something they are not.
- 7. While you are struggling to carry four cups of coffee to your table, someone bumps into you, spilling the coffee.
- 8. You have hung up your clothes, but someone knocks them to the floor and fails to pick them up. ____
- 9. You are hounded by a salesperson from the moment that you walk into a store.
- 10. You have made arrangements to go somewhere with a person who backs off at the last moment and leaves you hanging.
- 11. Being joked about or teased.
- 12. Your car is stalled at a traffic light, and the guy behind you keeps blowing his horn.
- 13. You accidentally make the wrong kind of turn in a parking lot. As you get out of your car someone yells at you, "Where did you learn to drive?"
- 14. Someone makes a mistake and blames it on you. _____

- 15. You are trying to concentrate, but a person near you is tapping their foot. ____
- 16. You lend someone an important book or tool, and they fail to return it.
- 17. You have had a busy day, and the person you live with starts to complain about how you forgot to do something that you agreed to do.
- 18. You are trying to discuss something important with your mate or partner who isn't giving you the chance to express your feelings.
- 19. You are in a discussion with someone who persists in arguing about a topic they know very little about.
- 20. Someone sticks his or her nose into an argument between you and someone else. _____
- 21. You need to get somewhere quickly, but the car in front of you is going 25 mph is a 40 mph zone, and you can't pass.
- 22. Stepping on a gob of chewing gum. ____
- 23. Being mocked by a small group of people as you pass them.
- 24. In a hurry to get somewhere, you tear a good pair of slacks on a sharp object. ____
- 25. You use your last dime to make a phone call, but you are disconnected before you finish dialing and the dime is lost.

Add up your score for each of the twenty-five items. Make sure that you have not skipped any items. Add up your score for each of the twenty-five incidents. You can now interpret your score according to the following scale:

- 0-45: The amount of anger and annoyance you generally experience is remarkably low. Only a few percent of the population will score this low on the test. You are one of the select few!
- 46-55: You are substantially more peaceful than the average person.
- 56-75: You respond to life's annoyances with an average amount of anger.
- 76-85: You frequently react in an angry way to life's many annoyances. You are substantially more irritable than the average person.
- 86-100: You are a true anger champion, and you are plagued by frequent intense furious reactions that do not quickly disappear. You probably harbour negative feelings long after the initial insult has passed. You may have the reputation of a firecracker or a hothead among people you know. You may experience frequent tension headaches and elevated blood pressure. Your anger may often get out of control and lead to impulsive or hostile outbursts which at times get you in trouble. Only a few percent of the adult population react as intensely as you do.

APPENDIX D

Beck Depression Inventory

Beck. A.T. The Psychological Corporation, Harcourt Brace Jovanovich, 1978

Beck Depression Inventory

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

- 1. 0 I do not feel sad.
 - 1 I feel sad.
 - 2 I am sad all the time and I can't snap out of it.
 - 3 I am so sad or unhappy that I can't stand it.
- 2. 0 I am not particularly discouraged about the future.
 - 1 I feel discouraged about the future.
 - 2 I feel I have nothing to look forward to.
 - 3 I feel that the future is hopeless and that things cannot improve.
- 3. 0 I do not feel like a failure.
 - 1 I feel I have failed more than the average person.
 - 2 As I look back on my life, all I can see is a lot of failures.
 - 3 I feel I am a complete failure as a person.
- 4. 0 I get as much satisfaction out of things as I used to.
 - 1 I don't enjoy things the way I used to.
 - 2 I don't get real satisfaction out of anything anymore.
 - 3 I am dissatisfied or bored with everything.
- 5. 0 I don't feel particularly guilty.
 - 1 I feel quilty a good part of the time.
 - 2 I feel guilty most of the time.
 - 3 I feel guilty all of the time.
- 6. 0 I don't feel I am being punished.
 - I feel I may be punished.
 - 2 I expect to be punished.

- 3 I feel I am being punished.
- 7. 0 I don't feel disappointed in myself.
 - 1 I am disappointed with myself.
 - 2 I am disgusted with myself.
 - 3 I hate myself.
- 8. 0 I don't feel I am any worse than anybody else.
 - 1 I am critical of myself for my weaknesses or mistakes.
 - 2 I blame myslef all the time for my faults.
 - 3 I blame myself for everything bad that happens.
- 9. 0 I don't have any thoughts of killing myself.
 - 1 I have thoughts of killing myself, but I would not carry them out.
 - 2 I would like to kill myself.
 - 3 I would kill myself if I had the chance.
- 10. 0 I don't cry any more than usual.
 - 1 I cry more now than I used to.
 - 2 I cry all the time now.
 - 3 I used to be able to cry, but now I can't cry even though I want to.
- 11. 0 I am no more irritated now than I ever am.
 - 1 I am slightly more irritated now than usual.
 - 2 I am quite annoyed or irritated a good deal of the time.
 - 3 I feel irritated all the time now.
- 12. 0 I have not lost interest in other people.
 - 1 I am less interested in other people than I used to be.
 - 2 I have lost most of my interest in other people.
 - 3 I have lost all of my interest in other people.
- 13. 0 I make decisions about as well as I ever could.
 - l I put off making decisions more than I used to.
 - 2 I have greater difficulty in making decisions than before.
 - 3 I can't make decisions at all any more.
- 14. 0 I don't feel that I look any worse than I used to.
 - 1 I am worried that I am looking old or unattractive.
 - 2 I feel that there are permanent changes in my appearance that make me look unattractive.
 - 3 I believe that I look ugly.
- 15. 0 I can work about as well as before.
 - 1 It takes an extra effort to get started at doing something.
 - 2 I have to push myself very hard to do anything.

- 3 I can't do any work at all.
- 16. 0 I can sleep as well as usual.
 - 1 I don't sleep as well as I used to.
 - 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
 - 3 I wake up several hours earlier than usual and find it hard to get back to sleep.
- 17. 0 I don't get more tired than usual.
 - 1 I get tied more easily than I used to.
 - 2 I get tired from doing almost anything.
 - 3 I am too tired to do anything.
- 18. 0 My appetite is no worse than usual.
 - 1 My appetite is not as good as it used to be.
 - 2 My appetite is much worse now.
 - 3 I have no appetite at all anymore.
- 19. 0 I haven't lost much weight, if any, lately.
 - 1 I have lost more than five pounds.
 - 2 I have lost more than ten pounds.
 - 3 I have lost more than fifteen pounds.
- 20. 0 I am no more worried about my health than usual.
 - I am worried about physical problems such as aches, pains, or upset stomach, or constipation.
 - I am very worried about physical problems and it's hard to think of much else.
 - 3 I am so worried about my physical problems that I cannot think about anything else.
- 21. 0 I have not noticed any recent changes in my interest in sex.
 - 1 I am less interested in sex than I used to be.
 - 2 I am much less interested in sex now.
 - 3 I have lost my interest in sex completely.

APPENDIX E Subjective Symptoms Scale

The Subjective Symptoms Scale

Dr Du-Fay Der Dept of Counselling Psychology University of B.C. VANCOUVER, B.C. CANADA

		LEAST			MOST	
1)	INSOMNIA1	2	3	4	5	
2)	LOSS OF APPETITE1	2	3	4	5	
3)	WANTS TO BE LEFT ALONE1 (LONLINESS)	2	3	4	5	
4)	POOR CONCENTRATION1	2	3	4	5	
5)	LOSS OF INTEREST (APATHY)1	2	3	4	5	
6)	LOSS OF LIBIDO1	2	3	4	5	
7)	ANGER1	2	3	4	5	
8)	IRRITABILITY1	2	3	4	5	
9)	GUILT1	2	3	4	5	
10)	SUICIDAL FEELINGS1	2	3	4	5	
11)	LOW ENERGY - RETARDATION1	2	3	4	5	
12)	LACK AMBITION/INITIATIVE1	2	3	4	5	
13)	HOPELESSNESS1	2	3	4	5	
14)	WORTHLESSNESS1	2	3	4	5	
15)	SELF-BLAME/ SELF-REPROACH1	2	3	4	5	
16)	WEIGHT LOSS1	2	3	4	5	
17)	SADNESS1	2	3	4	5	
18)	CRYING1	2	3	4	5	

APPENDIX F

Dysfunctional Attitude Scale (Revised)

Burns, D.D. Feeling Good: The New Mood Therapy Middlesex, England: Penguin Books, 1981

Dysfunctional Attitude Scale (Revised)

- 1= Agree Strongly
 2= Agree Slightly
 3= Neutral

- 4= Disagree Slightly 5= Disagree Very Much

	1.	2.	3.	4.	5.
1. Criticism will obviously upset the person who receives the criticism.					
2. It is best to give up my own interests in order to please other people.					
3. I need other people's approval in order to be happy.					
4. If someone important to me expects me to do something, then I really should do it.					
5. My value as a person depends greatly on what others think of me.					
6. I cannot find happiness without being loved by another person.					
7. If others dislike you, you are bound to be unhappy.					
8. If people whom I care about reject me, it means there is something wrong with me.					
9. If a person I love does not love me, it means I am unlovable.					
10.Being isolated from others is bound to lead to unhappiness.					
<pre>11.If I am to be a worthwhile person,</pre>					
12.I must be a useful, productive, creative person, or life has no purpose.					
13.People who have good ideas are more worthy than those who do not.					
14.If I do not do as well as other people, it means I am inferior.					

15.If I fail at my work, then I am a failure as a person.			
16.If you cannot do something well, then there is little point in doing it at all.			
17.It is shameful for a person to display his weakness.			
18.A person should try to be the best at everything he undertakes.			
19.I should be upset if I make a mistake.			
20.If I don't set the highest standards for myself, I am likely to end up a second-rate person.			
21.If I strongly believe I deserve something, I have reason to expect that I should get it.			
22.It is necessary to become frustrated if you find obstacles to getting what you want.			
23.If I put other people's needs before my own, they should help me when I need something from them.			
24.If I am a good husband (or wife), then my spouse is bound to love me.			
25.If I do nice things for someone, I can anticipate that they will respect me and treat me just as well as I treat them.			
26.I should assume responsibility for how people feel and behave if they are close to me.			
27.If I criticize the way someone does something and they become angry or depressed, this means I have upset them.			
28.To be a good, worthwhile, moral person, I must try to help everyone who needs it.			

29.If a child is having emotional or behavioral difficulties, this shows that the child's parents have failed in some important respect.			
30.I should be able to please everybody.			
31.I cannot expect to control how I feel when something bad happens.			
32. There is no point in trying to change upsetting emotions because they are a valid part of daily living.			
33.My moods are primarily created by factors that are largely beyond my control, such as the past, or body chemistry, or hormone cycles, or biorhythms, or chance, or fate.			
34.My happiness is largely dependant on what happens to me.			
35.People who have the marks of success (good looks, social status, wealth, or fame) are bound to be happier than those who do not.			

Now that you have completed the DAS, you can score it in the following way. Score your answer to each of the thirty-five attitudes according to this key:

Agree	Agree	Neutral	Disagree	Disagree
Strongly	Slightly		Slightly	Very Much
-2	-1	0	+1	+2

Now add up your score on the first five attitudes. These measure your tendency to measure your worth in terms of the opinions of others and the amount of approval or criticism you receive. Suppose your scores on these five items were +2; +1; -1; +2; 0. Then your total score for these five questions would be +4.

Proceed in this way to add up your score for items 1 through 5, 6 through 10, 11 through 15, 16 through 20, 21 through 25, 26 through 30, and 31 through 35, and record these as illustrated in the following example:

SCORING EXAMPLE:

Value System	Attitudes	Individual Scores	Total Scores
I. Approval	1 through 5	+2,+1,-1,+2,0	+4
II. Love	6 through 10	-2,-1,-2,-2,0	-7
III. Achievement	11 through 15	+1,+1,0,0,_2	0
IV. Perfectionism	16 through 20	+2,+2,+1,+1,+1	+7
V. Entitlement	21 through 25	+1,+1,-1,+1,0	+2
VI. Omnipotence	26 through 30	-2,-1,0,-1,+1	-3
VI. Autonomy	31 through 35	-22,-1,-2,-2	- 9

RECORD YOU ACTUAL SCORES HERE:

Value System	Attitudes	Individual Scores	Total Scores
I.Approval	1 through 5		
II. Love	6 through 10		
III. Appearance	11 through 15		
IV. Perfectionism	16 through 20		
V. Autonomy	21 through 25		
VI. Omnipotence	26 through 30		
VI. Autonomy	31 through 35		

Each cluster of five items from the scale measures one of seven value systems. Your total score for each cluster of five items can range from +10 to -10. Now plot your total scores on each of the seven variables so as to develop your "personal-philosophy profile."

Interpreting your DAS Scores

I. Approval: The first five attitudes on the DAS probe your tendency to measure your self-esteem based on how people react to you and what they think of you. A positive score

between zero and ten indicates you are independent, with a healthy sense of your own worth even when confronted with criticism and disapproval. A negative score between zero and minus ten indicates you are excessively dependent because you evaluate yourself through other people's eyes. If someone insults you or puts you down, you automatically tend to look down on yourself. Since your emotional well-being is exquisitely sensitive to what you imagine people think of you, you can be easily manipulated, and you are vulnerable to anxiety and depression when others criticize you or are angry with you.

II. Love: The second five attitudes on the test assess your tendency to base your worth on whether or not you are loved. A positive score indicates you see love as desirable, but you have a wide range of other interests you also find gratifying and fulfilling. Hence, love is not a requirement for your happiness or self-esteem. People are likely to find you attractive because you radiate a healthy sense of self-love and are interested in many aspects of living.

A negative score indicates you are a "love junkie."

You see love as a "need" without which you cannot survive,

much less be happy. The closer your score is to minus ten,

the more dependent on love you are. You tend to adopt

inferior, put-down roles in relationships with people you

care about for fear of alienating them. The result of this,

more often than not, is that they lose respect for you and

consider you a burden because of your attitude that without their love you would collapse. As you sense that people drift away from you, you become gripped by a painful, terrifying withdrawal syndrome. You realize you may not be able to "shoot up" with you daily dose of affection and attention. You the become consumed by the driving compulsion to "get love." Like most junkies, you may even resort to coercive, manipulative behavior to get your "stuff". Ironically, your needy, greedy love addiction drives many people away, thus intensifying your loneliness. III. Achievement: Your score on attitudes 11 through 15 will help you measure a different type of addiction. A negative score indicates you are a workaholic. You have a constricted sense of your own humanity, and you see yourself as a commodity in the marketplace. The more negative your score, the more your sense of self-worth and your capacity for joy are dependent on your productivity. If you go on vacation, if your business slumps, if you retire or become ill and inactive, you will be in danger of an emotional crash. Economic and emotional depressions will seem identical to you. A positive score, in contrast, indicates that you enjoy creativity and productivity, but do not see them as an exclusive or necessary road to self-esteem and satisfaction.

IV. Perfectionism: Items 16 through 20 measure your tendency to perfectionism. A negative score indicates you are hooked on searching for the Holy Grail. You demand

perfection in yourself -- mistakes are taboo, failure is worse than death, and even negative emotions are a disaster. You're supposed to look, feel, think, and behave superbly at all times. You sense that being less than spectacular means burning in the flames of hell. Although you drive yourself at an intense pace, another more distant goal instantly replaces it, so you never experience the reward of getting to the top of the mountain. Eventually you begin to wonder why the promised payoff from all your effort never seems to materialize. Your life becomes a joyless, tedious treadmill. You are living with unrealistic, impossible personal standards, and you need to reevaluate them. problem does not lie in your performance, but in the yardstick you use to measure it. If you bring your expectations in line with reality, you will be regularly pleased and rewarded instead of frustrated.

A positive score suggests you have the capacity to set meaningful, flexible, appropriate standards. You get great satisfaction from processes and experiences, and you are not exclusively fixed on outcomes. You don't have to be outstanding at everything, and you don't always have to "try your best." You don't fear mistakes, but you see them as golden opportunities to learn and to endorse your humanity. Paradoxically, you are likely to be much more productive than your perfectionistic associates because you do not become compulsively preoccupied with detail and correctness. Your life is like a flowing river or a geyser compared with

your rigid perfectionistic friends who appear more like icy glaciers.

V. Entitlement: Attitudes 21 through 25 measure your sense of "entitlement." A negative score indicates that you feel "entitled" to things -- success, love, happiness, etc. You expect and demand that your wants be met by other people and by the universe at large because of your inherent goodness or hard work. When this does not happen -- as is often the case -- you are locked into one of two reactions. Either you feel depressed and inadequate or you become irate. Thus, you consume enormous amounts of energy being frustrated, sad, and mad. Much of the time you see life as a sour, rotten experience. You complain loudly and often, but you do little to solve problems. After all, you're entitled to have them solved, so why should you have to put out any effort? As a result of your bitter, demanding attitudes, you invariably get far less of what you want from life.

A positive score suggests you don't feel automatically entitled to things, so you negotiate for what you want and often get it. Because of your awareness that other people are unique and different, you realize there is no inherent reason why things should always go your way. You experience a negative outcome as a disappointment but not a tragedy because you are a percentage player, and you don't expect perfect reciprocity or "justice" at all times. You are patient and persistent, and you have a high frustration

tolerance. As a result, you often end up ahead of the pack. VI. Omnipotence: Attitudes 26 through 30 measure your tendency to see yourself as the centre of your personal universe and to hold yourself responsible for much of what goes on around you. A negative score indicates that you blame yourself inappropriately for the negative actions and attitudes of others who are not really under your control. Consequently, you are plagues by guilt and self-condemnation. Paradoxically, the attitude that you should be omnipotent and all powerful cripples you and leaves you anxious and ineffectual.

A positive score, in contrast, indicates you know the joy that comes from accepting that you are not the centre of the universe. Since you are not in control of other adults, you are not ultimately responsible for them but only for yourself. This attitude does not isolate you from others. Quite the opposite is true. You relate to people effectively as a friendly collaborator, and you are not threatened when they disagree with your ideas or fail to follow your advice. Because your attitude gives people a sense of freedom and dignity, you paradoxically become a human magnet. Others often want to be close to you because you have relinquished any attempt to control them. frequently listen to and respect your ideas because you do not polarize them with an angry insistence that they must agree with you. As you give up your drive for power, people repay you by making you a person of influence. Your

relationships with your children and friends and associates are characterized by mutuality instead of dependency.

Because you don't try to dominate people, they admire, love, and respect you.

VII. Autonomy: Items 31 through 35 measure your autonomy. This refers to your ability to find happiness within yourself. A positive score indicates that all your moods are ultimately the children of your thoughts and attitudes. You assume responsibility for your feelings because you recognize they are ultimately created by you. This sounds as if you might be lonely and isolated because you realize that all meaning and feelings are created only in your head. Paradoxically, however, this vision of autonomy frees you from the petty confines of your mind and delivers the world to you with a full measure of all the satisfaction, mystery, and excitement that it can offer.

A negative score suggests you are still trapped in the belief that your potential for joy and self-esteem comes from the outside. This puts you at a great disadvantage because everything outside is ultimately beyond your control. Your moods end up the victim of external factors.