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STRESS MANAGEMENT OUTCOME:
Prediction of Differential Outcome by Personality Characteristics

by
Suzanne Edna Weld

Thesis submitted to the School of Graduate Studies and
Research of the University of Ottawa in partial
fulfillment of the requirements of the degree
Doctor of Philosophy in Clinical Psychology.



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UNIVERSITÉ D'OTTAWA
UNIVERSITY OF OTTAWA

CURRICULUM STUDIORUM

Suzanne Weld was born in Buckingham, Quebec. She began her university education at the University of Ottawa in 1979. She received her B.A. Concentration in Psychology in 1981. She received her B.A. Honours in Psychology in 1983. Both degrees were conferred magna cum laude. She won, along with Sharon Francis Harrison, Ph.D., an Award of Merit from the Division of Psychotherapy, American Psychological Association, in 1984 for the winning contribution in a contest for the best student paper in the area of psychotherapy.

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ABSTRACT

This study examined differential outcome between two stress management approaches according to subject characteristics.

It was hypothesized that individuals with certain characteristics might benefit more from one form of stress management training (Rational Emotive Therapy) than another (Gendlin Focusing). The implication, were this hypothesis to be supported, would be that individuals could be streamed into one form of training versus another, according to certain personality variables, and the result would be greater effectiveness and efficiency in the delivery of services.

Subjects were classed as having one of two sets of characteristics. One class of subjects (N=34) displayed stress cognitively on the Cognitive-Somatic Anxiety Questionnaire (CSAQ) and were of the Sensing type on the Myers-Briggs Type Indicator (MBTI) while the other class of subjects (N=31) displayed their stress somatically on the CSAQ and were of the Intuitive type on the MBTI. Based on personality theory, cognitively anxious Sensing types were predicted to have greater decreases in stress as a result of receiving a Rational Emotive Therapy approach to stress management while somatically anxious Intuitive types were predicted to have greater decreases in stress as a result of receiving a Gendlin Focusing approach to stress management.

Additional measures of client characteristics were taken in order to explore the predictive potential of variables which

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the literature indicates might be useful in predicting differential outcome. These included Locus of Control, Verbal Reasoning, Abstract Reasoning, Experiencing Ability, Rational Beliefs.

A measure of stress (Symptom Check List-90-R) was taken at three points in time: pre, post-training (or post-waiting as in the case of the waiting-list controls), and at one-month follow-up. A waiting-list control group (N=30) was utilized to demonstrate a treatment versus no treatment comparison.

Treatment group subjects received 12-15 hours of stress management training in either (Rational Emotive Therapy) RET or Focusing spread over 5 weeks. Half of each class of subjects received RET while the other half of each class of subjects received Focusing.

Key results include: Both classes of treatment subjects displayed significantly greater reductions ($p < .05$) in stress levels after training as compared to waiting-list control subjects who had not received training over the same period of time. The main hypothesis was not supported. There were no statistically significant treatment by classification interactions. However, there were relationships between client satisfaction, use of the techniques, and decrease in reported levels of stress. Further analyses showed that none of the variables were significant predictors of outcome.

This Study introduced Focusing as a viable stress management technique.

Introduction

Stress-related diseases are of major concern in contemporary society (Krantz, Glass, Contrada, and Miller, 1981; Woolfolk and Lehrer, 1984). There is a growing need for stress management intervention (Ivancevich, Matteson, Freedman, Phillips, 1990), and a substantial body of clinical opinion and research suggests that treatment methods may be most effective if they are matched to the personality of the client (Bergin and Strupp, 1972; Beutler, 1979; Frank, 1979; Garfield, 1971; Gelso, 1979; Horowitz, Marmar, Krupnick, Wilner, Kaltreider, and Wallerstein, 1984; Kiesler, 1966, 1971; Lazarus and Folkman, 1984; Luborsky, Chandler, Auerbach, and Cohen, 1971; Neufeldt, Zimmer, and Mayton, 1977; Norcross, 1986; Paul, 1967; Rice and Greenberg, 1984; Sloane, Staples, Cristol, and Yorkston, 1976).

A review of the stress management literature reveals that certain client variables may be relevant in predicting the differential effectiveness of alternative treatments (Abramowitz and Abramowitz, 1974; Best, 1975; Friedman and Dies, 1974; Giroux, Roberts, and Carskadon, 1979; Neufeldt, 1978; Ollendick and Murphy, 1977; Schwartz, Davidson, and Goleman, 1978). These client variables include beliefs, assumptions, and appraisals (Bulman and Wortman, 1977; Cousins, 1979; Suls and Mullen, 1981), locus of control (Abramowitz and Abramowitz, 1974; Best, 1975; Friedman and Dies, 1974; Ollendick and Murphy, 1977), personality type (Cooley and Keesey, 1981; Garden, 1988; Giroux, Roberts, and Carskadon, 1979), cognitive characteristics

(Luborsky, Chandler, Auerbach, and Cohen, 1971; Neufeldt, 1978), ability to "experience", as conceived by humanistic therapists (Gendlin, Beebe, Cassens, and Oberlander, 1968; Luborsky, Chandler, Auerbach, and Cohen, 1971), and cognitive versus somatic anxiety (Lehrer, Schoick, Carrington, and Woolfolk, 1980; Schwartz, Davidson, and Goleman, 1978; Tamaren, Carney, and Allen, 1985a, 1985b).

While it appears from the literature that many factors may interact in the differential outcome of therapy, such as the specific kind of problem, client characteristics, therapist characteristics, and the type of therapy, this study focused its attention on how client characteristics interact with outcome for the reduction of stress (Bergin and Strupp, 1971; Parloff, Waskow and Wolfe, 1978). This was explored within the context of two treatment approaches, Rational Emotive Therapy (RET) and Focusing.

CHAPTER 1

REVIEW OF THE LITERATURE

Introduction

This chapter will review relevant research and theoretical literature, provide definitions for key terms and variables, develop the rationale for the investigation, and present hypotheses.

The first concern will be to examine the complexity of stress phenomena and present a definition of stress which recognizes the many ways individuals manifest stress responses and the potential importance of personality variables as mediating factors. The research literature on individual factors relevant to differential outcome of stress management methods will then be reviewed, followed by brief descriptions of a number of currently available psychological treatments for stress. Then there will be a presentation of a rationale for the choice of treatments and personality variables selected for this study.

A final section will present the general purposes of the study and the hypotheses.

A) Defining Stress

"Stress" is a highly complex construct which may be approached from many perspectives resulting in different definitions and terms (Lazarus, DeLongis, Folkman, & Gruen, 1985).

As an example, it is not unusual to find the terms "stress", "anxiety", and "neurosis" used interchangeably in one

article or chapter (e.g., Goldberger and Shlomo, 1982; Spielberger and Sarason, 1975). The variety of terms used in the stress literature may reflect efforts to describe various qualitative and quantitative aspects of stress. For example, when a stress-related response is quite severe it may be termed "anxiety syndrome", or, when a severe stress-related response is experienced chronically it may be termed "neurotic" (Clancy and Noyes, 1976; Lader, 1984). According to Tyrer (1976), an almost infinite variety of psychological and/or physiological symptom patterns can be found in the stressed person. In attempting accurate descriptions, investigators use multiple and often ambiguous terms.

While the interchangeable usage of terms causes difficulties in defining stress, the focus of various research efforts also causes difficulties in defining stress. As noted above, the study of some reactions to stress may lead to the use of such words as neurosis and anxiety. The study of physiological ramifications of stress vis-a-vis cardio-vascular disease may lead to the view that there exists clearly delineated types of stress-prone personalities (Type A). A focus on the biochemical changes due to stress may lead to a definition which speaks of hormonal and immune system functioning, and which excludes discussion of behavioural or experiential components. A focus on behavioural manifestations of stress can lead to the use of terms such as "burnout" and coping skills, excluding a discussion of genetic predispositions and physiological aspects. Each focus of

investigation yields a somewhat different emphasis in defining stress.

To date, there has been no major synthesis of the subject of stress and therefore no universally accepted definition (Ivancevich, Matteson, Freedman, and Phillips, 1990; Lazarus, DeLongis, Folkman, and Gruen, 1985). Polyson, Miller, and Shank (1987), upon reviewing Axis IV of the DSM-III, conclude that the lack of a clearly stated definition of stress in the manual reflects a wider difficulty of arriving at an acceptable definition of stress in the scientific literature.

Within the context of a review of important issues and facets of the problem of stress, a working definition of stress will be presented. It is not intended to be a comprehensive definition but one that includes what appears to be some essential elements and can guide the development of the rationale and design of the present investigation.

The following subsections will present general aspects of stress including health versus stress, good versus bad stress, ways of categorizing stressors, and discuss aspects implicated in the development of stress-related disorders such as state-trait anxiety, genotype, reactivity levels, intra-psychic communication, state dependent learning, cognitive appraisal and biorythms. The presentation of these subsections serves to emphasize the complexity of the phenomena of stress and leads to the formulation of a working definition of stress for this investigation.

General Aspects of Stress

(i) Health versus Stress

In defining stress, it would seem logical to also define health, an alternate of stress. Health implies that all systems are in relative balance with each other and function as they should at any "averaged" moment in time and that the healthy organism is capable of re-establishing internal states of homeostasis (Cannon, 1932, 1953) in the normal course of living without undue difficulty and damage to the social or tissue systems (Lazarus and Launier, 1978, p. 296).

Stress, can be seen as a failure in homeostasis. Stress can also represent difficulty in the normative patterns of regaining homeostatis. As Ornstein and Sobel (1987) state, stress demands that the body and brain spend time and energy towards management of the stress and as such the brain does not have as much of a chance to perform its main function - health maintenance.

Stress management has become an important issue largely due to the limitations placed on our natural modes of adaptation by the structure of society. Unfortunately neither fighting nor fleeing, which are our phylogenetically given modes of adaptation, are realistically available to us all of the time (Selye, 1982). Contemporary society has injunctions against the expression of "against" modes of adapting and, as such, we have become overdependent on just "putting up with" as an alternative way of adapting (Selye, 1982). The degrees of continual stress many individuals experience may lead to prolonged states of

disequilibrium and "diseases of adaptation" (Selye, 1980).

"...one implicit function as therapists is that of protecting and/or restoring balance. The majority of our clients present with the complaint of disequilibrium, usually experienced and expressed emotionally, and our goal has been to help them restore equilibrium and reduce suffering."

(Maloney, 1983, p.41)

A client will come to a therapist because he or she cannot manage some stress with his or her current resources. The individual is taxed beyond resources.

(ii) Good Stress, Bad Stress

Not all stress is "bad". Any need, such as a need for food or solitude, will place a necessary and adaptive demand on the organism to re-establish homeostatic comfort.

"Good" stress (eustress) serves an adaptive and constructive purpose providing motivation and feelings of aliveness in normal everyday functioning (Selye, 1980) and is also necessary in the process of replenishing the living organism so that life continues. Noxious or "bad" stress, on the other hand, overtaxes the individual's abilities to cope and adapt, resulting in physical damage and psychological discomfort (Selye, 1980). This differentiation between "good" and "bad" stress is made on an individual level and is judged on the basis of whether it enhances or hampers life processes and experiences. Therefore, bad stress is a "taxing" or overextending of an organism's physical and psychological coping resources. Bad stress does not include the normative everyday adaptive drives towards re-establishing the organism's optimal

levels of functioning in all of its respective systems which the organism is designed to comfortably handle.

iii. Categories of Stressors

The source of the stressor(s) can vary widely including intra-psychic (unresolved issues from the past), cognitive processing (beliefs), physical/emotional disease states (illness), environmental (job stresses, pollution), nutritional (Vitamin B, drug intake), social (war, prejudice, technological changes, crime, role overload, availability of supports), economic (unemployment, under and over utilization at workplace, poverty, financial difficulties), and personal (parenthood, divorce, re-constituting families, retirement) matters (Barrett, Rose, and Klerman, 1979; Brown, 1980; Coleman, 1981; Ender and Edwards, 1982; Grencik, 1981; Lazarus, 1977; Selye, 1980; Steinmetz, Blankenship, Brown, Hall, and Miller, 1980; Terriro and Vetter, 1981; Tuchwiller, 1979). Stressors can be categorized into types according to the source of a stressor. This categorization process can be useful in the assessment of a stressed individual and subsequent planning for treatment (Holmes and Rahe, 1967; Holt, 1982). The impact of any given stressor depends on the number of other stressors already in play (Selye, 1980).

Aspects Implicated in the Development of Stress-Related Disorders

i. State and Trait Anxiety

Spielberger (1972) made the distinction between "state anxiety" & "trait anxiety". "State anxiety" refers to anxiety at

a particular point in time while "trait anxiety" implies an enduring anxious personality predisposition (Zuckerman, 1976). Spielberger hypothesizes that the factors underlying a high level of trait anxiety include genetic, developmental and emotional learning factors which interplay to varying extents in different people. Lader (1984) points out that the clinical version of "state anxiety" is seen when the individual who is normally calm develops anxiety symptoms when under stress; the clinical version of "trait anxiety" is seen when the individual who normally has an anxious disposition, finds lifelong worries becoming increasingly unbearable as stressors mount in his or her current life. State and trait anxiety typically exist in conjunction, and are manifested as a result of the interplay between external events, personality & existing stressor load (Lader, 1984).

ii. Genotype

Genotype refers to the total genetic make-up of an individual.

Farber (1982) and Rossi (1986) believe that different susceptibility to stressors is due, in part, to genotype. Farber notes that in the case of infectious diseases, the host is variable and the agent is constant, and this is why not all people become ill. The expression of symptoms is dependent, in part, on genotype. Research on twins reveals that approximately 50% (conservative estimate) of variance on personality variables is due to genetic factors (Buss and Plomin, 1975; Farber, 1982;

Loehlin and Nichols, 1976; Willerman, 1979).

Farber (1982) transposes these general findings from twin research to the area of stress.

"...people may be more or less susceptible to stressors because of individual differences in endogenous factors. One of these factors is genotype."

(Farber, 1982, p. 123)

Certain stress-related disorders (susceptible systems) such as high blood pressure/hypertension/coronary disease (Farber, 1981; Rose, Fulker, Miller, Grim, and Chistian, 1980), alcohol consumption (Goodwin, Schulsinger, Hermansen, Guze, and Winokur, 1973; Goodwin, Schulsinger, Knop, Mednick, and Guze, 1977), asthma (Farber, 1981), ulcers (Levitan, 1977), migraine (McKusick, 1978), colitis (Janowitz, 1975; McKusick, 1978), psychosomatic symptoms and habit disturbances (Bakwin, 1971; Farber, 1981), and psychosis (Bertelsen, Harvald, and Hauge, 1977; Gottesman and Shields, 1972) have been shown to run in families. Stress related symptoms, according to Farber (1981), represent the interaction among congenital, genetic and environmental factors. As such, genetic factors cannot be ignored in a definition of "stress".

Herein, "stress" may mean a genetic predisposition towards a particular pattern of susceptibility and responsiveness to stress.

iii. Reactivity Level

This section discusses stress resulting from the hyperactive, underactive or misguided response efforts of one

system within the person.

Writers such as Davis, Eshelman, and McKay (1988), and Orlebeke, van der Molen, Somsen, and van Dooren (1975) suggest that people who suffer from stress-related disorders tend to show hyperactivity in a particular preferred system which then becomes the vehicle for the expression of "bad" stress in the taxed organism. In the case of migraines, for example, there is the opinion that there is an abnormal instability in the autonomic nervous system of these individuals and that this is responsible for the hyperactivity of vasodilation under situations of stress (Havanka-Kanniainen, Tolenen, and Myllyla, 1986; Reading, 1982; Rubin, Graham, Pasker, and Calhoun, 1985).

Hyperactivity in one system apparently does not have to be restricted to cases where stress-related disorders are evident. Of interest were the Lacey (1967) and Lacey and Lacey (1958, 1962) studies which demonstrated that even among nonpatients, there was a stereotyped and individualized way of showing stress. Using different stressors & different autonomic response variables, these studies showed that each person tested showed a more or less consistent preference for the order in which maximum, medium and minimum activity in the autonomic variables was expressed. Irrespective of stressor type, each person's autonomic stress reactions were similar for each person but different between subjects. Thus, part of "individual differences" has to do with characteristic patterns of responding to stress.

Engel and Bickford (1961) studied eighteen hypertensive patients and seventeen normal control subjects exposed to five different stressors. They found that fourteen of the hypertensive patients showed maximum reactivity in either systolic OR diastolic blood pressure to all stressors while this was true for only five control subjects. Furthermore, the control subjects were generally less specific in their autonomic reactions. Selye (1980) comments on this idea as well. That is, healthy people tend to utilize a variety of physical and psychological coping regulatory mechanisms whereas people who have developed some stress-related disorder have a dysynchronized set of systems where one stereotypical response to stress becomes the norm for that person thereby resulting in being "in a groove" of a response set to stress.

How this comes about is unclear but Patel (1984) offers evidence suggesting that frequent rises in blood pressure in a genetically susceptible individual can lead to resetting of the baroreceptors at higher levels (Kezdi, 1953; Korner, 1971; Kubicek, Kottke, Laker and Visscher, 1953; McCubbin, Green, and Page, 1958) and can also result in a structural enlargement of the resistance vessels (Folkow, Hallback, Lundgren, Sivertsson, and Weiss, 1973). Patel (1984, p. 74) suggests that these factors could maintain or perpetuate high blood pressure even in the absence of initiating factors. Patel (1984) further suggests that repeated mobilization of an opposing response like relaxation could eventually lead to a reversal of the

dysfunctional setting of the baroreceptors.

While it has been posited that hypersensitivity of one system is more important than the specific disease manifestation (Freeman, Gorman, Singer, Affelder, and Feingold, 1967), there is a different and more comprehensive view. Bowers and Kelly (1979) write that there are three, rather than one, major ways in which a system, (in their discussion, the immune system) can become dysfunctional in psychosomatic illness. These are: under-reactivity, hyperactivity, or misguided efforts to defend the body. These three errors within the body's systems could result, over time, in cancer, bronchial asthma, or rheumatoid arthritis, for example (Rossi, 1986). Selye's (1980) writings imply that psychological analogues of these errors can exist. Psychological errors towards under-reactivity, hyperactivity, and misguided efforts to defend may be related to social withdrawal, mania, and suicide respectively.

The idea that tension maladies can be manifested in physical and/or psychological systems is supported by McGuigan (1984). McGuigan feels that tension maladies fall into two familiar categories. The first consists of such psychological-psychiatric disorders as anxiety, phobias and lesser fears, worries, insomnia and depressions, while the second would include colitis, bruxism, essential hypertension and coronary heart disease, rheumatological pathologies, chronic fatigue, headaches and backaches (McGuigan, 1984).

Herein, "stress" may mean specific characteristic patterns

of reacting to stressors which involves three general patterns: under-reactivity, hyperactivity, or misguided efforts to defend.

iv. Intra-person Communication

The term intra-person refers to communication patterns within the individual. It has been suggested that specific systems within an individual can, depending upon the individual, become communicators of particular types of information about the total system. Lupton's research with temporomandibular joint dysfunction led him to posit that the soma can communicate affect (Lupton 1966). This same conclusion has been reached by various writers and researchers in the area of chronic pain. Neill and Sandifer (1982), in their discussion of alexithymia and psychosomatics, suggest that there is a lack of information transduction between mind and body systems which results in a person only being able to communicate affect through the soma. This can be thought of as a different form of dysynchronization of systems, one in which the communication lines between systems have either been broken (e.g., psychological trauma and amnesia) (Freud, 1953), never developed (e.g., schizoid processes) (Geller, 1987), or never exercised (e.g., cultural values on intellectual functioning emphasized to the detriment of body awareness) (Rogers, 1980). Another example of a breakdown of some kind in communication across systems comes from Roskies (1983) in her work on stress management for Type A individuals. Roskies sees Type A as hyper-responsives who experience stress through obsessive worrying rather than through muscle tension. Roskies

feels that well functioning individuals use many different strategies. Groen and Bastiaans (1975) see psychosomatic stress as a case of inhibited communication among the psychological, biological and social resources of the person and that this inhibited communication is related to individual differences in sensitivity and resistance to stressors.

The broader literature also speaks of inhibited communication among the organism's systems. This concept is not limited to discussion of problems which have been explicitly identified as stress-related. For example, Lowen (1975) presents bioenergetics as a therapy which is based on the notion that energy can be bound in the body. He links neuroticism with body tension. The goal of therapy is to re-connect the communication lines between systems and mobilize emotions by working with blockages in the body. Interestingly, Lowen's (1975) writings would appear to support Selye's (1980) position when he states that a chronic problem is like getting stuck with a particular way of trying to cope with a stressor. Lowen (1975) and Reich (1949) would frame this being stuck in terms of body armour or blocked energy which is carried within the body and can actually be a factor in the development of body type. Along the same lines, Selye (1980) claims to have altered the physical appearance of animals through the application of specific and long-term stressors.

Herein, "stress" may mean that an individual cannot access his or her own resources in coping with the stressor.

v. Biorhythms

Another viewpoint on stress comes from the work of Reiser (1984) and Rossi (1990) which emphasizes the relationship between stress and the numerous biorhythms that regulate our functioning.

Reiser (1984) emphasizes the importance of biorhythms as follows:

"In order to maintain optimal host resistance in tissues, all of the neural, psychoneuroendocrine, and psychoneuroimmune systems we have been discussing must be not only "orchestrated", or synchronized, but also harmoniously entrained to a variety of biorhythms. Environmentally paced biorhythms include the twenty-four hour circadian rhythm, related to the rotation of the earth around the sun, which produces alternating periods of light and darkness; the twenty-eight-day infradian rhythm, related to the rotation of the moon around the earth; the three-month seasonal rhythm associated with spring, summer, autumn, and winter. And there is also the internally paced ultradian ninety-minute biorhythm manifested during sleep as recurrent "rapid eye movement" (REM sleep) periods." ... "Each of these biorhythms exerts (potentially separate) effects on the person's levels of rest and activity - on levels of activity of individual endocrine glands, on general metabolic systems, on immune systems, and on sensitivity of neuronal membrane receptors to agonist, antagonist, and modulatory substances at synaptic clefts (thereby influencing neurotransmitter systems). Synchronization of endogeneously generated internal rhythms with each other and their entrainment with environmental rhythms is accomplished in the brain. It is not hard to understand how disruption and desynchronization of these systems can upset dynamic biological balances, nor should it be difficult to appreciate the important health maintaining role of the physiological and psychological mechanisms that have been developed during the course of evolution for dealing with stress. The wonder isn't only why and how we fall ill when we do but also how we manage to stay as well as we do most of the time."

(Reiser, 1984)

In our fast-paced world we are likely to actively dismiss our

biological need for a break (about every 90 minutes) by ingesting caffeine or nicotine. Crabtree (1989) notes that altered ultradian rhythms "have been detected at the clinical beginning of certain cancers". Rossi (1990) notes that most methods of mind-body healing usually involve a 20 minute break. Relaxation, meditation, imagery, body work, biofeedback all serve to relieve us from chronic ultradian fatigue (Rossi, 1990).

Wertz, Bickford, Bloom and Shannahoff-Khalsa (1983) have demonstrated that there is a direct relationship between cerebral hemispheric activity and the ultradian rhythm of the nasal cycle.

"Since cerebral circulation is known to be diminished during increased sympathetic activity, it is possible that breathing through one nostril would correlate with increased metabolic or mental activity in the contralateral hemisphere. ... Therefore, the nasal cycle becomes a clear indicator for the relative sympathetic-parasympathetic influences associated with lateralization of activity."

Rossi (1990) suggests that the above noted bio-rhythms may well be important in the study of activity, rest, creativity, depression, rejuvenation and illness. Implications are that stress, ability to cope with stress, and even the possibility of learning ways of dealing with stress may be mediated by the daily biorhythms of the individual.

Research by Kleitman (1970), Klein and Armitage (1979), and Kandel (1989), suggest that learning may be affected by the biorhythm fluctuations which a person experiences during the course of a normal day.

Lund (1974) found that physiologically desynchronized

subjects had significantly higher neuroticism scores and also had a significantly greater tendency to complain of physical ailments than the other 80% of subjects (N=34) who were not internally desynchronized in regard to rhythm of activity and temperature.

Herein, may mean that an individual's biorythms are so out of line that the individual can no longer calibrate his or her systems. "Stress" may also mean that a person's ability to deal with stress is moderated by the phase of that individual's daily biorhythm fluctuations. The stressor(s) may initiate a loss of synchronicity and the resulting stress becomes self-perpetuating.

vi. State-Dependent Learning

This section will discuss stress resulting from the individual's history of stuck and recurrent learning patterns.

Selye felt that enduring psychosomatic problems are reflections of stuck-in-a-groove patterns of learning that occur during the GAS process. Rossi (1986) also spoke of how individuals may develop ingrained habitual coping patterns. Rossi (1986) posited that the way hypnosis works is to access and dissolve these state-dependent "stuck" learnings. Selye (1980) saw psychosomatics as "being stuck in a groove" of learned response and behaviour and he felt that medication, insulin shock, ECT, and psychological shock (flooding) worked mainly as nonspecific therapies that counteracted the nonspecific aspects of the GAS. Treatment would knock a person out of a state-dependent learned groove.

Indeed this process may be one of the factors explaining how some therapies, in part, work (Selye, 1980). Much of therapy involves a combination of accessing information or the particulars about the presenting difficulty, bringing in resources or skills or therapist-client relationship to act upon the presenting problem, and re-framing emotions, feelings, thoughts, skills, relationship and information into a new network of understanding, meaning, effectiveness and physical comfort that in a sense frees up the passage of information across the various systems within that person's total self. The result is that individuals can escape being "stuck in a groove" (Selye, 1980) and being stressed to a point where they can no longer adapt on the merits of their own resources. In other words, a habit or conditioned schema of responding can develop and act, no longer related to the original stressor(s). These learnings can be un-learned in therapy.

Herein, "stress" may mean that the individual is engrained in an habitual responding pattern that is not adaptive.

vii. Temporal Factors in Stress

Temporal factors are also relevant to an individual's experience of stress. Selye (1980) speaks of the three stages of the General Adaptation Syndrome, alarm, resistance & exhaustion. Different observations can be made regarding stress reactivity, according to Selye, depending upon whether a person is in a state of alarm (panic, anxiety, vigilance), resistance (active physiological and/or psychological and/or sociological coping

efforts), or exhaustion (burnout, fatigue, illness).

It is not always evident, according to Selye (1980), that a person or animal is in the state of resistance. Often, the organism may look and act as though adaption has occurred when in fact, stress may be subtly and chronically affecting health. Roskies (1983), in reference to stress management for Type A individuals, notes that Type A individuals look very healthy, have few complaints of anxiety and depression, are valued by society, and for all intents and purposes, at least upon a cursory look, appear to be well-functioning successful individuals. They would be, according to Selye, in the stage of resistance. Indeed, Type A individuals typically move rather dramatically from the resistance stage to the exhaustion stage. Their usual coping style is of hyperresponsiveness interspersed with periods of helplessness and hyporesponsiveness (Roskies, 1983).

These temporal or stage aspects of adaptation also add to the complexity of our understanding of "stress".

viii. Cognitive Appraisal

Stress may be placed along the two major dimensions of acuteness - chronicity, and life-threatening - daily hassles (Holroyd, Appel, and Andrasik, 1983). Also, the number of stressors already at play is important. However, the extent to which an individual experiences stress depends also on his/her cognitive assessment of the quality and intensity of the stressor(s).

Cognitive Appraisal (Lazarus, 1977; Lazarus and Folkman, 1984) involves primary appraisal, where there is an appraisal of a potential stressor as 1) irrelevant, 2) benign - positive, or 3) stressful (perceived loss, threat or challenge), and secondary appraisal, where there is an appraisal of the resources available to that individual.

There is a difference between perception of impossibility and actual impossibility of imminent return to homeostatis. In part, this determination is made by the individual through a cognitive appraisal process (Holroyd and Lazarus, 1982).

Also, paradoxically, stressor intensity may be related to the apparent lack of a stressor. Under-utilization of a person in the workplace can be quite stressful to that person (Caplan, Cobb, French, Harrison, and Pinneau, 1975). Mismatches between employee interests/aptitudes/personality and the requirements of a job can exert stress on an individual (Holt, 1982). And of course interpersonal conflict in the workplace, as elsewhere, can be stressful. In these cases, it may not be evident, to the outside observer, that there even exists a stressor in that person's environment. These are quiet stressors but again the individual's cognitive appraisal of the situation will define them as stressful.

ix. Information Processing Difficulties

This section will discuss stress resulting from a person's deficient cognitive system as well as stress resulting from a person's cognitive constructs.

Emphasizing the implications of cognitive processes in stress-reactivity, Neufeld and Mothersill (1975) see schizophrenics as having cognitive operations that are particularly vulnerable to stress. The more specific difficulties that schizophrenics must deal with are arousal drive, ability to process information in an organized and discriminatory fashion and matching severity of event with coping avenues. Also, these writers see depression as a behaviourally deficient coping activity, and compulsive disorders as a behaviourally excessive coping activity. Stress then can result from faulty information processing abilities.

Another aspect of stress caused by faulty cognitive processes involves faulty or rigid cognitions. To illustrate this point, Kelly's Construct Theory and Beck's Cognitive Model of Stress will be presented.

Kelly's Construct Theory (Kelly, 1955) provides us with a theoretical view of how cognitions affect perceptions, responses, and the ongoing adaptational process of the individual. Kelly's theory posits "tight" versus "loose", and "permeable" versus "impermeable" constructs (cognitions) which together form a constellation of filters through which perceptions and responses to stress or to situations in general are mediated (Crump, 1975). On the basis that stress reduction requires movement toward a more accurate perception of reality, Kelly's fixed-role therapy attempts to assist the person out of "the groove" of habitual but nonadaptive responding to uncomfortable life situations

(Bannister, 1970; Kelly, 1955).

Aaron Beck has presented a cognitive model of stress reactions in terms of eleven principles (Beck, 1984). These are listed below illustrating the information processing model typically utilized by cognitive behaviourists in speaking about stress:

1. "The construction of a situation (cognitive set) is an active, continuing process that includes successive appraisals of the external situation and risks, costs, and gains of a particular response. When the individual's vital interests appear to be at stake, the cognitive process provides a highly selective conceptualization." (Beck, 1984, p. 258).
2. "The cognitive structuring of a situation is responsible for mobilizing the organism to action. If the mobilization is not adequately discharged it forms a precursor to a stress reaction." (Beck, 1984, p. 260).
3. "Overt behaviour stems directly from the mobilization of impulses, drives, or wishes (behavioural inclinations). The emotional experience is parallel to the behavioural inclination and is not a determinant of overt action." (Beck, 1984, p. 261).
4. "Depending on the content of the cognitive constellation, the behavioural inclination may be a desire to flee, attack, approach, or avoid; the corresponding affect would be anxiety, anger, affection, or sadness. The responses can be regarded as organized into structures, with primacy assigned to the controlling cognitive constellation, which activates and controls the behavioural inclinations and the affective response." (Beck, 1964, p. 263).
5. "The stressors lead to a disruption of the normal activity of the cognitive organization. In addition to erosion of the ability to concentrate, recall, and reason, and to control impulses, there is a relative increase in primitive (primary-process) content." (Beck, 1984, p. 267).
6. "Specific primitive cognitive constellations are "chained" to specific stimuli. This pairing constitutes the specific sensitivity of a given individual and

prepares the way for inappropriate or excessive reactions. Since people vary widely in their specific sensitivities, what is a stressor for one person may be a benign situation for another." (Beck, 1984, p. 271).

7. "Differences in personality organization account for some of the wide variations in individual sensitivities to stressors. Thus, the autonomous and sociotropic personality types differ in the type of stressors to which they are sensitive. The occurrence of a stress reaction, thus, is contingent to a large degree on specific vulnerabilities related to personality." (Beck, 1984, p. 275).

8. "Each of the stress syndromes (such as hostility, anxiety, and depression) consists of hyperactive schemas with an idiosyncratic content specific for that syndrome. Each syndrome comprises a specific controlling cognitive constellation and the resultant behavioural inclinations and affect." (Beck, 1984, p. 277).

9. "The principal stressor may be internal, with no apparent referent in the outside world. The assumption that the only road to fulfillment is through total success is intrinsic in achievement-oriented persons prone to stress reactions." (Beck, 1984, p. 278).

10. "Stressful interactions with other people occur in a mutually reinforcing cycle of maladaptive cognitive reactions. Specific mechanisms such as the egocentric cognitive mode, framing, and polarization lead to increased mobilization and consequently to stress." (Beck, 1984, p. 283).

11. "An individual experiences an inclination to respond physically, although the stimulus may be psychosocial or symbolic and although ultimate overt behaviour is verbal. The mobilization for "fight-flight" involves the same cognitive-motoric systems, irrespective of whether the level of meaning of a threat or challenge is "physical" or psychosocial." (Beck, 1984, p. 285).

For Beck, the cognitive approach to the treatment of stress reactions focuses on reducing the hyper-activity of the controlling cognitive schemas while strengthening the adaptive functions. This should lead not only to a reduced reactivity of

the neuromuscular-endocrine system, but also to an increase in the adaptive functions, especially objectivity and perspective (Beck, 1984, p. 286-287). Interestingly, Beck recognizes individual factors as important mediators of stress in his seventh principle noted above.

In this framework, "stress" may mean that dysfunctional cognitive processes are present which preclude adaptive responses to stressors.

Defining Stress for This Study

The above conveys the complexity of the stress phenomena and how the human being is made up of recursive systems in constant movement operating at numerous levels simultaneously (Ader, 1981; Bandura, 1985; Beecher, 1959; Black, 1963, 1969; Bowers, 1977; Cheek, 1981; Cousins, 1979; Dafter, 1990; Dohrenwend and Dohrenwend, 1974; Engels, 1975; Erikson, 1985; Evans, 1985; Friedman, 1990; Groen and Bastiaans, 1975; Harris, 1948; Lader, 1975; Lazarus, 1971; McGaugh, 1983; McGuigan, 1978; Neufeld and Mothersill, 1975; Passchier, Van der Helm-Hylkema, and Orlebeke, 1985; Reiser, 1975; Rossi, 1986; Selye, 1936, 1976, 1980; Weiner, 1977; Wurtman and Anton-Tay, 1969; Zegans, 1982).

The purpose of this subsection is to clearly delineate the aspect of the stress phenomena which constitutes the focus of this study.

The Longman Dictionary of Psychology and Psychiatry (Goldenson, 1984, pp. 181, 312, 715-716) touches upon many of the

aspects noted by writers such as Selye (1980), Spielberger and Sarason (1975), and Lazarus and Launier (1978) in their efforts to formulate a definition. The Longman Dictionary incorporates DSM-III in providing the following definitions of stress and related terms:

STRESS THEORY: "The theory that certain stimuli perceived as noxious or threatening cause reactions that have adverse emotional, behavioural, and physiological reactions. See stress; general adaptation syndrome; Selye."

STRESSOR: "Any event or force that results in physical or emotional stress."

STRESS SITUATION: "Any condition that puts an extra burden on the organism's capacity to adapt. Examples are extreme hunger, an overcompetitive environment, combat conditions, bankruptcy, marital conflicts, and a new and taxing job."

STRESS: "A state of physical or psychological strain which imposes demands for adjustment upon the individual. S. may be internal or environmental, brief or persistent. If excessive or prolonged, it may overtax the individual's resources and lead to a breakdown of organized functioning, or decompensation. Types of situation that produce s. include frustrations, deprivations, conflicts, and pressures, all of which may arise from internal or external sources. ..."

STRESS REACTION: "Faulty, maladaptive, or pathological behaviour resulting from conditions of pressure or strain. Examples are extreme feelings of tension or panic, disorganized speech patterns, and accidents incurred under the influence of alcohol, drugs, or emotional stress. Reactions to stress may also be "task-oriented", which involves an objective appraisal of the situation with an eye toward choosing the most constructive, rational way of handling it."

GENERAL ADAPTATION SYNDROME: "The total mobilization of the organism's resources and defense systems to meet situations of severe stress. According to H. Selye, originator of the concept in 1950, there are three levels of defense, each determined largely by endocrine

secretions. In stage one, termed alarm reaction, pituitary-adrenal secretions produce an increase in heart rate, blood sugar, muscle tone, and general alertness. In stage two, termed resistance, secretions from the adrenal cortex (corticoids) help the organism repair damage and sustain continued stress. In stage three, termed exhaustion, the hormone defenses and protective reactions break down, and continued exposure to stress may lead to disintegration, diseases of adaptation (such as hypertension, arthritis, peptic ulcer), and even death. The ability of the individual to survive depends upon the length and severity of the stress condition and the body's ability to cope and endure."

COPING BEHAVIOUR: "Any conscious or unconscious adaptation that lowers tension in a stressful experience or situation. Examples of c.b. range from a simple detour around a crowded city street to elaborate defense mechanisms employed to ward off anxiety. Also called coping mechanisms."

From the above definitions, and the previous discussion on the complexity of the stress phenomena, one may list the common features which appear essential to a definition of stress:

1. A stressor is whatever taxes an individual's physical and/or psychological and/or social coping resources.
2. The source of the stress can be internal or external to the individual.
3. If the stress is prolonged, behavioural and/or emotional and/or physiological damage results.
4. The intensity and characteristics of stress reactions are mediated by individual factors.
5. Coping with stress can take a multitude of forms.

This study focuses upon the 4th of the above common features, that is, individual factors that may be implicated in predicting differential outcome of psychotherapy. The general question is: Are individual factors implicated in the differential success of psychotherapeutic approaches for stressed

individuals? More specifically: Is there an interaction between client factors and therapy approach in determining outcome in stress therapy?

In focusing upon the 4th common feature of the definition of stress, it is necessary to define what is meant by "individual factors". In brief, the phrase "individual factors" refers to those factors that distinguish one person from another and can be identified in showing how one person is different from another. The study of personality is the study of individual differences. Longman's Dictionary of Psychology and Psychiatry (Goldenson, 1984, p. 547) defines personality as:

"The configuration of characteristics and behaviour that comprises an individual's unique adjustment to life, including major traits, interests, drives, values, self-concept, abilities, and emotional patterns. P. is generally viewed as a complex, dynamic integration, or totality, shaped by many forces: hereditary and constitutional tendencies, physical maturation, early training, identification with significant individuals and groups, culturally conditioned values and roles, and critical experiences and relationships."

This broad and comprehensive definition of personality implies that people will have characteristic ways of responding to stimuli, whether the stimuli is stressor(s) or therapy approach. The integration of characteristics sets a unique and identifiable style for an individual. This study has, as a basic assumption, common to all literature studying personality and differential outcome, the idea that the ways in which a person responds to a stressor(s) is somehow similar in style to the way that person will respond to a particular therapy approach.

This study explores the possibility of utilizing individual factors, that is personality factors, as predictors of differential outcome from two therapies in the treatment of stressed individuals. This study will provide further data to the body of research literature concerned with personality variables and differential outcome.

Stress, for the purpose of this study, is defined in general terms as a state whereby individual adaptational resources are taxed to the extent that there is interference with the healthy functioning of the biopsychosocial system, with resulting damage to the biological and/or psychological and/or social well-being of the individual. The stressor can come from anywhere, including current situations, learned associations from the past, and cognitive schema. The target of stress can include cognitive processes, affective processes, bodily processes, social adjustment processes, behavioural adaptation or any combination of these. The source stressors may include any of these as well. Individual factors mediate the impact of the stressors. Finally, coping with stress may take many forms. The causative factors of stress include genotype, intra-person communication, state-dependent learning, reactivity levels, cognitive appraisal, information processing difficulties, interference with biorthyms, or any combination thereof.

It is recognized that stress responses may be manifest in several different bodily, psychological, and social systems for a variety of reasons. As such, measurement of stress should be of

sufficient breadth to accommodate this variety of symptoms and evidence decreases in stress levels resulting from psychotherapy intervention. This issue of measurement will be discussed in Chapter 2.

Having discussed the complexity of the stress phenomena and presented a working definition of stress which recognizes the potential importance of individual factors in response to stress and treatment outcomes, the research literature concerned with personality factors which may be predictive of differential outcome will now be presented.

B. Stress Management Literature Review: Potential Importance of Personality Factors

This section will present a brief review of the effectiveness of stress management generally where the impact of individual factors on outcome are largely ignored, followed by a more specific review of the literature where individual factors and their implication for differential outcome are addressed.

General Effectiveness of Stress Management Methods

In the general area of psychotherapy outcome there have been a number of persuasive meta-analytic studies, for example from Smith and Glass (1977, 1980), demonstrating that psychotherapy does have a significant positive impact on client problems. The average client is better off at the end of therapy than 80% of untreated clients. In the field of stress management Woolfolk and Lehrer (1984) reviewed hundreds of outcome studies with the following conclusions: 1) Stress therapies are effective for a

variety of symptom pictures and presentations including anger and aggressive behaviour (Carrington, Collings, Benson, Robinson, Wood, Lehrer, Woolfolk, and Cole, 1980; Green and Murray, 1975; Novaco, 1975), anxiety (Boswell and Murray, 1979; Carrington et al., 1980; Lehrer, Schoicket, Carrington, and Woolfolk, 1980; McCann, Woolfolk, and Lehrer, 1986), asthma (Davis, Saunders, Creer, and Chai, 1973; Erskine-Milliss and Schonell, 1981; Pinkerton, Hughes, and Wenrich, 1982), depression (Gilbert, Parker, and Clairborn, 1978), dysmenorrhea (Chesney & Tasto, 1975), headaches (Beatty, 1982; Blanchard, Andrasik, Neff, Arena, Ahles, Jurish, Pallmeyer, Saunders, Teders, Barron, and Rodichok, 1982; Pinkerton, Hughes, and Wenrich, 1982; Silver and Blanchard, 1978), hypertension (Agras and Jacob, 1979; Frumkin, Nathan, Prout, and Cohen, 1978; Goldstein, 1982; Redmond, Gaylor, McDonald, and Shapiro, 1974), lower back pain (Barlow, 1977), insomnia (Borkovec and Fowles, 1973; Borkovec and Hennings, 1978; Borkovec, Kaloupek, and Slama, 1975; Gershman and Clouser, 1974; Knapp, Downs, and Alperson, 1976; Mitchell and White, 1977; Nicassio and Bootzin, 1974; Woolfolk, Carr-Kaffashan, McNulty, and Lehrer, 1976), and Raynaud's Disease (Blanchard, 1979; Pinkerton et al., 1982; Sappington, Fiorito and Brehony, 1979; Surwit, 1982); 2) different methods may have specific effects on target symptoms (Chesney and Tasto, 1975; Erskine-Milliss and Schonell, 1981; Gilbert, Parker, and Clairborn, 1978; Lehrer, Schoicket, Carrington and Woolfolk, 1980); 3) different methods have compatible impact in improving the same condition

(Frumkin, Nathan, Prout, and Cohen, 1978; Gershman and Clouser, 1974; Knapp, Downs, and Alpersen, 1976; Nicassio and Bootzin 1974; Silver and Blanchard, 1978; Woolfolk, Carr-Kaffashan, Lehrer, and McNulty, 1976), 4) different methods yield additive effects when combined (Green and Murray, 1975; Mitchell and White, 1977) and 5) very little research examines the possibility that client personality characteristics may mediate differential outcome.

In the above studies, where techniques are assessed for effectiveness, both individually and in comparison, and where mediating personality variables are largely ignored, stress management techniques work with about equal effectiveness for the average client. While these studies may be criticized on their methodology in several areas, there is one methodological problem which is of particular relevance to this current study. The problem with this form of research which simply compares the effectiveness of one treatment with another (others) is referred to as the "Patient Uniformity Myth" by Kiesler (1966). The myth is that all patients are the same, that patients are interchangeable, and that responses of a client to a specific treatment will be identical to the responses of any other client exposed to the identical specific treatment.

Mays and Franks (1985) in their examination of negative effects recognize that different clients may not profit from the same treatment. Bergin and Strupp (1972), Beutler (1979), Frank (1979), Garfield (1971), Gelso (1979), Horowitz et al. (1984),

Luborsky et al. (1971), Neufeldt, Zimmer, and Mayton (1977), Paul (1967), Sloane et al. (1976), and Woolfolk and Lehrer (1984) also call for further research into how individual factors, that is personality, impacts differential outcome.

The next section will present a literature review of research that specifically attends to personality factors as predictive of differential outcome. Following this, a rationale for the choice of therapies will be presented.

Factors Predictive of Differential Outcome

The research literature investigating the interaction of personality variables and treatment outcome seems to be generally limited to about six main categories of personality factors, and so the review has been organized accordingly.

(i) Beliefs, assumptions and appraisals

Beliefs, assumptions, and appraisals are powerful moderating elements in states of illness and well-being. It has been illustrated in studies of placebo effects that states of mind can have profound effects on somatic functioning. Several researchers have documented the placebo effect (Beecher, 1959; Cousins, 1979; Evans, 1985; Marini, Sheard, Bridges, and Wagner, 1976; Morris and Beck, 1974). A person's belief that a stressor will disappear or be rectified may have positive effects on diverse conditions such as pain, hypertension, stress, cardiac pain, blood cell counts, headaches, pupillary dilation, adrenal gland secretion, diabetes, ulcers, gastric secretion and motility, colitis, menstrual pain, thyrotoxicosis, colds, fevers, vaccines,

asthma, multiple sclerosis, cancer, and rheumatoid arthritis (Rossi, 1986). According to Rossi (1986), there may be as much as a 55% placebo response in many, if not all, healing procedures. For Rossi (1986), the placebo effect functions by the transduction of information between the various systems of the total self which mobilizes a healing process. A tendency towards suggestibility may not only predispose a person to benefit from a technique such as hypnotism but may also be a personality factor mediating the effect of stress on the total self and predispose the person to a good prognosis regardless of treatment approach. Conversely, a pessimistic, depressed attitude may make unavailable a person's natural healing propensities.

A 1977 study by Bulman and Wortman examined attributions of blame and coping among severe accident victims. The authors found that poor coping in the long term was related to a tendency towards a pattern of external blame and feeling that one could have avoided the accident. Good coping was predicted by self-blame. Also, those who coped least seemed to show a greater sense of regret about having engaged in the accident-related activity. Those who were freely engaged in the chosen leisure activity at the time of the accident, without later regret, coped better. While this study does not speak of internal/external locus of control or any other specifically named personality construct, it does relate to the idea that individual factors mediate responses to stressors. Tendencies

towards self-blame and depression may be important mediating individual factors. Certainly, events perceived as uncontrollable and undesirable are significantly related to the occurrence of physical illness (Suls and Mullen, 1981) and, as the above discussion illustrated, to how a person copes with palliative states.

Therefore, degree of irrational or dysfunctional cognitions may be predictive of differential outcome in therapy.

(ii) Locus of Control

Locus of control has to do with assumptions, beliefs and expectations.

"Internal locus of control refers to the conviction that one can use one's behaviour to achieve desired goals; "External locus of control refers to the belief that real power resides outside the individual, and that forces other than oneself determine one's life"

(Goldenson, 1984)

Rotter (1966) posited that the variable of Internal-External Locus of Control may be significant in understanding how consistent individual differences influence adjustment to a learning situation. He felt that individuals would differ in attributing their own success and competency. This in turn would affect their ability to learn. He linked the ability to learn to the belief about the nature of the reinforcement provided in the learning situation.

In terms of mediating stress, it is possible that a person's Locus of Control will either facilitate or not facilitate the necessary learning involved in adaptating and ascribing meaning

to stress.

Best (1975) studied the possibility of tailoring smoking withdrawal procedures to personality and motivational differences. He felt that the failure to include client variables in experimental designs may be masking the interaction between these client variables and treatment. From previous studies, reviewed by Best (1975), it was found that internal locus of control clients responded better to a stimulus satiation aversion procedure, while external locus of control subjects showed more benefit from conducting a situational analysis of the environmental events that impact upon individual smoking behaviour. Best tailor-made one treatment focus condition to reflect this knowledge. Another treatment focus condition involved a punishment variable which would contingently punish postclinic smoking behaviour by satiation (smoking double preclinic rate) on the day after an "infraction". A third treatment focus condition involved attempting to change the smoker's attitude about smoking once he quit or just after behaviour change to work on the optimal relationship between cognitive dissonance, attitude and timing of attitude change as related to level of initial motivation. Best found that the first and the third foci interacted significantly with locus of control and degree of motivation, proper timing being related to degree of cognitive dissonance about smoking. There was a significant drop in smoking when both Locus of Control and initial motivation level were matched to treatment procedure.

Best felt that these results supported further work into the tailoring of therapy to individual differences and that his data partially supported the hypothesis that treatment impact is a function of pretreatment individual differences.

Houston (1972), in studying physiological reactions and locus of control, found that external locus of control subjects (assumed to hold "helplessness" feelings) manifested less physiological arousal under stress depicting anxiety than did internal locus of control subjects. Houston's data indicate that, while internal and external locus of control individuals do not differ in reports of anxiety in identical stressful situations, they do show a difference at the physiological level, in heart rate measured when belief about control over getting shocked was created by the investigator.

Ollendick and Murphy (1977) studied the differential effectiveness of muscular and cognitive relaxation as a function of Locus of Control. Thirty-six subjects were randomly assigned to one or the other of these relaxation procedures. The study showed that cognitive relaxation resulted in a greater decrease in heart rate and subjective distress for the internal locus of control subjects while muscular relaxation resulted in a greater decrement for the external locus of control subjects.

Abramowitz and Abramowitz (1974) found that externals on the Locus of Control Scale were more therapeutically responsive to directive group therapies than internals, who were more therapeutically responsive to non-directive group therapies.

Similarly, Kilman, Albert, and Sotile (1975) found that external locus of control clients required more control in therapeutic intervention without a spaced time format, while internals required minimal control in therapeutic intervention and structure for maximum gain.

Friedman and Dies (1974) demonstrated that external locus of control individuals reacted more favourably to desensitization than to counselling, whereas internal locus of control individuals reacted more favourably to counselling where the control of the therapy session was more self-determined than other-determined.

Schneider (1988) studied the effect of personality variables as stress buffers. She found that locus of control was the major predictor of self-concept and anxiety level. Internal locus of control subjects of both introversion and extroversion preferences on the Myers-Briggs Typology Indicator showed higher self-concept (Tennessee Self-Concept Scale) and lower anxiety (IPAT-2) scores than external locus of control subjects.

In sum, Locus of Control may be useful in predicting differential outcome in stress management psychotherapy.

(iii) Typology

According to MBTI theory, differing types do exhibit characteristic patterns of beliefs about themselves, preferences for certain types of information, differences regarding characteristic patterns of decision-making and problem solving, and also differences in lifestyle preferences (Keirsey and Bates,

1978; Lawrence, 1979; Myers, 1962, 1977; Myers and Myers, 1980; Quenck, 1984).

Giroux, Roberts, and Carskadon (1979) studied the differential effectiveness of RET on Thinking Types and Feeling Types utilizing the Myers-Briggs Typology Indicator. They questioned whether it was possible to make predictions about the relative effectiveness of particular therapy approaches based on type. Their hypothesis was that RET would be more effective for Thinking types since, according to the theoretical literature, the Thinking types by nature prefer to use logic and reason. Their results indicated differential effect but the results could be interpreted differently depending on whether one looked at the short-term versus the long-term gains. There was no differential effect between thinkers and feelers receiving relaxation and RET in the long term. In the short term however, and contrary to predictions, results suggest that RET may be more effective for Feeling types than for Thinking types. Cooper (1977) suggests, as does Selye (1980), that problems may result from the overuse of a particular coping preference to the exclusion of the use of alternative coping abilities. RET may be more effective with Feeling types because it is different from the usual preferred way of arriving at decisions which is typical of Feelers as compared to Thinkers. The absence of long-term effects may be reflecting the fact that only 6 hours of therapy were offered. Also, the control group was treated with relaxation training. It would have been more appropriate for comparison purposes to have

had an untreated control group.

Alexy (1982) showed that temporal effects in stress may be more important than personality factors for the matching of clients to treatment approach. He found that bereaved parents' preference for type of therapy depended on the phase of grieving they were in. Concrete therapies for early stages of grief and insight, and meaning therapies for later stages of grief, were preferred regardless of personality type.

Cooley and Keesey (1981) looked at potential moderator variables in the relationship between life stress events and physical illness. Their moderator variables were the Sensation-Seeking Scale, Health Locus of Control Scale, and the MBTI. Results from all subjects, without attending to moderator variables, showed a relationship between events and severity of stress-related disorders. While no relationship was found with locus of control, sensation-seeking proved to be a moderator, whereby only low sensation seekers showed a significant correlation between life changes and illness ($p < .05$). On the MBTI, Introverts ($p < .001$), Thinking ($p < .05$) & Sensing ($p < .001$) types showed larger correlations between life changes and illness than Extroverts ($p < .05$), Feeling ($p < .05$) and Intuitive (n.s.) Types. It is possible that Extroverts and high sensation-seekers are less severely affected by change in their lives while Introverts and low sensation-seekers are more sensitive to changes and respond, according to Cooley and

Keesey, with increased neuroticism, anxiety and hostility. Also, the internal focus of Introverts may make it less likely that they will accumulate social supports than do Extroverts.

Garden (1988) studied how symptoms of burnout are critically related to psychological type as defined by the MBTI. She found that burnout seems to diminish the very qualities that characterize specific types (16 types in the Inventory). In other words, it is not the case that certain types are predisposed to burnout. Rather, because of stress of the working environment, the person loses distinguishing characteristics so that the types become like each other during burnout. It can be said that stress attacks the usually distinctive presentation of an individual's personality, and, to use Selye's term, "deranges" the usual mechanisms of the individual. Garden specifies the symptomatology that occurs with each psychological function that describes a type in the state of burnout. For Feeling types, there is loss of the inclination to care for others. For Thinking types, there is a loss in achievement orientation or ambitiousness. For Sensing types, there is a loss in groundedness in reality. For Intuitive types, there is a loss of enthusiasm and originality. Garden goes on to say that in some cases, there was an increase in the characteristic associated with a person's opposite type when under stress.

There would appear to be the possibility of utilizing typology as a predictor of differential outcome.

(iv) Cognitive Characteristics

A study by Neufeldt (1978) studied client cognitive characteristics and preference for counselling approaches. While not a stress study per se, the findings have ramifications for the type of stress treatment that could be utilized for different individuals. This might be relevant for matching type of person with type of approach. She classified subjects according to nine Piagetian tasks to ascertain their capacities for formal thought. Then subjects read transcripts of behavioural and insight counselling interviews, and rated their preferences for each. Neufeldt found that differences in concrete and formal thinking related to differential preference for either behavioural or insight counselling transcripts. Those indicating a preference for insight counselling showed a significantly greater capacity for formal thought than did those who preferred the behaviour counselling, who themselves showed a greater capacity for concrete thinking. She concluded that, if individuals are accustomed to solving problems in particular ways, they will be most comfortable continuing in those ways. This Piagetian position meshes very well with MBTI theory regarding Sensing and Intuitive types and practically mirrors MBTI theory in describing the preferences of these two types (Myers, 1962, 1977; Myers and Myers, 1980).

Luborsky, Chandler, Auerbach, and Cohen (1971) in their review of 166 quantitative studies of predictors of individual psychotherapy outcome with adult patients found that patients

with higher intelligence performed better in psychotherapy. They comment that psychotherapy requires learning and those who learn most readily do better. However, they do not comment on TYPE of intelligence as did Neufeldt. There are a variety of types of intelligence that have been identified and studied (Sternberg, 1982). Some forms of behaviouristic therapies do certainly emphasize a concrete, problem-solving approach whereas other therapies, such as Gestalt, Focusing and Psychoanalysis, appear to emphasize meanings.

Cognitive characteristics of clients, that is abstract versus concrete reasoning abilities, may be an appropriate predictor of differential treatment outcome.

(v) Experiencing ability

Luborsky, Chandler, Auerbach, and Cohen (1971), in a review of 166 studies dealing with predictions of individual psychotherapy outcome with adult patients, found experiencing (as coined by Gendlin) to be a relevant client variable. Experiencing implies that subjects can experience deeply and immediately, and be reflectively aware of experiencing. Gendlin, Beebe, Cassens, and Oberlander (1968) had previously found that patients who have better outcome are those who start psychotherapy with higher levels of "process". They stressed that a subject's ability to experience may be a factor for the therapist to consider in deciding what therapeutic approach to offer the individual client in order to maximize gains. This variable may be predictive of success in forms of therapy that emphasize

experiencing.

Ability to "experience" may be used as a predictor of differential outcome in stress psychotherapy.

(vi) Cognitive-Somatic Dimension

Hamilton (1959) interviewed anxiety neurotics and rated their symptoms. He identified symptoms constituting, in his terminology, a factor consisting of Tension and Worry at one pole, and Autonomic Reactivity at the other. Tension and Worry consisted of such symptoms as muscular tension, fears, insomnia, apprehension, difficulty in concentrating and depression. Autonomic Reactivity consisted of such symptoms as autonomic responsiveness, gastro-intestinal complaints, genitourinary complaints, respiratory complaints and cardiovascular complaints.

Buss (1962) suggested that Hamilton's bipolar factor may well apply to a broader range of clients than anxiety neurotics. Buss rated clients with a wide range of diagnoses. He rated physiological complaints, subjective feelings, somatic complaints, distractability, restlessness, worry and muscular tension. His factor analysis yielded 2 factors which corresponded closely to Hamilton's findings.

Schwartz, Davidson, and Goleman (1978) devised a scale which separates global anxiety into symptoms which relate to the factors found by Hamilton and Buss. The Cognitive-Somatic Anxiety Questionnaire had two subscales, somatic and cognitive. They then separately assessed the differential effects of a somatic (physical exercise) and a cognitive (meditation) relaxation

procedure. Their subjects were either regular exercisers or regular meditators. Results indicated that regular exercisers reported relatively less somatic and more cognitive anxiety than meditators. Their data suggested that subcomponents of anxiety may be associated with different relaxation techniques based on the somatic versus cognitive subsystems. They therefore suggested that a person's preferential channel for displaying stress and feeling anxiety may be matched to treatments that address either cognitive or somatic channels and thereby lead to optimal outcomes. Schwartz et al. (1978) concluded that their findings provide the most general kind of division in the assessment and treatment of anxiety and stress. They offer an assessment tool, the Cognitive-Somatic Anxiety Questionnaire, to assess a client's use of these two basic channels for displaying stress reactions.

DeGood, Buckelew, and Tait (1985) studied the Cognitive-Somatic Dimension with 100 chronic pain patients and 100 nonpatients. They also administered the CSAQ to two smaller comparison groups (N=60). Pain patients not only displayed significantly more somatic (as opposed to cognitive) indicators of anxiety when compared to nonpatients, but also acknowledged fewer signs of anxiety. According to Degood et al., it seems as though, for chronic pain patients, "the capacity to communicate private affective experience is limited almost entirely to the somatic realm". Degood et al. also comment that this applies particularly to a class of patients that has been reported in

the medical and psychoanalytic literature as "alexithymic" [without words for feelings] (Sifneos, 1973, p. 256). Roskies (1983) interpreted her research findings on Type A subjects along a similar but converse line of reasoning: many Type A individuals do not experience stress primarily through muscle tension but through obsessive worrying, racing thoughts, anger outbursts, etc. Therefore, simply relaxing muscles does not speak directly to either the situation at hand or to the subjective experience of the stressed Type A individual. And yet physical disease often accompanies this kind of "system specific" expression of stress.

DeGood and Tait (1987), note that dysynchrony of response components is common place in anxiety states (Hodgson and Rachman, 1974; Lacey, 1967) and that anxiety-reducing therapeutic interventions may be most effective if directed at a person's own unique style for displaying cognitive and somatic anxiety. They also pointed out that extreme scores on one scale to the exclusion of the other are quite rare as most people display a combination of stress symptomatology. In this study, DeGood and Tait (1987) found that the CSAQ correlated with the SCL-90 subscales of obsessive-compulsiveness and somatization.

Tameren, Carney, and Allen (1985a) took GSR measures of subjects who were watching a stress-inducing film. The GSR responses of subjects with a preference for the somatic scale on the CSAQ were higher than those of subjects with a preference for the cognitive scale. The cognitive scale of the CSAQ correlated well with the Irrational Beliefs Inventory and with the Internal-

External Locus of Control Scale.

In another study on the predictive validity of the cognitive versus somatic anxiety distinction, Tamaren, Carney, and Allen (1985b) matched and mismatched "cognitively" and "somatically" anxious persons, as identified by the CSAQ, to treatments that were either "cognitively" or "somatically" oriented. Out of the 12 subjects who were identified as "cognitively" anxious on the CSAQ, 6 were matched to Meichenbaum and Cameron's stress inoculation technique and 6 were mismatched to Bernstein and Borkneric's progressive muscle relaxation training. Out of the 12 subjects who were identified as "somatically" anxious, 6 were similarly matched and 6 mismatched. All subjects who were matched reported significant drops in anxiety symptoms.

While the above findings appear straightforward, there are indications that the relationship between anxiety and other personality variables may be more complex. Schalling (1975) took Spielberger's State-Trait Anxiety Scale and applied Buss's (1962) factorial findings by dividing the scale into Psychic (cognitive) and Somatic subscales. Schalling was interested in studying Extroversion and Introversion in relation to these components of anxiety. In studying types of anxiety and types of stressors as related to these personality variables, she found that Psychic (cognitive) anxiety trait scores on the Multi-Component Anxiety Scale negatively correlated with EPI extraversion. That is,

introverted patients reported higher psychic anxiety than did extraverted patients. In contrast, she found that somatic anxiety scores (both state and trait) were positively correlated with impulsiveness.

Some authors, such as Borkovec (1976), Lehrer and Woolfolk (1982), and Norton and Johnson (1983), have proposed a three component model: 1) cognitive 2) somatic 3) behavioural. However, the majority of researchers have emphasized the 2 component model: 1) cognitive and 2) somatic. These authors agree that a matching of component to treatment is desirable.

The cognitive-versus-somatic anxiety dimension may therefore be a useful predictor of differential outcome in stress management psychotherapy.

Summary

So far, this chapter has offered a definition of stress and has reviewed the literature regarding individual variables potentially useful as predictors of differential outcome.

Six major factors have been identified which may predict differential outcome:

- a. Beliefs
- b. Locus of Control
- c. Typology
- d. Cognitive Characteristics
- e. Experiencing
- f. Cognitive-Somatic Dimension

Additional factors, not reviewed in detail have been identified, such as information seeking/information avoidance, sensitizier/denier, vigilance/denial, and monitoring/blunting

(Goldstein, 1973; Cohen and Lazarus, 1973; Shipley, Butt, Horwitz, and Farby, 1978; Miller, 1979; Suls and Fletcher, 1985; Martelli and Auerback, 1987; Suls and Mullen, 1981). These factors have been used primarily in studies of coping with surgery or palliative coping with terminal illness. Also, and perhaps arguable, these factors may be subsumed under the theoretical descriptions of Jungian typology (Keirse and Bates, 1978; Lawrence, 1979; Myers, 1962, 1977; Myers and Myers, 1980). This study is interested in the individual factors that may predict differential psychotherapy outcome for the kind of stress that has become normative in our society, and not the stress associated with palliative states.

This chapter will now present brief descriptions of commonly utilized stress management techniques/approaches before presenting a rationale for the choice of therapies for this study.

C) Available Treatments for Stress

Introduction

We have offered a general definition of "stress", reviewed stress management therapy effectiveness, and identified six major predictors of differential outcome. What follows is a brief overview of stress management techniques/approaches after which there will be a presentation of the rationale for choosing Rational Emotive Therapy and Gendlin Focusing as the therapies for this study.

A broad range of techniques and treatments exists under the

heading of "stress management", each relating to different aspects of the stress response depending upon what is considered the pivotal point maintaining the dysfunctional system (eg. relaxing the body versus eliminating irrational beliefs).

While differences among techniques/approaches may be noticed, there does not appear to exist well defined ways (other than clinical intuition) of matching a particular client to the treatment best suited for that client.

In practice, the practitioner will utilize parts of, or varying combinations of, techniques with an individual client. These are not mutually exclusive stress management techniques.

A stress management technique, for the purposes of this study, is any technique, therapy or approach whose goal is to re-establish the comfort state of an individual whose own coping mechanisms at whatever level of functioning no longer sufficiently serve to re-establish well-being. As such, all psychotherapy falls into the more general category of stress management. While this section presents techniques explicitly identified as "stress management techniques", all psychological therapies may be seen at least implicitly as dealing with stress.

Sometimes, a technique is called by different names. Whenever this is the case, alternate names will be indicated.

(i) Assertiveness Training

Assertiveness Training targets the kind of stress which arises from interpersonal contact (Alberti and Emmons, 1974; Bach and Goldberg, 1974; Bower and Bower, 1976; Fensterheim and Baer,

1975; Jakubowski-Spector, 1973; Lazarus, 1966; Phelps and Austin, 1975; Smith, 1975). The goal of the approach is to assist clients in re-framing beliefs, assumptions and awareness of personal rights and feelings within the context of interpersonal interactions. The technique emphasizes role-play and behavioural change, with specific instructions for identification and resolution of the stressful situation. It is a skills training approach which specifically attends to 1) anxiety resulting from stressful relationships (personal or job related), and 2) feelings of depression, hopelessness, powerlessness and poor self-esteem in interpersonal relationships.

(ii) Autogenic Training

Autogenics targets sensations of chronic tension in the body (Assagioli, 1965, 1973; Luthe, 1963, 1969; Pelletier, 1977, 1979, 1984). The goal of the approach is to teach the client (body and mind) to respond to the client's own verbal commands (cue-controlled relaxation) to relax and return to a balanced, normal state. This approach interrupts chronic sympathetic nervous system responding by teaching the client to call upon the antagonistic properties of the parasympathetic system. The approach teaches self-regulation of the autonomic nervous system. The techniques usually consists of physical exercises, meditative exercises, and special exercises designed to normalize specific problems. It is often utilized with an emphasis on general relaxation of the body. Primary symptoms to which this approach attends include muscular tension, high blood

pressure, indigestion, irritable bowel, ulcers, and chronic constipation. When autogenic exercises are utilized for the mind, symptoms such as generalized anxiety, hostility, fatigue, and insomnia are targeted. When autogenic exercises are utilized for the body, symptoms such as headaches, neckaches and backaches are targeted.

(iii) Biofeedback

Biofeedback is an approach which assists clients in monitoring and exercising control over muscle tension, body temperature, brain waves, heart rate, and other functions controlled by the autonomic nervous system (Brown, 1974, 1977; Karlins and Andrews, 1972; Lamott, 1975; Sterman, 1978). It has been successfully utilized in the treatment of muscular tension, anxiety, insomnia, asthma, hypertension, ulcers, colitis, menstrual distress and headaches (Davis, Eshelman, and MacKay, 1988). Heightened awareness and control are initially achieved by viewing feedback information on the biofeedback machine. With practice, the machine is no longer necessary. Brown (1974) describes biofeedback as a way to learn voluntary control over autonomic reflex-regulated body function. Again it is based on the concept that awareness and voluntary control can affect the arousal systems of the body.

(iv) Body Awareness

Body Awareness is an approach which emphasizes awareness of body states that are concurrent with events, situations and interpersonal contacts (Lowen, 1975; Stevens, 1971; Perls, 1973;

Perls, Hefferline and Goodman, 1951). The approach encourages shifting awareness from events that are external to the body to those which are internal to the body. The goal is to assist clients in re-owning personal processes. In order to do this, there must be awareness of those processes. From such re-owning, autonomy and responsibility can grow. Symptoms of anxiety and tension are signals about the state of the organism. Perls and Lowen felt that the body feels stress long before the mind becomes aware of it. Becoming more aware of the body assists in the resolution of the source of the stress.

(v) Breathing

Breathing awareness and breathing exercises target stress that results from inadequate delivery of oxygen to the body (Ramacharaka, 1905; Saraswati, 1976; Spreads, 1978). Improperly oxygenated blood places a stress on the body and this contributes to anxiety, depression, and fatigue, and makes dealing with stressful situations more difficult.

(vi) Combination Techniques

Combination Techniques are a smorgasbord of stress management techniques (Davis, Eshelman, and McKay, 1988). Utilizing two or more techniques with an individual client may not only have a synergistic effect by covering several aspects of functioning, but also provide the client with the opportunity to become acquainted with different techniques and to adopt those which appear most effective. Combination techniques focus upon various aspects of relaxation, cognitions, and self-

acceptance. Yogic therapy (Patel, 1984), for example, involves 1) teaching the client to be aware of how their mental evaluation of a situation leads to responses, 2) modelling appropriate and inappropriate responses (audiovisual aids), 3) teaching breathing, 4) teaching systematic deep-muscle relaxation, 5) teaching meditation, and 6) deconditioning to stressful situations.

Any technique which attend to both cognitive and somatic aspects of may be conceptualized under this general heading (Woolfolk and Lehrer, 1984).

(vii) Coping Skills Training and Stress Inoculation Training

Coping Skills Training and Stress Inoculation Training involve three major phases of treatment: 1) conceptualization of the stressor, 2) skills acquisition and rehearsal and 3) applications and follow-through (Goldfried, 1973; Meichenbaum, 1974, 1977, 1985; Meichenbaum and Cameron, 1974; Suinn and Richardson, 1971; Jaremko, 1979). This step-by-step approach increases the individual's sense of mastery and self-efficacy. It calls upon the client's past coping resources and applies them to the current situation. It teaches clients to control irrational thoughts about their ability to overcome stressors, step by step. Finally, it emphasizes the value of reinforcing success so as to strengthen the resources of the person for coping with future stressors. This approach has been successfully applied to the treatment of anxiety in specific situations, and to the treatment of feelings of depression, helplessness and

hopelessness. It is actually a brief combination technique in that a variety of sub-approaches are utilized such as semistructured interview, imagery recall, self-monitoring, behavioural assessments and psychological testing in the first phase of conceptualization of the problem; relaxation training, problem-solving, self-instructional training and cognitive restructuring for the second phase; and systematic desensitization, visualization, self-statements, modeling and role-play for the final phase.

(viii) Exercise

Exercise provides an outlet for sympathetic arousal and is one of the best means of stress reduction for a variety of stress-related symptoms (Anderson and Cohen, 1978; Cooper, 1977; Davies, Eshelman, and McKay, 1988; Kostrubala, 1976; Sorenson, 1979; Thomas, 1981).

(ix) Hypnosis

Hypnosis and Self-Hypnosis have long been used for stress management, relaxation, the control of chronic pain, the control of some organic functions, assessing past experiences, and accessing past resources in coping with current difficulties (Cheek and LeCron, 1968; Haley, 1967, 1973; LeCron, 1952, 1961, 1970; Morris, 1974; Rossi, 1987). The techniques assist clients in developing the ability to narrow consciousness while heightening awareness. Thereby, they can open channels of communication or information-processing between or among systems within themselves (Rossi, 1986) and be able to step out of being

"stuck in a groove" (a la Selye) and be liberated from state-dependent learning (a la Rossi).

(x) Job Stress Management

Job Stress Management is devised to deal with symptoms of fatigue, pessimism, absenteeism, inefficiency, and proneness to illness that arise from stress exerted on the individual through the work situation (Kemper, Giuffre, and Drabinski, 1985; Pelletier, 1984; Potter, 1987; Veninga and Spradley, 1981). Job stress management takes into consideration the underutilization and overutilization of people in the workplace and consequent stress underload and overload that can be equally damaging (Yerkes and Dodson, 1908). Job stress management and career assessments in general take into consideration the importance of matching the individual's interests, aptitudes, and personality to an appropriate job. Other important areas of concern are identifying and working on the symptoms and sources of job stress, and the responses to job stressors; planning response goals; motivating and rewarding oneself for improvements; identifying and working on irrational ideas of persecution, perfectionism or powerlessness; improving interpersonal communication with bosses; developing negotiation skills in the office, as well as the ability to pace activity and to know when to quit (Davis, Eshelman, and McKay, 1988; Holt, 1982).

(xi) Meditation

Meditation can decrease physiological processes such as

heart beat, breathing rate, oxygen consumption, blood lactate, and skin resistance to electrical current Harp, 1987; Hewitt, 1978; LeShan, 1974; Locke, and Colligan, 1986; Naranjo and Ornstein, 1971). During meditation, EEG patterns indicate increased alpha wave activity (Benson, Beary, and Carol, 1974). Meditation produces effects that are congruent to physical states of relaxation. In both, parasympathetic resources are called upon to counteract sympathetic arousal.

(xii) Nutrition

Adequate nutrition is essential to the proper functioning of the body and for it's ability to counteract stress (Corbin, 1980; Davis, 1965; Kunin, 1980). Malnutrition places stress on the body. Under stress, the body must mobilize it's nutritional resources. A poor diet therefore contributes to poor reactions to stress (Davis, Eshelman, and McKay, 1988).

(xiii) Progressive Relaxation

Progressive Relaxation is based on the notion that one cannot be both tense and relaxed at the same time (Jacobson, 1964a, 1964b, 1974; Wolpe, 1969). As such, this technique is utilized for the treatment of a broad range of stress-related symptoms including muscle tension, headaches, insomnia, general/interpersonal/situational anxiety, phobias, and high blood pressure. People are often not aware that they carry tension in their bodies. This technique teaches awareness through exercises which attend to each major muscle group in turn throughout the body, assisting the client to discriminate between

states of tension and states of relaxation. Like some Gestalt exercises which shift awareness between inside states and outside situations, progressive relaxation teaches clients to shift between inside states of tension and inside states of relaxation.

McGuigan (1984), in reviewing the origins, principles and clinical applications of progressive relaxation, notes the importance of Jacobson's discoveries about how the mind and body work. Jacobson discovered that even thinking about moving a limb produced very tiny muscle flexion in that limb and that these flexions were only measurable when an individual was in a fully relaxed state, since only then would there not be an obscuring of this phenomenon by general muscle tension (McGuigan, 1984, p. 13). Jacobson's research showed that, in order to relax, one must relax all of the interacting systems of the body. This occurs by directly relaxing the skeletal musculature, such relaxation being followed by decreased central nervous system arousal and parasympathetic dominance of the autonomic system (McGuigan, 1984, p. 13). Interestingly, McGuigan (1984), Jacobson (1964a) and Patel (1984) appear to agree on the idea that receptors in the body, after repeated activations, and reverberations along the feedback loops between muscles, nerves and brain mechanisms, constitute a control signal. This is like a kind of baseline activity, a sort of habit, perhaps even a "groove" of responding. For McGuigan, "the long-range goal of progressive relaxation is for the body to monitor instantaneously all of its numerous control signals, and automatically to

relieve tensions that are not desired" (McGuigan, 1984, p. 15).

(xiv) Refuting Irrational Ideas and Rational Emotive Therapy

Refuting Irrational Ideas [Rational Emotive Therapy] is a popular approach which focuses on stress caused by one's own cognitions that are no longer based in a perception of reality (Beck, 1967; Ellis, 1971a, 1971b, 1975; Ellis and Harper, 1961; Farquhar and Lowe, 1974; Goodman, 1974; Lazarus, 1971; Maultsby, 1971). This approach attacks absolutistic, irrational self-talk that has demonstrable effects on physiological arousal (Rimm and Litvak, 1969). The approach emphasizes the identification of irrational beliefs and then challenges these beliefs by encouraging the client to examine and assess the validity of the beliefs against reality and finally to replace irrational beliefs with rational ones.

(xv) Time Management

Time Management is an excellent approach when the primary symptom is fatigue (Assagioli, 1973; Greenwald, 1973; Lakein, 1973). This approach assists the client in establishing priorities, delineating goals, planning realistic time schedules and eliminating low priority tasks. The basic idea is that overloading the system results in stress and this situation must be avoided. Useful skills such as the ability to say "no" are taught, the ability to delegate low priority items is emphasized, building in flexible time slots to cover the unexpected is advised, and the specific setting aside of quiet time each day is encouraged. Basically, this approach focuses upon reducing the

intrusive demands from the environment which place the individual in a position of constant stressed efforts to manage abundant demands.

(xvi) Thought-Stopping

Thought-Stopping is especially useful for the treatment of obsessive and phobic thoughts (Lazarus, 1971; Rimm and Masters, 1974; Wolpe, 1969). This technique is based on the cognitive model which stipulates that thoughts PRECEDE emotions. This information processing model is evident in all forms of cognitive therapies and techniques. The obsessive or phobic person is "stuck in a groove" of thought which exacerbates emotional reactions. Emotional reactions are based on physiological responses, with concomitant sympathetic arousal. This technique emphasizes identification of stressful thoughts and the development of cues to interrupt the recurrence of these thoughts.

(xvii) Visualization

Visualization of Imagery uses a person's imagination and positive healing images therein to counteract stress, to divert oneself from feelings of stress, and to find creative solutions to difficulties (Fanning, 1988; Gawain, 1978; Ornstein, 1972; Oyle, 1976; Samuels and Samuels, 1975; Shealy, 1977; Siegel, 1986; Simonton, Matthews-Simonton, and Creighton, 1980). This is similar to Jung's technique of scenario re-writing in "active imagination" (Storr, 1983). Gestaltists use similar techniques for dream interpretation where, through imagination, the client

re-writes the dream after having worked out the meaning of the dream (Perls, Hefferline, and Goodman, 1951). Also, visualization is now being utilized in the treatment of cancer patients to boost their own biochemical/immune healing processes. Various kinds of visualization can be taught such as receptive, programmed and guided visualization. Various exercises within the visualization can also be done to achieve a relaxed state. These include eye relaxation (palming), metaphorical images of tension and relaxation, going off to a special place of relaxation, or finding an Inner Guide. Again the basic idea is that states of the mind will affect states of the body such as tension and anxiety.

Summary

We have presented, in brief, the commonly utilized stress-management techniques/approaches. They have different foci: cognitive processes, somatic processes, or some combination of both. Stress management, for the purposes of this study, is any technique, therapy or approach whose goal is to re-establish the comfort state of an individual whose own coping mechanisms at whatever level of functioning no longer serve sufficiently to re-establish well-being.

The next section will present a rationale for the choice of therapies for this study. The choices were made based on the adequacy of the conceptual formulation of the therapies for the exploration of the identified potential predictors of differential outcome and also based on the approach's

representativeness of being either a cognitive processes focused or a somatic processes focused approach. The reader will note that one choice was included from the above noted list of approaches/techniques for stress management and one choice, never explicitly used towards stress management in the past, embodies all of the necessary concepts to provide for the exploration of the variables identified through the literature review. The two approaches are fundamentally different from each other but from whose theoretical underpinnings we can predict each to be more suitable for the reduction of stress in clients with particular characteristics.

D) Rationale for Choice of Therapies for This Study

This section will present Rational Emotive Therapy (RET) and Gendlin Focusing. Both are well-accepted forms of psychotherapy (Corsini, 1973, 1984). It will be argued that each modality is suitable for the reduction of stress among subjects.

Following this, there will be a section on how these two modalities contrast with each other in relation to the purposes of this study and how they were suitable choices for the investigation of individual variables identified as possible predictors of differential outcome.

Rational Emotive Therapy

Rational Emotive Therapy, as formulated by Ellis (1962, 1971a, 1971b, 1973, 1975, 1982, 1984) emphasizes the importance of one's cognitions in overall healthy functioning. RET will be discussed in terms of a) basic points, b) major contentions, and

c) ramifications.

(i) Basic Points in RET

The first basic point in Ellis' approach is that the most efficient way of effecting lasting emotional and behavioural change is for individuals to change their thinking (Ellis, 1962).

In his eight step cognitive model of human functioning, the process of forming a cognition is important in determining the resulting emotional experience.

- Step 1: Stimulus configuration
- Step 2: Detection
- Step 3: Description
- Step 4: Inference (Descriptive-Evaluative)
- Step 5: Personal Significance (Evaluative)
- Step 6: Emotional Experience
- Step 7: Behaviour
- Step 8: Reinforcing consequences (of steps 6 and 7)
(Dryden, 1934)

Second, Ellis (1982) states that rational beliefs underlie functional behaviours, while irrational beliefs underlie dysfunctional behaviours such as substance abuse and procrastination, for example. As such, Ellis has addressed himself mainly to rational and irrational beliefs that occur at Step 5 above. Negative emotional experiences such as depression, anger, anxiety and guilt arise from irrational beliefs. "Musterbation" and "awfullising" which result from irrational beliefs have a detrimental impact on levels of self-acceptance and self-esteem.

Third, Ellis (1982) states that people perpetuate their psychological disturbance because a) there is a tendency to

attribute the root of the difficulty to the situations themselves rather than to their irrational beliefs concerning these situations, b) people re-indoctrinate themselves in the present with these beliefs, and c) people do not work at and practice towards the replacement of their demanding philosophy with a desiring philosophy.

RET works by attending to and challenging irrational beliefs. In this way, it assists the client in replacing irrational beliefs with rational ones.

The basic model is one commonly found in cognitive therapies. Thoughts affect physiological functioning, and then physiological functioning feeds back to perceptual mechanisms, which then reinforce thoughts (back to step 1 in the model). If the thoughts are dysfunctional, then the totality of the person's system will not be responding in accordance to the realities of the environment, nor will the person be as capable of accessing his or her own resources.

(ii) Important Contentions of RET

Important contentions (Ellis, 1984) include:

1. Clients tend to receive more effective help from a highly active directive than from a more passive psychotherapeutic approach.
2. Effective therapy importantly includes the therapist's strong challenge to clients' irrational philosophies and persuading them to adopt less self-defeating beliefs.
3. Efficient therapy includes activity oriented homework assignments.
4. Abreaction and catharsis of dysfunctional emotions

like anger may have temporary palliative effects but often prove iatrogenic in that they tend to reinforce the beliefs that people use to create these feelings; the rational disputing of these philosophies gives better and more lasting effects.

5. People largely choose to disturb themselves and can intentionally choose to surrender these disturbances.

6. Self-control has very strong cognitive, as well as behavioural, elements and effective therapy often consists of helping clients use cognitive-related self-management principles.

7. Helping clients believe they can cope with conditions of distress and stress constitute effective methods of psychotherapy.

8. A great deal of psychotherapy consists of cognitive diversion or distraction, which can be used for significant, if often inelegant, personality change.

9. Helping clients modify their beliefs helps them to make significant changes, which are more enduring than those achieved through other methods of therapy.

10. Effective psychotherapy provides clients, in a variety of ways, with information that can help them understand how they have disturbed themselves and what they can do to make themselves less disturbed.

11. Many effective methods of cognitive therapy exist, including modeling, roleplaying, skill training, and problem solving.

(Ellis, 1984)

Ellis (1984) explicitly states that somatic processes will be altered by cognitions. Unnecessary stress is caused by irrational beliefs, the solution is changing irrational beliefs into more rational ones. These changes have ramifications for the individual in all systems of functioning.

(iii) Ramifications of RET

Ramifications of RET and irrational beliefs for the individual include:

1. Human thinking and emotion do not constitute two disparate or different processes, but significantly overlap.
2. Although activating events (A) significantly contribute to emotional and behavioural consequences (C), people's beliefs (B) about A more importantly and more directly "cause" C.
3. The kinds of things people say to themselves, as well as the form in which they say these things, significantly affect their emotions and behaviour and often lead them to feel emotionally disturbed.
4. Humans not only think and think about their thinking but also think about thinking about their thinking. Whenever they have strong feelings at C (consequence) after something has happened in their lives at A (activating event), they tend to make C into a new A to perceive and think about their emotion (and emotional disturbances), and thereby significantly escalate, diminish, or otherwise modify these emotions and create new ones.
5. People not only think about what happens to them in words, phrases, and sentences but also do so by images, fantasies, dreams, and other kinds of pictorial representations. These non-verbal cognitions contribute significantly to their emotions and behaviours and can be used to change such behaviours.
6. Just as cognitions importantly contribute to emotions and actions, emotions also significantly contribute to or "cause" cognitions and action; and actions contribute to or "cause" cognitions and emotions. When people change one of these three modalities of behaving they concomitantly tend to change the other two.
7. By focusing on, and cognizing about their physiological somatic processes, people can often change these dramatically.
8. Humans have strong innate as well as acquired tendencies to think, emote, and behave in certain ways, although virtually none of their behaviour stems solely from instinct and practically all of it has powerful environmental and learning factors that contribute to its "causation".
9. When people expect that something will happen, to

expect that others will act in a certain way, they act significantly differently than when they have other kinds of expectations.

10. When people view situations, others' reactions, and their own behaviour as within their control they act significantly differently than when they view them as stemming from external sources.

11. Humans attribute motives, reasons, and causes to other people and to external events and to internal physical states; and they significantly influence their own emotions and behaviours by these attributions, even when based on false or misleading perceptions and conceptions.

(Ellis, 1984)

As such, RET's therapeutic springboard is the emphasis on beliefs and cognitions and how beliefs and cognitions can be stressful to the individual without denying that all aspects of human functioning are interrelated.

This model of information processing emphasizes the importance of cognition as the precursor to stress reactions. This is in keeping with Lazarus' model of stress and also with Leventhal and Nerenz's model of coping. According to Zajonc (1980), all cognitive theorists share this assumption regarding the processing of information which leads to a stress reaction.

RET is a form of therapy which emphasizes cognitive primacy of human functioning. If irrational beliefs are altered, functioning will alter accordingly. This RET therapeutic goal is accomplished through directive means, with homework, and an emphasis on a rational approach problem-solving.

RET has been empirically demonstrated to be effective in reducing stress in research which did not control for personality

factors (Bowin, 1983; Drob, Bernard, Lifshutz, Nierenberg, 1986; Golden and Consorte, Higgins, 1986; 1983; Kendall, 1982; Maes, 1987; Stanton, 1989; Woods, 1987).

Focusing

Gendlin's Focusing emerged from an experiential/phenomenological rather than a cognitive tradition. This means that client subjective experience is valued in the therapy situation, and that therapeutic progress can occur when the client is truly in contact with his or her own experiential self (Gendlin, 1962, 1964, 1973, 1978).

Whereas Ellis believes that faulty cognitions result in maladaptive reactions to stressful events, Gendlin maintains that maladaptive reactions occur as a result of the blocking or breakdown of the human organism's inherent capacity for self-direction and healing. This blocking or breakdown is the result of disjunction between ongoing organismic experiencing and consciously maintained cognitions or schemas. For Gendlin, harmful stress comes about when an individual does not know how he or she "really feels", but instead uses the intellect to construct explanations based on introjected values, and thereby blocks the natural capacity to direct oneself towards health. This natural capacity is a function of nonconscious evaluative operations which are bodily-felt by an individual. For an individual to be healthy, there must be an open flow between what is bodily-felt and what is in conscious awareness so that the body provides direction and organizes conscious action.

Gendlin's (1978) basic premise in approaching the unity of human experiencing is as follows:

"When something goes wrong the body knows it and immediately sets about the task of repairing itself. The body knows what its own right state feels like and is constantly checking and adjusting its processes to stay as close to that state as possible. It maintains its temperature, for instance, in the narrow range near 98.6 degrees. People all over the world have precisely the same body temperature, whether they live on the Equator or in the Arctic."..."Your body knows the direction of healing. If you take the time to listen to it through focusing, it will give you the steps in the right direction."

(Gendlin, 1978, pp. 76-77)

People form cognitive structures or schemas through their experiences of the world. These structures affect how later events are experienced, that is, perception and experience are mediated through structures formed by prior emotionally significant experiences. Problems arise when these structures are static, unchangeable by interaction with new elements of current experience and blocked off from change that would naturally occur through the operation of the organismic valuing process. Simply put, organismic valuing is the trust and confidence a person places in the accuracy of their own subjective sense of reality and their position in relation to that reality. According to humanistic theory, there is by virtue of being a living system, a built-in capacity for self-direction and self-regulation. Organismic valuing is the process of accessing this natural mechanism for self-direction and self-regulation. Organismic valuing equals adaptive functioning. However, lack of organismic valuing results in static structures

which are maladaptive to the current changing reality. Static structures are largely unconscious or outside awareness but they are bodily felt. To bring about change, the individual needs to consult the felt sense of the body and to symbolize structures thus opening up the possibility of allowing guidance by organismic valuing. For Gendlin (1978), a distressed individual makes a situation worse by intellectual speculation about what he or she thinks he or she feels or thinks rather than by accessing the felt sense directly.

A person's body provides the most basic useful information regarding needs, homeostatis and cues for the direction of behaviour towards the establishment and maintenance of well-being. It is the base providing information about or concerning a person's physical, psychological and social well-being. Therefore, of importance to Gendlin Focusing theory is that the individual must come into contact with his or her own concrete immediate experiencing and understand the meanings of those experiencings. From this contact with immediate and concrete experiencing (that is, the felt sense), meanings, understandings, and direction (carrying forward into behaviour) will emerge.

"This is the key concept in this process of listening, responding, and referring to people's feelings just as THEY feel them. It is based on the fact that feelings and troubles are not just concepts or ideas: they are bodily. Therefore the point of helping is never just to speculate, to explain. There has to be a physical process of steps into where the trouble is felt in the body."

(Gendlin, 1978, p. 124)

It is this ability to have contact with immediate concrete experiencing and carry it forward in ways that are aligned to cues from the body that is essential to healthy functioning. Problems arise when this contact wither does not exist or is interfered with by cognitions which impose a meaning upon the felt sense rather than allowing the meaning to emerge from the felt sense.

"Focusing is part of a wider philosophy (Gendlin, 1962, 1973). In focusing one pays attention to a "felt sense". This is felt in the body, yet it has meanings. It has all the meanings one is already living with because one lives in situations with one's body. A felt sense is body AND mind before they are split apart. What is the relation between this unsplit body-mind and our usual logical thinking? ... Focusing is not an invitation to drop thinking and just feel. That would leave our feelings unchanged. Focusing begins with that odd and little known "felt sense", and then we think verbally, logically, or with image forms - but in such a way that the felt sense shifts. When there is a body shift, we sense that our usual kind of thinking has come together with body-mind, and has succeeded in letting body-mind move a step. ... Thinking in the usual way, alone, can be objectively true and powerful. But, when put in touch with what the body already knows and lives, it becomes vastly more powerful."

(Gendlin, 1978, p. 165)

Therefore, while Ellis would speak about how irrational beliefs result in dysfunctional living, Gendlin would speak about how incomplete contact with the felt sense process results in dysfunctional living. For Gendlin, cognitions that are conducive to healthy living emerge from implicit bodily felt meanings. Existence is felt in the body and as such existence is preconceptual. For Gendlin, there is no other access to one's own existence except through bodily felt experience. However,

a process of interaction between these felt meanings and the usefulness of verbal symbols or cognition is necessary. This process is called "symbolization". This is very important in Focusing theory for, without accurate symbolization of felt meanings, the individual is left with cognitions or verbal symbols that do not accurately portray the immediate experience of the individual. In a sense, this is like irrational beliefs, where the irrational beliefs are no longer connected to any actual reality and are therefore not only inappropriate but are quite useless in the ongoing adaptational process of the individual. When a correct or accurate or congruent symbolization is achieved the individual feels it in his or her body as a "felt shift". The more a troublesome topic is symbolized, the more relief the person feels. Interestingly, as direct reference to felt meaning is done, even anxiety producing topics see a reduction in felt discomfort. Bodily felt tension relief results from direct referencing of bodily felt experiencing and the resulting symbolization process (Gendlin, 1964). What characterizes this experiential approach is that ... "it must first be felt concretely and then articulated in further words and acts" (Gendlin, 1978). Also, as a person focuses, the meanings unfold and change such that a person may find that previous formulations that were correct before no longer apply. Therefore, in Focusing, the ongoing encounter with the self and the symbolization that emerges from that ongoing encounter is important for authentic living that is

meaningful for the individual in the present.

McGuigan (1984), a noted researcher in the area of Progressive Relaxation, writes that there are two ways to do away with tension: first, on the meaning level, by explaining the "whys" of physical discomfort and then persuading change; and second, on the process level, by showing how to directly relax controlling muscles.

"Tension maladies fall into two familiar categories. The first consists of such psychology-psychiatric disorders as anxiety, phobias and lesser fears, worries, insomnia and depressions. The second is often referred to as psychosomatic illness and includes such disorders as colitis with accompanying diarrhea and constipation, bruxism, essential hypertension and coronary heart disease, rheumatological pathologies, chronic fatigue and such pains as those of headaches and backaches."

(McGuigan, 1984)

McGuigan felt that there is meaning and purpose in tension and that, if we understand the meaning of these tensions, we can understand and control the patient's difficulties. To a large extent, this is what concerns Gendlin Focusing. Symbolization is a translation process between the meanings of the bodily felt sense and cognitive processes so that cognitions and behaviour are anchored in the reality of experiencing.

Without attending to bodily experiencing and implicit meaning, body process will be tense and inhibited (Gendlin, 1978). Correct symbolization of bodily felt senses results in a bodily felt shift. This is experienced as an "Ahha, yes" stress relief in having correctly anchored cognitions to the bodily felt sense.

RET and Focusing Contrasted Relative to Predictor Variables

RET and Focusing have different points of departure in understanding human functioning and also in terms of how to approach a person therapeutically. RET emphasizes cognitions while Focusing emphasizes bodily felt experiences. As noted when discussing available treatments for stress, there appear to be three major classes of treatments: 1) those that emphasize somatic aspects of stress, 2) those that emphasize cognitive aspects of stress, and 3) those that emphasize both the cognitive and somatic aspects of stress. It would appear that RET emphasizes a cognitive approach while Focusing generally emphasizes a somatic approach. They thus appear to be appropriate alternative approaches for the study of the cognitive-somatic dimension.

Focusing is non-directive while RET is directive. This may be appropriate for the study of differential outcome as a function of therapeutic approach and Locus of Control, as suggested from the literature reviewed in a previous section (Abramowitz and Abramowitz, 1974; Friedman and Dies, 1974; Kilman et al., 1975).

RET emphasizes the use of logic and cognitions whereas Focusing emphasizes the importance of "Experiencing" in the application of the therapy. It is not the case that RET negates the importance of experiencing nor that Focusing negates cognitions. Rather, they have different emphases. One might say that cognitions become irrational when they are not anchored in

one's experiencing.

Gendlin et al. (1968) have documented the importance of "experiencing" ability in predicting successful outcome in psychotherapy. Luborsky et al. (1971) in their review of the empirical comparative research literature has arrived at the same conclusions.

In terms of the cognitive aspect, RET is concrete, deals with tangible reality, and is practical. Focusing, on the other hand, may result in concrete change but starts from what would seem, to many, an esoteric and abstract notion about symbolizing bodily felt senses into cognition. The steps of Focusing are not readily seen as a process which is concrete although Gendlin would argue that nothing is as concrete as anchoring the self and cognition in the reality of the body's experiencing.

The theoretical and empirical literature on the MBTI supports the contention that there is a relationship between typology and the choices made by individuals regarding professions and preferred perspectives on reality (Casas, in print; Kiesey and Bates, 1978; Lawrence, 1979; Myers, 1962; 1977; Myers and Myers, 1980). Perusing the theoretical literature on the MBTI and the literature on RET and Focusing therapies and subsequent exploratory research (Casas, unpublished) would appear to indicate that different types of therapists are attracted to different forms of therapy. Sensing-Thinking types of therapists would appear to tend to be more attracted to cognitive therapies while Intuiting-Feeling types would appear to tend to be more

attracted to humanistic/experiential therapies. As such, does it not make sense to suppose that clients too would have their preferences were they to undergo clinical training (Quenck, 1984)? Client type as a predictor of differential outcome may therefore be tested out by the application of these two very different therapies.

Summary

This section presented a description of RET and Focusing, the rationale for utilizing these therapy modalities for stress management, and the theoretical underpinnings of these two therapies, showing them to be reasonable choices for this study.

RET emphasizes cognitions as well as the impact of irrational beliefs, is directive, does not stress the importance of "experiencing", may appeal to the preferences of Sensing types, and is concrete/practical. Focusing, on the other hand, emphasizes symbolization of bodily felt experience as well as the importance of "experiencing", is nondirective, does not stress the role of irrational beliefs, may appeal to the preferences of Intuitive types, and is abstract. These differences allow for the use of these two approaches for the exploration of their differential effectiveness with respect to cognitive-somatic, locus of control, experiencing ability, beliefs, type, and cognitive characteristics.

E) General Purposes of This Study and Hypotheses

The key purpose of this study was to demonstrate that, while therapy works, a matching of therapy to type of client

might add to the benefit gleaned from therapy.

A related purpose of this study was to demonstrate that certain types of clients benefit more from an experientially based therapy while other clients benefit more from a cognitively conceived treatment approach. The therapies for this study were chosen on the grounds that they, as are all therapies under our general definition of stress, have the purpose (explicitly or implicitly) of reducing stress, and also that the theoretical underpinnings of these two therapies offer the opportunity to explore the specific individual factors which the literature has indicated may be predictive of differential outcome.

Another purpose of this study was to investigate what might be the most effective combination of predictors of differential outcome.

MANIPULATION CHECK: First, a manipulation check would be done, to verify that, at the end of the treatment period, treatment subjects yield lower average scores than waiting-list control subjects, on the criterion measure (SCL-90-R).

HYPOTHESES:

This Chapter has argued that RET and Focusing would be suitable for the exploration of the six potential predictors of differential therapy outcome identified in the literature.

A hypothesis stating that a class of clients who have external locus of control, are ST types, rate high in irrational beliefs, and low in abstract reasoning and experiencing ability, and who tend to display cognitive anxiety should have a more

optimal outcome with RET would logically arise from the literature review. Likewise, a hypothesis stating that a class of clients who have internal locus of control, are NF types, rate low in irrational beliefs, and high in abstract reasoning and experiencing ability, and who tend to display somatic anxiety should have a more optimal outcome with Focusing also arises from the literature review.

However, it was acknowledged prior to the running of this study that fulfilling six criteria in each of two classes may meet certain practical barriers. Financial and human resource limitations combined with the lack of guarantee that sufficient numbers of subjects would present themselves for the study for this kind of intensive screening necessitated that certain research decisions be made regarding the final number of variables defining each class. These decisions were made during the running of the study as it became evident what the final sample size would be relative to the number of variables utilized in defining each class of subject.

In order to maintain a minimum subject size of 90 (30 RET-CLASSED, 30 FOC-CLASSED, 30 Waiting-List Controls), only two variables defining class were retained. However, measures for the other four variables were taken for exploratory purposes. This decision was taken due to the number and types of subjects presenting themselves for this study. Addition of a third variable to the classification system would have resulted in too small a sample size. The two variables chosen were the Sensing-

Intuition dimension on the Myers Briggs Type Indicator and the cognitive-somatic scales of the Cognitive-Somatic Anxiety Questionnaire. This choice allowed for approximately equal number of subjects in each class and offered the convenience of data which was at the same time continuous and categorical.

As such the hypotheses for this study were:

HYPOTHESIS 1: The experimental hypothesis was that RET would be more effective in reducing stress as measured by the SCL-90-R in that class of subjects categorized as RET-CLASSED (Sensing as measured by the Myers Briggs Type Indicator, and Cognitively anxious as measured by the Cognitive-Somatic Anxiety Questionnaire), and that Focusing would be more effective in reducing stress as measured by the SCL-90-R in that class of subjects categorized as FOC-CLASSED (Intuitive as measured by the MBTI, and Somatically anxious as measured by the CSAQ).

HYPOTHESIS 2: That these gains would be maintained at one month follow-up.

Additionally, but not the main thrust of the study, there would be a supplementary analysis of the scores on all other measures taken on the subjects. These include Locus of Control (measured by the Multidimensional Health Locus of Control Scale), Beliefs (measured by the Rational Beliefs Inventory), Cognitive Characteristics (measured by the Abstract Reasoning and Verbal Reasoning subscales of the Differential Aptitude Test), Experiencing Ability (measured by the Post-Focusing Questionnaire), Type (measured by the MBTI). Because of the

uneven numbers of subjects by variable by class, this analysis will be done by combining all subjects without classification or respect to treatment modality. This analysis would be exploratory in nature and would have limited generalizability because of the specific sample from which these measures were derived: individuals were either cognitively anxious AND Sensing types OR somatically anxious AND Intuitive types. However, this analysis would offer clues as to the appropriateness of the choice of variables defining class in efforts to explore optimal client matching to therapy approach.

CHAPTER 2

METHOD

Introduction

This Chapter outlines the procedures used to test the hypotheses presented in Chapter 1.

This Chapter includes a description of the therapists, supervisors and trainers involved in the delivery of services. There will also be a detailed description of the subject pool. Procedures for screening, testing, selecting, categorizing, and assigning subjects to groups will also be presented. Mechanisms ensuring consistency and quality of services will be discussed. Treatment form and duration will be discussed for both treatment and waiting-list control subjects along with procedures for follow-up and feedback of test results to all participants. All measures (Symptom Check List-Revised, Cognitive-Somatic Anxiety Questionnaire, Myers Briggs Type Indicator, Multidimensional Health Locus of Control Scales, Rational Behaviour Inventory, Verbal Reasoning and Abstract Reasoning Subtests of the Differential Aptitude Tests, and Experiencing Ability) and procedural checks (consent form, physician's letter, client satisfaction, log sheets, client use of techniques) will be described as they appear in the unfolding of the procedure. Lastly, data analysis will be presented.

Participants

(i) Therapists, Supervisors, Trainers

Eleven therapists, three supervisors and two trainers were

involved either directly or indirectly in the provision of stress management training to the subjects.

Two therapists provided services to the waiting-list control subjects.

Five therapists provided Focusing. The Focusing trainer also acted as supervisor to the Focusing therapists during the course of the study.

Four therapists provided RET. There was one expert trainer and two supervisors for RET. One supervisor acted as a supervisor for the other who was listed on temporary register and who provided direct supervision of RET therapists.

RET Therapist A: This therapist has a Ph.D., is listed on the temporary register of the Ontario Board of Examiners in Psychology, and is working in a private practice. In addition to her M.A. in Education and her Ph.D. in Clinical Psychology (McGill University and University of Ottawa), she has over 7 years of experience as an Occupational Therapist and has run groups for adults and adolescents with social/emotional concerns and has run groups for children dealing with parental divorce. She also has 2 years of experience working with groups of young people placed overseas through the Canadian Crossroads International Program.

RET Therapist B: This therapist is a registered psychologist in the province of Ontario, works full-time at the University of Ottawa, and has 35 years of clinical experience. He has experience in running stress groups for students, hospital

staff, and the clergy, and has attended RET and behavioural workshops and seminars over the years.

RET Therapist C: This therapist is a doctoral candidate in psychology. He has a Master's degree in Religious Studies. His background includes group training in leadership for pastoral counselling within an experiential framework. He also has teaching experience in physical education and has worked as a Teaching Assistant for the past four years at the University of Ottawa.

RET Therapist D: This therapist is a senior doctoral candidate in psychology and has 3 1/2 years of experience in running support groups for AIDS and cancer patients in addition to his clinical training within the Ph.D. programme.

Focusing Therapist A: A senior doctoral candidate in psychology, she has five years of experience in teaching and running seminars on the Myers Briggs Type Indicator. She has taught one course which focused on stress management. She has attended three seminars on Focusing and has utilized the method as part of her doctoral training.

Focusing Therapist B: This therapist had just recently defended her Ph.D. thesis in psychology. She has a strong humanistic experiential background in her training. She ran groups at a local community organization teaching occupational skills for one year, and she ran groups in the area of giving and receiving criticism over an eight-month period. Her clinical training included three Focusing training seminars and Focusing

supervision.

Focusing Therapist C: This therapist went into private practice after obtaining his M.Ps. degree, working with individuals and couples, and giving public lectures to the community on issues of relationship. He has taught, as a part-time professor at St. Paul's University, a graduate course on abnormal psychology. Also, he has two years of experience in the supervision of students completing their practicum training in counselling at the Canadian Catholic Health Association.

Focusing Therapist D: This senior doctoral candidate in psychology has focused on the experiential family of therapies during his clinical training. He has had 1 1/2 years of group experience working with agoraphobics in a hospital setting, with inmates for life-skills management, and with men working on issues of divorce and mid-life crises.

Focusing Therapist E: This therapist is a senior doctoral candidate in psychology. He has 1 1/2 years of co-therapy experience with groups for anger management (young offenders) and pain management (chronic care hospital population). His internship training included in-depth training in the Focusing method.

Waiting-List Control Subject Therapist A: This therapist is a senior doctoral candidate in psychology. He has a Master's degree in Counselling. He has received instruction in Focusing, bioenergetics, transactional analysis, neurolinguistic programming and gestalt by attending several workshops and

courses outside of the doctoral programme. His specialty is stress management and he has run a large number of stress management groups for various departments and ministries of the Public Service of Canada, for hospital staff, and is currently working full-time as a stress management consultant for a private consulting firm. He also has 6 years of part-time teaching experience at the University of Ottawa.

Waiting-List Control Subject Therapist B: This therapist has been a registered psychologist for 10 years. She has 4 1/2 years of experience in running stress management workshops for public service managers. She has been employed as a clinical psychologist in a hospital setting for 4 1/2 years.

While all therapists were informed of the purpose of the study, none of them knew the classification of the participants with whom they were working. The one exception was that the principal investigator of this study, who ran one group, did know the classification of the participants beforehand since she was instrumental in testing and selecting participants.

All treatment group therapists received training in either RET or Focusing, according to their own preference, before delivering services to clients. Once the delivery of services began, all therapists received weekly group supervision.

RET Trainer: This RET trainer has a private practice and has been an Associate Professor at Carleton University since 1969. He is a Fellow of the New York Institute for Rational Living and has been a member of the Institute for Rational

Emotive Therapy since 1964. He has presented many training seminars on RET over the years.

Focusing Trainer/Supervisor: A full professor at the University of Ottawa since 1965, this psychologist was the Regional Coordinator of training in Focusing for the Ottawa area from 1978 to 1989. He received training in Focusing directly from Eugene Gendlin in Chicago, 1982. He has given many seminars on Gendlin Focusing over the years.

RET Supervisor: This supervisor holds a Ph.D. and is listed on the Temporary Register of the Ontario Board of Examiners in Psychology. He has been employed in private practice for the past year and has been teaching, part-time, at the University of Ottawa for the past five years. RET and the behavioural approaches were the main foci of his clinical doctoral training.

RET Supervisor's Supervisor: He is a registered psychologist and has been an Associate Professor at the University of Ottawa since 1984. His area of expertise is depression with a geriatric population, and his orientation is cognitive-behavioural.

(ii) Clients

A multi-tiered selection procedure was used in obtaining the subject population for this study. This will be discussed in detail in the Procedure section of Chapter 2.

The final pool of subjects were 95 English-speaking adult males (30 waiting-list control subjects, 65 treatment subjects) who had responded to an advertisement for the study.

Advertisements were placed in the Ottawa Citizen (4 occasions), the Pennysaver, the Cinemaguide, the Fulcrum, the Military Routine Papers of DND, and posted in a number of offices including the National Arts Centre, Canadian Pacific, local fire stations, the police station, several brokerage houses, and several offices served by Cancare (see Appendix A). Additionally, there were two radio interviews on local stations. This advertising campaign resulted in 284 calls from potential subjects. Of these, 189 persons were selected for testing according to the procedure to be detailed in the next section. Of those tested, 56 were excluded because they did not fulfill inclusion criteria, 28 dropped out of the study before completing the testing and/or beginning to receive services and 10 dropped out of the study after having started to receive services. Ninety-five participants who were included in the testing stayed with the study until the end.

Forty-four percent of the participants had responded to the newspaper ads, twenty-six percent to the radio interviews, ten percent to the Military Routine Orders notice, and seven percent to postings on office bulletin boards, while eleven percent heard about the study through their wife or friend and two percent heard about the study from their physician.

The 95 participants had a mean age of 35.88 years. Focusing-Classified participants (N=31) had a mean age of 35.16 years, RET-Classified participants (N=34) had a mean age of 36.29 years, and waiting-list control subjects (N=30) had a mean age of

35.13 years.

Table 2.1 presents educational information on the subjects.

Quite a variety of occupations were represented among the participants which included five accountants, two administrators, one analyst, one archivist, three bureaucrats, four brokers, one buyer, one chef, one clerk, one communications officer, five computer analysts or programmers, nine consultants, one dispatcher, one disk jockey, three engineers, one farmer (former teacher), one finance officer, one fire fighter, one information technologist, one journalist, nine office managers, one methodologist, eight military personnel (land, air and sea), one patent agent, two police officers, one political policy analyst, one priest, one publicist, one radiation safety officer, one research officer, one retail designer, nine salesmen, one scientist, two security officers, two social workers, one systems analyst, one tax collector, three teachers, two trainers, one translator, one writer/artist, and one who did not report his occupation.

The purpose of the screening procedure to be detailed below was to obtain a sample which was free of debilitating or serious stress and to eliminate issues of adolescence, unemployment, or retirement by accepting only subjects between the ages of 25 and 45 who were employed. The study focused upon assisting individuals who were experiencing everyday types of stress rather than more serious, chronic, or very acute stress which would normally require more intensive interventions.

Table 2.1

Participants' Educational Level

Number	% of Total	Level of Education
8	8.4	High School
4	4.2	Some College
9	9.5	Some University
8	8.4	College Degree
2	2.1	Military College
47	49.5	Bachelor's Degree
14	14.7	Master's Degree
1	1.1	Ph.D.
2	2.1	Subject did not report education

Procedure

This section presents the procedure followed in executing this study, and descriptions of all measures utilized. This includes the selection of subjects, the procedures in testing subjects, assignment of subjects to groups, the training and evaluation of therapists, the procedures involved in treatment administration and follow-up. Please refer to Figure 2.1.

(i) Subject Screening

a. Phone Screening

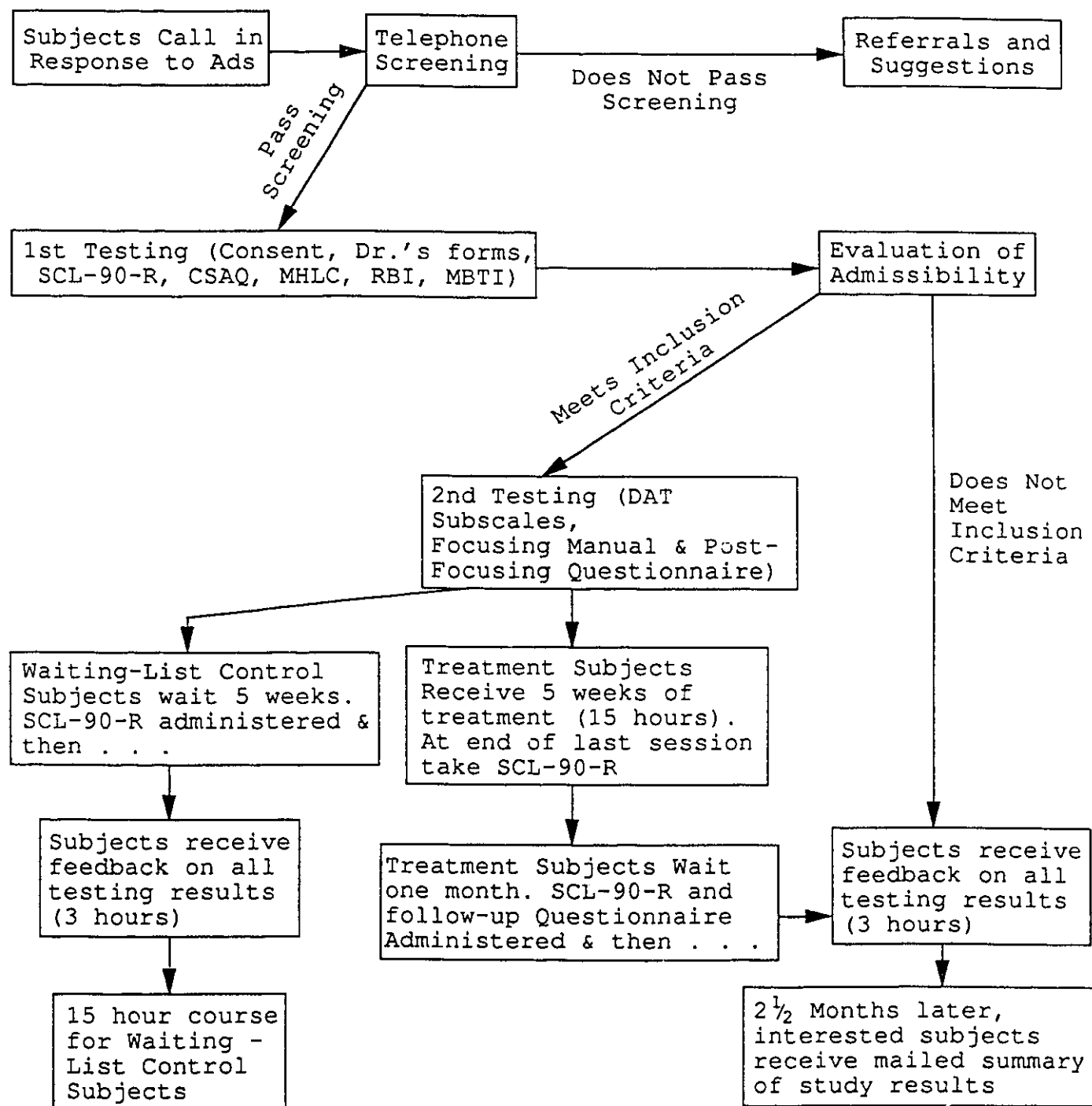
The initial contact with each prospective subject who responded to an advertisement or otherwise expressed willingness to participate as indicated in the previous section was by means of a telephone conversation. At this time, trained personnel administered a standardized telephone screening questionnaire (see Appendix B) which both informed the prospective subject about the study and provided the first level of screening, to determine whether or not the caller was suitable for the study.

Personnel answering calls were trained for 2 days on the administration of the questionnaire, and in the proper way to handle a variety of questions and situations which might arise.

Once it was established that the caller was male and between the ages of 25 and 45, the prospective subject was read a brief description of the study and of the conditions under which the research would be taking place (Ethics Committee approval, supervision by Registered Psychologists, services delivered in a group format), and was informed of the commitment required from

Figure 2.1

Procedural Flowchart



each participant (2 testing sessions, 3 hours per week for 5 weeks with a one-month follow-up and feedback on test results). If the prospective subject agreed, the telephone screening procedure continued to the next stage.

This involved asking questions about availability for the study, language, problem areas (alcohol or drug abuse), having received psychiatric, medical or psychological treatment in the past, having experienced acute life events in the past year (top seven items of the Holmes and Rahe (1967) Social Readjustment Scale), and rating the subject's experienced stress level (on a ten-point scale).

If the subject was 1) male, 2) aged 25-45, 3) available to participate in the study (that is, not going off for holidays or moving in the next 3 months) and 4) English-speaking and still had English as the dominant language; if the subject 5) did not report problems with alcohol or drugs, 6) had not received psychiatric, medical or psychological treatment in the past year for either a psychiatric/psychological or physical stress-related problem, 7) did not foresee participating in any other form of psychiatric, medical or psychological treatment for the next 3 months, 8) had had a clear medical check-up in the past year (or could get one for this study), 9) had never been treated for a stress-related difficulty (ulcers, hypertension) requiring drug or surgical intervention; and if the subject 10) had not experienced over the past year the death of a spouse, divorce, marital separation from mate, detention in jail, death of a close

family member, major personal injury or illness, marriage, or unemployment, then admission to the study was possible and an appointment for the first of two testing sessions was made. The prospective subject was assigned a number which would appear on all of that subject's materials in order to protect confidentiality. The subject was asked to bring this number with him whenever dealing with any aspect of the study. Also, the subject was informed that he was free to drop out of the study at any time and that the testing would take place in a group format.

If the prospective subject was unsuitable for inclusion in the study at any point during the telephone interview, then he was thanked for his interest and, if appropriate, a suitable referral was made and suitable reading materials were recommended. Most of the referrals were to the Ottawa Academy of Psychology which offers the services of a number of professionals in several areas of expertise. Some referrals were to AA and others were to the Bereaved Families of Ontario group. Most unsuitable subjects were unsuitable for the following reasons: too young or too old, female, clash with holiday schedules, currently taking psychotropic medication, history of bleeding ulcers or hypertension, currently undergoing psychiatric or psychological treatment, or recent exposure to an acute stressor (divorce, unemployment).

The purpose of the telephone screening was to obtain a group of male subjects who were experiencing moderate levels of stress, were not in a crisis situation, had not been so chronically

stressed as to have required medical treatment, and were not engaged in some form of psychiatric or psychological treatment.

b. Initial Testing

Subjects who were retained on the basis of the telephone screening were invited to attend, in groups, an initial testing session.

The prospective subjects arriving for this initial testing session were asked to select an envelope of materials arranged by subject number. Each subject's envelope contained the same materials with each item bearing that subject's number. The envelope contained the consent form, the physician's letter and questionnaire, the Symptom Check List Revised (SCL-90-R), the Cognitive Somatic Anxiety Questionnaire (CSAQ), the Multidimensional Health Locus of Control Scale (MHLC), the Rational Behaviour Inventory (RBI), and the Myers Briggs Type Indicator (MBTI), in that order. It took about 1 to 1 1/2 hours to work through the package.

Measures were chosen according to what the literature indicated may be a predictor of differential outcome, and because they were among the briefest measures available which could provide information on described potential predictors of differential outcome. The measures will be described in the following sections.

Subjects were seated and offered a juice refreshment. The investigator worked through the contents of the package in a standardized fashion (see Appendix C) starting with completion of

the consent form and the physician's letter and questionnaire before going on to the administration of the tests. Instruction was given in groups rather than individually. Below is a description of each item of the initial testing package in the order presented to the subject.

Consent Form

The consent form was given to the prospective subject at the first interview (see Appendix D).

The consent form provided the following facts about the study: the necessity of putting the subject through a series of questionnaires for selection to the study, that its purpose was to investigate the differential effectiveness of stress management approaches, that there would be random assignment to group and that the subject could be assigned either to a treatment group or to the waiting-list control group, that training involved meeting in small groups for 5 consecutive weeks, that in addition to the selection questionnaires each subject would be required to fill in brief post-session, inter-session and post-treatment questionnaires, that there were no known negative effects from the treatment, and that the study had been approved by the Ethics Committee of the University of Ottawa. The subject was asked to inform his group facilitator if he began taking medication or engaged in other psychotherapy or treatment during the course of the study. To ensure the safety of the subject, the subject's physician would be asked to fill in a questionnaire. Lastly, the consent form, in addition

to informing the subject of the various aspects of the study, also advised the subject that his materials would be treated confidentially and that he was free to drop from the study anytime.

Physician's Letter and Questionnaire

The purpose of the Physician's letter and questionnaire was to ensure that the subject's health would not be compromised by participating in this study, and to ensure that the subject had received a clear medical check-up in the past year (see Appendix E).

The Physician's Letter outlines to the physician why information is requested regarding the subject. The accompanying questionnaire includes a section wherein the subject authorizes the physician to disclose information. The questionnaire asks questions related to the health of the client vis-a-vis stress-related symptomatology and whether or not the patient can safely participate in our study. The purposes of the questionnaire are to ensure that needed medical treatment is not forfeited because the subject is participating in our study and to reduce the probability that reported stress is due to undiagnosed physiological illness.

The letter and questionnaire were mailed to each subject's physician by the staff. A follow-up was made if the physician had not returned (in a self-addressed stamped envelope) the materials within 10 days and/or if physician responses were unclear as to the status of the subject, and/or if the physician reported that

a participant's annual checkup was still outstanding.

SCL-90-R - Criterion Measure

The SCL-90-R is a 90-item, self-report inventory designed to assess psychological symptoms. The nine subscales of the SCL-90-R measure somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, phobic anxiety, psychoticism, paranoid ideation, hostility. Also, there are three global indices of psychopathology. One of these global indices, the Global Severity Index (GSI), is recommended (Derogatis, 1983) as the best single summary measure of distress as it combines information across the dimensions with reported intensity of the distress. In keeping with the definition of stress offered in Chapter 1, which recognizes that there are individual differences in the expression of symptoms, it was felt that a measure which could be sensitive to a variety of stress responses and that had a scale which could summarize intensity of distress across these various ways of expressing stress, such as the SCL-90-R, would be an appropriate choice as the main dependent measure. Its demonstrated psychometric properties and use in pre-post group treatment intervention with stress also contributed to this choice.

Participants presenting difficulties were varied and the group heterogeneous. For this kind of treatment outcome research, Coche (1983) and Lambert, Shapiro, and Bergin (1986) recommend a broad-spectrum inventory such as the Symptom Check List (SCL-90-R). If the group were homogeneous, for example a group of

depressives, these writers recommend a to-the-point measure such as the Beck Depression Inventory.

The SCL-90-R (Derogatis, 1975, 1977, 1982; Derogatis and Cleary, 1977) was chosen as the criterion measure for this study because it is brief, it is a standardized instrument with norms, and it has a broad basis of empirical work supporting its usefulness in detecting change in individuals undergoing group treatment for a wide variety of difficulties including stress (Derogatis, 1977; Dies and MacKenzie, 1983; Payne, 1985).

The SCL-90-R Administration, Scoring and Procedures Manual-II (Derogatis, 1983) outlines the SCL-90-R symptom dimensions, scoring procedures, reliability (internal consistency and test-retest), factorial invariance, validation studies (construct, concurrent), interpretation, and normative data for female and male psychiatric out-patients (N=1001), female and male non-patients (N=960), female and male psychiatric in-patients (N=313), and for female and male adolescents (N=806).

The manual reports internal consistency, using coefficient alpha, for the 9 dimensions as ranging from a low of .77 for Psychoticism to a high of .90 for Depression. This was calculated from data on 219 symptomatic volunteers (Derogatis, Rickels, and Rock, 1976).

The manual reports test-retest reliability on a sample of 94 heterogeneous psychiatric outpatients where coefficients were between .80 and .90 which the writers considered to be an appropriate level for measures of symptom constructs.

The manual also reports results on factorial invariance, which refers to constancy in a dimension, across subject parameters such as age, sex, or social class. The manual documents invariance coefficients between male and female definitions of the 9 primary symptom dimensions and the coefficients range from .51 for paranoid ideation to .85 for hostility.

The SCL-90-R has been shown to be sensitive in identifying change for many disorders such as depression (Weissman, Slobetz, Prusoff, Mezritz, and Howard, 1976; Weissman, Pottenger, Kleber, Rubin, Williams, and Thompson, 1977), sexual disorders (Derogatis, Meyer, and Gallant, 1977; Derogatis, Meyer, and King, 1981), and withdrawal from long-term diazepam use (Winokur, Rickels, Greenblatt, Snyder, and Schatz, 1980). It is also sensitive to subject changes during pharmacological research (Carlsson, Gullberg, Hostery, and Christensson, 1979; Prusoff, Williams, Weissman, and Astrachan, 1979; Ravaris, Robinson, Ives, Nies, and Bartlett, 1980).

Regarding stress research:

"The assessment and treatment of stress syndromes has come to occupy a significant place in current clinical research and the SCL-90-R has been shown to be highly sensitive to stress-related conditions. Carrington and her associates (Carrington, Collings, Benson, Robinson, Wood, Lehrer, Woolfolk, and Cole, 1980) have demonstrated the SCL-90-R to be highly sensitive to differences between meditation and control groups in the treatment of stress, and beyond that, revealed significant differences between various types of meditation, as well as between those who practiced as scheduled versus those who did not. Horowitz and his group (Horowitz, Wilner, Kaltreider, and Alvarez, 1980)

have carefully profiled the DSM-III post-traumatic stress disorders in terms of the SCL-90-R, and in a subsequent study were able to demonstrate significant differences on the SCL-90-R between a group of individuals seeking psychotherapeutic treatment subsequent to parental death and a group who experienced the same stressor but did not seek therapeutic help (Horowitz, Krupnick, Kaltreider, Wilner, Leong, and Marmar, 1981). More recently, Derogatis (1982) reviewed the SCL-90-R extensively in the context of self-report measures of stress, and Bohachick (1982, 1983) has published reports revealing the scale to be sensitive to differences in cardiac rehabilitation interventions. Additionally, Baum and his associates (Baum, Gatchel and Schaffer, 1983; Baum, Grunberg, and Singer, 1982; Davidson, Baum, and Collins, 1982; Collins, Baum, and Singer, 1983) have published an extremely interesting series of reports dealing with stress at Three Mile Island in which the SCL-90-R proved to be quite sensitive. In a similar vein, Green and her colleagues (Green, et. al., 1983) used the "90" to document residual levels of stress among survivors of the Beverly Hills Supper Club file."

(Derogatis, 1983)

The manual presents studies where the SCL-90-R was used in medical contexts as both a screening tool and as an outcome measure (Pottenger, McKernon, Patris, Weissman, Ruben, and Newberry, 1978; Snyder, Lynch, Derogatis, and Gruss, 1980; Steinglass, 1979; Steinglass, 1980). These studies focused on alcoholism. It has been utilized in studies documenting the status of drug abusers (Jacobs, Doft, and Koger, 1981; Steer, 1982), investigating doctor-patient agreement (Derogatis, Abeloff, and MacBeth, 1976; Steer and Henry, 1979), screening among cancer patients (Derogatis, Lobo, Folstein, and Abeloff, 1983), and assessing biofeedback-induced changes (Hendler, Derogatis, Avella, and Long, 1977; Harper and Steger, 1978; Pelz and Merskey, 1982). The SCL-90-R has been demonstrated as a

sensitive assessment tool in these studies and many others noted in the Manual.

Concurrent validation correlations between the scales of the SCL-90-R and the Middlesex Hospital Questionnaire ranging from .36 on phobic anxiety to .92 on the global severity scales of the two measures (Boleloucky and Horvath, 1974). Convergent validity correlations between the SCL-90-R scales and like-construct scales of the MMPI (clinical, Wiggins, and Tryon scores) range from .41 for hostility compared to suspicion and mistrust to .75 for SCL-90-R's depression scale compared to MMPI's depression scales. Furthermore,

"...concurrent validity for the "90" in terms of correlations with analogous instruments given at the same time has been shown by Weissman and her group (Weissman, Sholmskas, Pottenger, Prusoff, and Locke, 1977) in terms of the unidimensional CES-D depression scale and the Hamilton Depression Rating Scale. The Yale group also demonstrated high concordance between SCL-90-R global scores and total score on the Social Adjustment Scale Self-Report (SAS-SR) in five different clinical samples (Weissman, Prusoff, Thompson, Harding, and Meyers, 1978). This research group also demonstrated concordance between the SCL-90-R, the Raskin Depression Screen, and Hamilton Rating Scale and CES-D in discriminating depressed from non-depressed alcoholics."

(Derogatis, 1983)

The manual presents construct validation data on the SCL-90-R which is too detailed to present here but basically:

"The data from this study [Derogatis and Cleary, 1977] are presented in summary form in Table 16. As may be seen by reviewing the columns of rotated factor loadings, the empirical analysis matched the theoretical structure quite well on just about all the dimensions. There was some overlap between the Anxiety and Phobic Anxiety dimensions (sub-table 7), and some splitting between the schizophrenic and the schizoid items of the

psychoticism dimension. For the most part, however, the empirical-theoretical match was excellent."

(Derogatis, 1983)

Finally:

"The American Group Psychotherapy Association found the "90" sufficiently sensitive and reliable to include it in their CORE battery recommendations (Dies and MacKenzie, 1983), and Beutler and McNabb independently evaluated the "90" favourably as a psychotherapy outcome measure."

(Derogatis, 1983)

CSAQ - Predictor Measure

The Cognitive-Somatic Anxiety Questionnaire (Schwartz, Davidson, and Goleman, 1978) was utilized as a predictor measure of differential outcome.

The Cognitive-Somatic Anxiety Questionnaire (CSAQ) is:

"...a 14 item, simply worded, easy to understand measure of the cognitive and somatic aspects of anxiety. The scale is based on the assumption that there are two different aspects of anxiety - cognitive and somatic. The importance of this for practice is that therapeutic techniques for reducing anxiety may differ in their impact on these two systems. Thus, by providing information on each aspect of anxiety, this measure allows the practitioner to be more precise in selecting intervention techniques. The CSAQ is considered to be a trait measure of anxiety in that it taps relatively enduring patterns."

(Corcoran and Fischer, 1987)

The CSAQ has .62 overlap and 38% shared variance with the the State-Trait Anxiety Inventory (Corcoran and Fischer, 1987; DeGood and Tait, 1987). Alpha reliability (cronbach) for each scale is respectable (cognitive = .806; somatic = .757) and the internal consistency of the total scale is .859. The CSAQ does tap general anxiety. However, correlations with anxiety-related

measures differ for males versus for females. With males, both the Cognitive and the Somatic scales of the CSAQ correlate significantly with both the somatization and obsessive-compulsive (essentially a cognitive complaint scale) subscales of the SCL-90 and with the State and Trait subscales of the STAI. With females, CSAQ scores correlate significantly with the SCL-90 subscales but not with the STAI subscales (DeGood and Tait, 1987).

DeGood and Tait (1987) do note that extreme cases of either somatic or cognitive anxiety are rare and that most people display a mix of these two forms of anxiety.

The major drawback to this instrument is lack of norms. However, it does permit the categorization of clients as displaying primarily either cognitive or somatic anxiety, and it provides a rating of how much somatic or cognitive anxiety the client displays, on the basis of self-report.

Please refer to Chapter 1 (pp. 41-45) for a review of this measure as a predictor of outcome.

MHLC - Exploratory Predictor Measure

The Multidimensional Health Locus of Control Scale (MHLC) (Wallston, Wallston, and DeVellis, 1978) (See Appendix G) is an:

"...18-item instrument [which] measures three dimensions of locus of control of reinforcement as it pertains to health. Specifically, the MHLC assesses peoples' belief that their health is or is not determined by their own behaviour. These issues of internal and external control have been extensively studied in regard to numerous clinical problems. The MHLC looks at beliefs about three sources of control over health, with each subscale containing six items: internality of health

locus of control (IHLC), powerful other locus of control (POLC), and chance locus of control (CHLC). The MHLC has parallel forms (Forms A and B) designed to be alternated for use as repeated measures, or the two forms may be combined to create longer (12 items) and more reliable subscales."

(Corcoran and Fischer, 1987)

Normative data are available on chronic patients (N=609), college students (N=749), healthy adults (N=1287) and persons involved in preventive health behaviours (N=720).

Internal consistency reliability as determined by Cronbach's alpha ranged from .67 to .77 for all six scales, the three dimensions, and two parallel forms and when the parallel forms were combined the alphas ranged from .83 to .86 for the three scales (Corcoran and Fischer, 1987).

According to Corcoran and Fischer (1987) the MHLC scales have good criterion validity (.6) and correlate with other measures of locus of control such as the Multidimensional Locus of Control scales for Psychiatric Patients (Corcoran and Fischer, 1987).

RBI - Exploratory Predictor Measure

The Rational Behaviour Inventory (RBI) (Shorkey and Whiteman, 1977) is a measure of irrational and absolutist beliefs.

"The RBI is a 37-item instrument that provides an overall index of irrationality, or the tendency to hold irrational and absolutist beliefs. The RBI is based on the work of Albert Ellis and the assumption that irrational beliefs underlie emotional disorders. The RBI was specifically constructed to be used for assessment, treatment planning, and evaluation in rational-behaviour and cognitive-behaviour therapy. It has been extensively studied by a number of

investigators. The RBI presents one overall score plus 11 factors: a) catastrophizing, 2) guilt, 3) perfectionism, 4) need for approval, 5) caring and helping, 6) blame and punishment, 7) inertia and avoidance, 8) independence, 9) self-downing, 10) projected misfortune, and 11) control of emotions. Each factor has three or four items, and separate factor scores as well as the overall score give a clear picture of the extent of an individual's irrational or dysfunctional beliefs in several areas."

(Corcoran and Fischer, 1987)

The RBI has good internal consistency, concurrent validity and known-groups validity (Corcoran and Fischer, 1987). Eleven Guttman scales were developed following factor analysis. Each factor was measured by a Guttman Scale with a coefficient of reproducibility of .90 or greater and with a coefficient of scalability of 0.60. Pre and post test scores for an N of 40 mental health professionals attending an all-day workshop on RET showed that overall test scores were significantly different at the 0.025 level in the predicted direction. In another study conducted by the same researchers (Shorkey and Whiteman, 1977), over-all test scores were significantly different at the 0.025 level in the predicted direction for a group of 87 mental health professionals attending a 2 day workshop. Corcoran and Fisher (1987) report that the RBI has had an estimated split-half reliability of .73 following the Spearman-Brown formula. Two independent studies showed that test re-test reliability was .82 for an N of 89 over a 3 day period and that test re-test reliability was .71 for an N of 90 over a 10 day period (Corcoran and Fischer, 1987). The RBI significantly correlated in predicted directions with several measures of trait and state

anxiety in clinical and nonclinical samples and has been found to correlate significantly with such personality measures as anomie, authoritarianism, dogmatism, and self-esteem, and to measures of psychiatric symptomatology, and the RBI does not appear to be influenced by social desirability response set (Corcoran and Fischer, 1987, pp. 270-271).

Normative data are available for a variety of groups (Thyer, Papsdorf, Himle and Bray, 1981).

MBTI - Predictor Measure

The Myers Briggs Type Indicator (Form G) is a well-accepted personality descriptor of personal preferences which is designed for use with a non-psychiatric population (Devito, 1985; Howes and Carskadon, 1979; Kiersey and Bates, 1978; Lawrence, 1979; Myers, 1962, 1979; Myers and Myers, 1980; Stricker and Ross, 1963; Webb, 1964; Willis, 1985).

While largely neglected by psychologists, it has been widely utilized in pastoral counseling, student counseling and organizations/industry (Devito, 1985).

This 126 item, forced-choice, self-report questionnaire (Form G) yields 4 dimensions each with two polarities resulting in the sorting of individual preferences into 16 types (Devito, 1985; Willis, 1985).

"The first dimension is a general attitude toward the world, either extraverted (E), in which the personal direction is actively outward to other persons and objects, or introverted (I), where the attention and energy are directed inward to focus on internal, often unspoken, representations of events. As such, the E-I dimension does not purport to measure shyness versus

gregariousness, a common misconception. The second dimension, perception, (how persons prefer to orient to data from their own environments), describes a function and is divided between sensation (S) and intuition (N). Sensing refers to attending to actual sensory realities and, cognitively, to facts and details. Intuition, on the other hand, is more global, even unconscious, focusing on insight and possibilities within the data a person receives. The third dimension, also a function, is that of judging. Once information is received, it is processed in either a thinking (T) or feeling (F) style. Thinking refers to a reliance on reasoning and logic in decision-making. Conversely, feeling means that perceptions are compared on a value basis. In the feeling style, decisions are more personal and subjective, and are particularly attuned to how the person relates to others. The final dimension, judging (J) and perception (P), "...The judging attitude focuses on a willingness to make prompt decisions, come to conclusions, and thereby excludes concurrent use of the perceiving function. Conversely, a preference for the perception (P) attitude means holding off on deciding while gathering more information and simultaneously excluding the judging function".

(Willis, 1985)

The MBTI yields two kinds of information, preference (a coded type out of 16 possible combinations of 4 bipolar dimensions) and continuous (a number along the continuum of each of four bipolar dimensions). Most reliability reports use Form F and preference scores applying phi coefficients and tetrachoric coefficients (both with the application of the Spearman-Brown prophecy formula). According to Willis (1985), the phi coefficient estimation is considered conservative and the tetrachoric coefficient is likely an overestimate due to normality assumption when in fact MBTI data are relatively non-normal. Phi coefficient estimates range from .55 to .65 (E-I), .64 to .73 (S-N), .43 to .75 (T-F), and .58 to .84 (J-P). The tetrachoric coefficients range from .70 to .81 (E-I), .82 to .92

(S-N), .66 to .90 (T-F), and .76 to .84 (J-P) (Willis, 1985; Carlyn, 1977). Test-retest reliability coefficients have been published by Carskadon (1979), Carlyn (1977), and Stricker and Ross (1963) and show that when subjects report a change in type, it is most likely to occur in only one preference and in scales where the original preference was low. Over a 5 week period, test re-test agreement for E-I averaged 81%, for S-N 89%, for T-F 83%, and for J-P 84% (Myers and McCaulley, 1989). Over a 5 year period, test re-test agreement for E-I averaged 68%, for S-N 66%, for T-F 66%, and for J-P 74% (Myers and McCaulley, 1989).

When data are converted into continuous scores, estimates become more consistent (Willis, 1985). These estimates are .75 to .82 (E-I), .75 to .87 (S-N), .69 to .86 (T-F), and .80 to .84 (J-P) (Myers, 1962; Stricker and Ross, 1963; Webb, 1964; Willis, 1985).

The MBTI shows construct validation through good correlations with other measures of interest and preference such as the Allport-Vernon-Lindzey Study of Values (AVL), the Gray-Wheelwright Psychological Type Questionnaire (Jungian Type Survey), the Edwards Personal Preference Schedule (EPPS), the Personality Research Inventory (PRI), the Scholastic Aptitude Test (SAT), the Strong Vocational Interest Blank (SVIB), the Strong-Campbell Interest Inventory (SCII), the Sixteen Personality Factors Test (16PF) and the Rokeach Dogmatism Scale (Carlyn, 1977; Willis, 1985; Devito, 1985). The MBTI Manual is replete with type tables by occupation demonstrating construct

validity of the MBTI (Myers and McCauley, 1989).

Construct validity data on specific MBTI dimensions of particular interest for this study indicates that on the S-N dimension, sensing correlates highly with measures of practicality (related to business, finance, sales and other careers that focus on attention to concrete details) while intuition correlates with autonomy, creativity, intelligence, aesthetic and theoretical values, and tolerance for abstraction and ambiguity (related to research scientist, psychologist, writer, and musician) (Willis, 1985). Also of interest, construct validity data on the T-F dimension show thinking as relating to constructs such as autonomy, order, masculine orientation, and dominance, valuing the theoretical, logical and objective aspects of situations (related to scientific, technical, business, legal, political and mechanical professions), while feeling correlates with measures of nurturance, affiliation and concern for valuing others (associated with the helping professions) (Willis, 1985).

While most of the validation and reliability studies were performed with Form G, Myers (1977) argued that Forms F and G can be used interchangeably since they are virtually identical in content and scoring (Willis, 1985).

English-Canadian norms are available for Form G (Casas, in press). Norms and corresponding scoring keys have been devised for American, French-Canadian and English-Canadian populations.

The theoretical parallels which can be drawn between its

dimensions and descriptions of RET and Focusing make it a potentially valuable predictor of differential outcome for this study.

Summary of Measures of First Testing

The first testing session involved completing the Consent Form, Physician's Letter and Questionnaire, the SCL-90-R, the CSAQ, the MHLC in order to have information on locus of control, the RBI, and the MBTI as pre-training measures.

c. Inclusion Assessment #1

After the first testing session, all questionnaires were scored and decisions were made regarding the admissibility of each participant pending the receipt of the physician's questionnaire.

It became evident early on the study that trying to satisfy categorization of clients on all predictor variables was not feasible. About one week into the study, it was decided that only two variables would be used to determine admissibility to the study, personality type (MBTI) and the way the client displayed anxiety (CSAQ). These two were selected because they could be used to yield dichotomies (sensing versus intuition, somatic versus cognitive) on key characteristics of the subjects given the purpose of the study.

Consequently, the inclusion assessment after the first testing was used to determine whether or not a person was admissible to the study. The measures of the second testing became part of the data base to be used in exploration of what

other variables might be useful in predicting outcome but would not be used in the analysis for confirming or disconfirming hypotheses.

Subjects would be admitted to the study if they satisfied three inclusion criteria. They would be admitted to the study if, first, they had a clean bill of health evidenced through a check-up done completed in the past year, had not received medical intervention for a stress-related difficulty, and their physicians indicated that participation in the study would not be harmful to their health.

Secondly, since the purpose of the study was to explore the predictive potential of variables for differential outcome for moderately stressed individuals, their scores on the SCL-90-R (GSI) had to fall within a moderate range, as determined by the primary investigator and a registered psychologist who examined the Global Severity Index and the configuration of subscale scores for each individual's pre-treatment profile and following the Manual's guidelines defining severity for a non-patient population (GSI T score of 63) and major depressive syndrome and schizophrenia. Individuals displaying below average (GSI T score of 50) levels of stress were eliminated except for a few who displayed an elevation in one subscale (eg. anxiety). Individuals displaying elevations in subscales indicating a combination of interpersonal sensitivity and hostility were excluded as it was felt that these individuals may be disruptive to group process. Also excluded were those displaying a major

depressive syndrome (elevation in scales 459.23) or a schizophrenic disorder (elevation in scales 957.83) as defined in the Manual. It was felt that 15 hours of services delivered in a group format was unsuitable for such subjects and that the stress they experienced went beyond "moderate".

Thirdly, the prospective participants were required to have CSAQ and MBTI results such that they would be Cognitively anxious on the CSAQ AND Sensing types on the MBTI, or Somatically anxious on the CSAQ AND Intuitive types on the MBTI. Additionally, there would have to be at least a two point difference between the two scales on each of these measures in order to minimize ambiguity when a person's score fell at the mid-point of a dimension.

Participants who fulfilled all three inclusion criteria were invited back for the second testing.

If a subject did not fulfill these criteria he was invited for three hours of feedback on his test results. He was also asked if he required a referral or suggestions for reading material on stress management. Most referrals were to the Ottawa Academy of Psychology. The main reading material suggested was Davis, Eshelman and McKay (1988), the winner of the American Medical Association's Self-Help Book Award.

Feedback procedures will be outlined in a subsequent section.

d. Second Testing Session

All participants invited for the second testing session

were given the Verbal and Abstract Reasoning Subscales of the DAT and a measure of Experiencing Ability, in that order. Again, subjects selected their numbered envelope, were seated, and offered juice refreshment. Instructions were given to the group. Standard administration procedures were followed for the administration of the DAT subscales. After a five minute break, the subjects were administered the measure of experiencing ability which was a taped exercise. After listening to the tape, they were requested to fill in a brief questionnaire (Post Focusing Questionnaire). Administration procedure, text of the tape, post-focusing questionnaire, and the rating form are presented in Appendices F, G, and H.

The measures used in the second testing session are described below.

Verbal and Abstract Reasoning Subscales of the DAT

The Differential Aptitude Test is a measure of aptitude with nine subscales (verbal reasoning, numerical ability, total, abstract reasoning, clerical speed and accuracy, mechanical reasoning, space relations, spelling, and language usage) (Mitchell, 1985).

The Verbal and Abstract Reasoning subscales were chosen for this study as measures of cognitive abilities.

The DAT Verbal Reasoning Subscale (50 items) takes 30 minutes to complete while the Abstract Reasoning Subscale (45 items) takes 20 minutes.

The writers of the Canadian Edition of the Differential

Aptitude Tests utilize a definition of aptitude from Warren's Dictionary of Psychology (1934):

"A condition or set of characteristics regarded as symptomatic of an individual's ability to acquire with training some (usually specified) knowledge, skill, or set of responses, such as the ability to speak a language, to produce music..."

(Bennett, Seashore, and Wesman, 1988)

The Verbal Reasoning subscale measures the ability to understand concepts framed in words and is used to predict success in areas requiring the understanding of complex verbal relationships (Bennett, Seashore, and Wesman, 1988).

The Abstract Reasoning subscale measures the ability to perceive an operating principle in a series of changes and involves the ability to perceive relationships among abstract figure patterns. It also involves the ability to recognize and generalize principles from nonlanguage designs (Bennett, Seashore, and Wesman, 1988).

These measures were utilized as the cognitive ability predictors of this study.

Experiencing Ability

Experiencing Ability was measured with a taped exercise (Focusing Manual) lasting about 6 minutes and the Postfocusing Questionnaire (eight questions) which took about 5-10 minutes to complete (Gendlin, Beebe, Cassens, Klein, and Oberlander, 1968). Small groups of subjects were comfortably seated in darkened rooms and a standard set of instructions were given.

For this study, the Manual was put on audiotape in order to

ensure standardization. The psychologist recruited for this task had at least a decade of experience in making tapes for assertiveness and taking/giving criticism studies. The tape was professionally made to ensure quality and clarity of the recording.

Scoring of experiencing ability was done by two raters experienced with this scale. One rater was a Ph.D. graduate in Clinical Psychology while the other was a M.Ps. graduate in Psychology with an M.A. in Public Health Administration. Both had participated in rating experiential material for other studies and both had first hand experience in receiving and providing Focusing as a treatment modality. They rated all of the Post Focusing Questionnaires on rating sheets and tallied their results independently. Inter-rater agreement was 78%, that is, for 78% of the questionnaires rated, total agreement was reached. For 16% of the questionnaires, there was a one point disagreement and for the remaining 6% of the questionnaires, the raters diverged by at least two points. Disputed cases were discussed with the primary investigator until all three agreed upon one rating.

Summary of Measures of the 2nd Testing

During the second testing session, the subjects were given the Verbal and Abstract Reasoning Subscales of the DAT, listened to the Focusing Manual, and completed the Post-Focusing Questionnaire. These were measures of cognitive and experiencing respectively, administered to explore the possible

usefulness of these variables in predicting differential outcome.

e. Assignment of Subjects to Groups

Waiting list control subjects were selected, as were the treatment subjects, on the basis of being moderately stressed. However, due to the limited number of subjects which responded to the call for subjects and financial constraints, control subjects were matched to treatment subjects in terms of degree of stress displayed and were not matched with consideration for classification variables. They were telephoned and informed that they were to be waiting list control subjects. An appointment was booked for 4-6 weeks after testing. They were informed of the services with which they would be provided. After a 4-6 week waiting period, during which the treatment subjects received 15 hours of training, the waiting list control subjects came in, were seated, offered juice refreshment, given the SCL-90-R (2nd administration), and given feedback on their testing results. Two days after this procedure, the waiting list control subjects began to receive their services which took the form of a stress management course given three hours a week for 5 weeks. The course was provided by a senior doctoral candidate who had several years of experience providing stress management workshops to various government groups and agencies and also had several years experience teaching University level courses. Three therapists were ready to provide services to any waiting list control subjects who could not, due to scheduling difficulties, attend the stress management course. There was only one

exception, and that individual received 5 hours of individual attention from a registered psychologist.

Each treatment subject who had fulfilled inclusion criteria was called by telephone. At that point in time it was known that the subject was moderately stressed, and the subject had been classed as either in the group hypothesized to have better outcome in RET (RET-Classed: cognitively stressed Sensing type) or to have better outcome in Focusing (Foc-Classed: somatically stressed Intuitive type). Subjects were not informed regarding their classification.

In total, fifteen treatment groups were scheduled at various times during the week (daytime and evenings). There were six Rational Emotive Therapy groups and eight Focusing groups. The drop out rate was higher in the Focusing groups, and this necessitated the formation of extra groups.

Each group was allotted three spots for RET Classed individuals and three spots for Focusing Classed individuals, regardless of whether that group was to be an RET group or a Focusing group.

Each subject selected that group which best fit his schedule. He was not told which type of therapy would be presented in that group before he made his selection. He was only offered groups which still had a spot open for his classification. In this way, subjects randomly self-assigned themselves to training groups and each group had in it members of each classification although strictly speaking, exact numbers of

each classification could not be practically maintained.

After the selection was made, the subject was informed again of what would take place during and after the training.

ii. Selection, Training and Evaluation of Therapists

The therapists have been described in the Participants Section. Each therapist chose the kind of group that he or she would prefer to conduct. All therapists, regardless of level of experience, received an intensive 2 day training workshop in either RET or Focusing, given by an expert in that form of therapy.

The RET expert presented and taught the ABC model of Rational Emotive Therapy. He also showed RET therapists how to present the rationale for this approach to their subjects, provided techniques for the framing of stress problems within the model of RET, modeled ways of involving all members of the group into the problem-solving process. Basically, the expert trainer showed how to initiate, process, and restructure stress related difficulties such that there would be a clear demarcation between real stress and the kind of stress which people inflict upon themselves through irrational thinking.

Ellis' model of RET was taught. The first step was to identify the consequences of irrational beliefs (point C), secondly to do a "camera check" of what actually happened at point A (activating event), and finally to get at the rational and irrational components of the beliefs and self-talk which the stressed person did at point B (beliefs). Once a particular

stressor and reaction were fully analyzed in this fashion, the task was to dispute the irrational aspects of the belief system, evaluate the worth of the irrational beliefs and formulate more adaptive and rational beliefs and self-talk about the activating event. Common irrational beliefs were presented along with brief questionnaires to aid in the identification of irrational beliefs which a given individual might be utilizing.

The Focusing expert taught how to present the rationale of Focusing in relation to stress and helped the therapists to establish how not listening to one's own experiential process leads to more stress and impedes the process of finding solutions to stressors. How to deal with focusing situations which might arise and how to facilitate the participation of all group members were also covered in this training. The expert trained the therapists to guide their subjects through the steps of focusing, which are: clearing a space, felt sense, getting a handle, resonating, asking and receiving. The expert trainer provided techniques for working with the subjects through each step.

The therapists began to deliver services to the subjects one week after the training seminars.

The therapists and their supervisors met once a week for group supervision and listening to tapes recorded during the course of delivering services to the subjects. Tape listening was crucial to ensuring that the techniques of each approach were strictly adhered to by all therapists, and to allow for further

training when specific difficulties were encountered by the therapists.

The therapists were also evaluated in terms of the level of satisfaction with services reported by their subjects through a modified Client Satisfaction Questionnaire (CSQ-8) (Larsen, Attkinson, Hargreaves, and Nguyen, 1979) completed by each participant at the end of each session.

The Client Satisfaction Questionnaire (CSQ-8) (Larsen, et al., 1979) served as the post-session questionnaire to assess client satisfaction with treatment and provide feedback to the therapist (see Appendix I).

"The CSQ-8 is an 8-item, easily scored and administered measure that is designed to measure client satisfaction with services. The items for the CSQ-8 were selected on the basis of ratings by mental health professionals on a number of items that could be related to client satisfaction and on subsequent factor analysis. The CSQ-8 is unidimensional, yielding a homogeneous estimate of general satisfaction with services. The CSQ has been extensively studied, and while it is not necessarily a measure of client's perceptions of gain from treatment, or outcome, it does elicit the client's perspective on the value of services received. Items 3, 7, and 8 can be used as a shorter scale."

(Corcoran and Fischer, 1987, p.120)

The CSQ-8 produces a score, ranging from 8 to 32, higher scores indicating greater satisfaction. It has excellent internal consistency, with alphas that range from .86 to .94 in a number of studies, and shows a moderate correlation between satisfaction and treatment gain (Corcoran and Fischer, 1987).

While it was not intended to be utilized as a predictor of outcome or criterion for this study, the CSQ-8 provided a

procedural check enabling therapists to monitor the impact of their therapeutic work by reviewing client satisfaction following each session.

The CSQ-8 was originally designed to be administered at the end of a course of treatment. In this study it was administered after each session. For the items to make sense after each session, three of the eight questions were dropped from the post-first session administration and two were dropped from each of the remaining four sessions. Therefore, scores can range from 5 to 25 for the first session and from 6 to 30 for each of the subsequent sessions. When scores across sessions were added, the possible range is from 29 to 145.

(iii.) Treatment

The groups met for five three-hour sessions given weekly (15 hours of therapy). Each therapy group followed a general plan.

The group members were informed as to the importance of group confidentiality. They were told that the sessions would be tape recorded, as this was necessary to ensure that a certain quality of services was being delivered. Name tags (first names only) were made available. Then, the rationale for the approach in relation to stress was presented with the aid of a flip chart. After this, the therapist demonstrated the approach by applying the technique. For RET groups, someone in the group presented a stress reaction and the the ABC model was applied. For Focusing groups, the entire group participated in Step 1 - clearing a space. At the end of this first session each client filled in

the CSQ and was given log sheets (see Appendix J) on which to record stressful events that might occur between sessions.

The second session involved reviewing the log sheets and applying the therapy towards working on the experiences of the subjects and the difficulties they had in dealing with a stressor. This was especially applicable to the RET groups, less so to the Focusing groups. Focusing is an experiential approach and it is rather difficult to apply the technique to something which happened in the past. The log sheets for Focusing were utilized more in terms of identifying where the subject was having difficulty in applying the technique, i.e. getting a handle. If a difficulty in applying the technique was evident, the therapist would work on that part of the technique while the subject was engaged in a fresh focusing. The full RET and Focusing approaches were utilized by the end of the second session. The CSQ was administered at the end of this and all other sessions.

The third to fifth sessions were conducted much in the same way as the second session. For the RET groups, there would be rotation among subjects presenting a stress related difficulty, and the group would work together applying the ABC model. For the Focusing groups, all subjects participated in Step 1, Making a Space, and when all participants had achieved this step, individual participants would take turns in focusing through the remaining 5 steps with the therapist, while the other participants would pay attention to the movement through the

steps and to the non-verbal signs indicating a shift in the felt sense of the person undergoing the focusing.

The end of the fifth session included a review of the group experience as well as the administration of the CSQ and of the SCL-90-R (2nd administration). The subjects were also reminded at this time that they would be called soon, to set up the one month follow-up appointment.

(iv.) Feedback and Follow-up

Introduction

This section will be divided into three parts: the feedback procedure for individuals excluded from the study, the feedback procedure for waiting-list control subjects, and the follow-up and feedback procedure for treatment subjects.

All subjects were notified of their status in the study within two weeks after the initial testing session. Appointments were booked at that time for feedback in the case of excluded subjects, or for the second testing in the case of a waiting list or treatment subjects. Within one week of the second testing, appointments were scheduled for the feedback session for waiting-list control subjects, to coincide with the end of treatment for the treatment subjects. Treatment subjects were contacted within one week of the end of their treatment to set up their feedback sessions approximately one month after the end of treatment. All subjects were reminded of their appointments through a telephone call one or two days before the appointment date.

In all, 18 separate groups received three hours each of

feedback. A few individuals who could not make it for any of the scheduled group feedback sessions were given individual attention. Five individuals moved away from the Ottawa area during the one-month feedback period. These individuals were given the tests needed to be given before feedback in one mailing, and given the feedback on their test results via audiorecording in a second mailing. The audiorecording was a tape made during one of the group feedback sessions.

Feedback for Excluded Individuals

Individuals who were tested but did not fulfill the inclusion criteria were invited for a three hour feedback session on their test results.

The feedback material, which each subject selected according to his file number, was comprised of a Demographic Information Sheet (See Appendix K), Feedback Summary Sheet (See Appendix L), an MBTI feedback sheet, a sheet from "Introduction to Type" giving some specific information about that individual's type, and a stamped envelope, in that order.

The purpose of the Demographic Information Sheet was to fill in any missing information on the individual's age, occupation, educational level and modality through which he found out about the study.

The Feedback Summary Sheet listed the individual subject's test results in one column, the average scores from all individuals tested in a second column, and available norms in the third column. As the feedback presentation was delivered,

individuals could follow on their own personal sheet, thereby maintaining confidentiality of their own test results while gaining information about their interpretation. This sheet also had, at the bottom, a list of recommended readings for interested individuals.

The MBTI record sheets and a copy of the type description from "Introduction to Type" offered more information, since at least half of the feedback presentation focused on the MBTI interpretation.

The feedback session began with an explanation of how the meeting would progress. First there was a presentation of the study, its purpose and the rationale for choosing individuals with certain characteristics. Then, each test was explained and the meaning of high or low scores on each measure was presented in the context of the study. The subjects followed the explanations on their feedback sheets. In this way, they could listen to the explanations and ask questions, yet keep their own results confidential. All test result explanations were presented in a positive light. It was emphasized that different scores merely refer to differences and not "better or worse than". The tests were presented in an academic, teaching format, with a focus on how each test result might enable differential prediction of outcome in the two treatment approaches. Also emphasized were the questionable aspects of the test results. For example, DAT results might not be very accurate since we know that people who are stressed may perform at a lower level than

when not stressed. Also, in relation to the DAT, we tested for only two of eight aptitudes. Individuals might have low scores on Verbal and Abstract Reasoning and have higher scores on aptitudes which we did not test.

Participants were free to ask questions. At the end of the feedback, those interested in receiving the overall results of the study filled in their names and addresses on stamped envelopes which were later mailed to them with an abstract of the study.

Feedback for Waiting-List Control Subjects

Waiting-List Control subjects were individuals who had stress levels similar to treatment subjects but who waited 4-6 weeks before receiving services.

Their feedback material was the same as that given to the excluded individuals with one addition. The top of their package had the SCL-90-R, which they were asked to complete and submit to the investigator before the feedback session began.

They received exactly the same feedback as the excluded subjects.

Follow-up and Feedback for Treatment Subjects

The treatment subjects received the same package and feedback as the waiting-list control subjects, with one addition. This package had a Follow-Up Questionnaire (see Appendix M) which focused on the extent of use of the techniques learned during the sessions over the past month. This questionnaire appeared in the package after the SCL-90-R but before the individual feedback

summary sheets.

The Follow-Up Questionnaire asked subjects to place an "X" beside one of these categories capturing the extent to which learned techniques were used during the past month: none at all, once during the month, 2-3 times during the month, once a week, 2-6 times a week, once a day or more.

The Follow-Up Questionnaire was included to see if there was any connection between the frequency with which a subject utilized the techniques over the one-month period and the extent of change in stress level at the third testing. The subjects had not been instructed to practice the techniques over the one-month follow-up period.

The feedback session for the treatment subjects proceeded as follows:

First, the subjects completed the SCL-90-R (for the third time), the Demographic Information Sheet, and the Follow-up Questionnaire. Then, they received three hours of feedback on their test results, and were informed that they would receive the overall results of the study if they filled in their names and addresses on stamped envelopes.

Summary of Measures

Table 2.2 summarizes the measures taken throughout the study and briefly states the purpose of each measure.

The measures are divided in three groups: predictor variables, criterion measure, and procedural checks.

Data Analysis

The purpose of this section is to describe the data and analyses.

Due to the number of therapists involved and the fact that for each treatment different therapists handled a different number of groups, the results section will first examine therapist effects. While the number of subjects per group precludes utilization of statistical procedures in examining therapist effects, a tabular presentation will allow the reader to discern variability between therapists and variability across groups run by the same therapist.

The subjects were classified as FOC-Classed or RET-Classed on the basis of their MBTI and CSAQ scores. Subjects were classified as RET-Classed if they experienced more cognitive than somatic anxiety and if they were of the Sensing type. Subjects were classified as Foc-Classed if they experienced more somatic than cognitive anxiety and if they were of the Intuitive type.

There were three conditions: Focusing, RET, or Waiting-list control.

The main criterion measure was the SCL-90-R which was administered to all subjects at the onset, to all subjects after the treatment/waiting period, and to the treatment subjects only at one-month follow-up.

The first question was whether or not treatment is better than no treatment. An analysis of covariance (ANCOVA), holding SCL-90-R scores at time 1 as a covariate, compared decreases in

Table 2.2

Summary of Measures

Instrument	Purpose of Measurement
Predictor Variables	
Cognitive-Somatic Anxiety Questionnaire	Assess type of anxiety experienced
Focusing Manual and Post-Focusing Questionnaire	Assess initial experiencing ability
Multidimensional Health Locus of Control Scales	Assess Locus of Control
Myers Briggs Type Indicator	Assess preference/type
Rational Behaviour Inventory	Assess extent of irrational thinking
Verbal and Abstract Reasoning Subscales of the DAT	Assess cognitive characteristics
Criterion Measure	
Symptom Check List 90-R	Assess stress levels
Procedural Checks	
Client Satisfaction Questionnaire	Assess post session satisfaction levels
Inter-session log sheet	Promote use of techniques between sessions
Demographic Information Sheet	Fill in missing data
Follow-up Questionnaire	Assess extent of use of techniques during 1-month follow-up period

stress for treatment and control subjects. Two a priori comparisons were conducted. One compared treatment to control conditions and one compared the Focusing treatment group to the control group.

The hypotheses regarding classification and treatment interaction over time were tested using multivariate analysis of covariance (Mancova), holding SCL-90-R scores at time 1 as a covariate.

Spearman correlations tested the degree of association 1) between client satisfaction with services received and pre-post decreases in stress on the SCL-90-R, 2) between client use of the techniques during the one-month follow-up and pre - follow-up decreases in stress, and 3) between client satisfaction with the services received and client use of techniques during the one-month follow-up period. Class by treatment interactions for use and satisfaction were explored through ANOVA.

A stepwise multiple regression analysis explored the predictive potential of all variables because the literature showed no strong evidence for entering variables in any specific order into the regression equation.

Summary of Chapter 2

This Chapter presented the procedures for testing the hypotheses of this study.

Ninety-five mildly to moderately stressed male subjects participated. There were thirty waiting list control subjects, thirty-one FOC-Classed subjects, and thirty-four RET-Classed

subjects. In all, thirty-two subjects received Focusing and thirty-three received RET.

RET classed subjects were mildly to moderately stressed (SCL-90-R), were cognitively anxious (CSAQ), and were of the Sensing type (MBTI), FOC classed subjects were mildly to moderately stressed, were somatically anxious, and were of the Intuitive type. RET classed subjects were predicted to have better outcome in RET while FOC classed subjects were predicted to have better outcome in Focusing.

Treatment subjects received fifteen hours of stress management training conducted in a small group format where each group had a maximum number of three RET-Classed and three FOC-Classed individuals.

A number of measures were administered.

The criterion measure was the SCL-90-R. It was administered twice to the waiting-list control subjects and three times to the treatment subjects. The waiting list control subjects took the SCL-90-R at the onset and at the end of their 4-6 week waiting period just before receiving services. The treatment subjects took the SCL-90-R at the onset, at the end of 5 weeks of sessions and once again at one-month follow-up.

All subjects completed the CSAQ, MHLC, RBI, MBTI, 2 subscales of the DAT (Verbal and Abstract Reasoning), and a measure of experiencing ability before receiving services.

All subjects who were tested were offered feedback.

The test results were analyzed to determine whether

treatment is better than no treatment, to ascertain the relative effectiveness of RET and Focusing over time for each of the two classifications of subject (RET-Classed, FOC-Classed), to ascertain the degree of association between client satisfaction and use of the techniques, and to ascertain if any other variables were useful in the prediction of outcome.

CHAPTER 3

RESULTS

Introduction

This Chapter presents the results of the study. The study involves one criterion measure of stress administered at three points in time and two major predictors of differential outcome. The criterion measure was the SCL-90-R and the two predictors were the CSAQ and the MBTI. The CSAQ has two scales each treated as one variable: cognitive and somatic anxiety. The MBTI has a Sensing-Intuition bipolar dimension which was treated as two variables. In terms of classification of subjects, subjects were classified as RET-CLASSSED if they experienced more cognitive than somatic anxiety and if they were of the Sensing type. Subjects were classified as FOC-CLASSSED if they experienced more somatic than cognitive anxiety and if they were of the Intuitive type.

In addition to these two major predictors, a number of other measures were taken to explore their potential predictive capabilities. These were the MHLC, the RBI, the Verbal and Abstract Subscales of the DAT, and Experiencing Ability.

This Chapter will present a number of analyses related to the purposes of this study. First, there was an analysis of Therapist Effect in table form which examines the stability of differences in stress reduction across groups run by the same therapist and across groups run by different therapists.

This will be followed by an analysis of treatment versus no

treatment effects for the three treatment conditions (Focusing, RET, Waiting List Control).

The next analysis involves testing the classification by treatment interactions.

This will be followed by a correlational analysis relating the procedural checks to outcome. More specifically, subject satisfaction with services rendered during the session and the extent to which subjects used the techniques during the one-month follow-up period was correlated with outcome.

There was also an exploration of whether or not subject satisfaction with services and use of techniques relates to how the subjects were classified and to which treatment those subjects received.

Lastly, there will be an exploration of all variables to ascertain which were the best predictors of outcome and to provide information for future research regarding the study of differential outcome.

Preliminary Analysis

There were three instances of missing data which were on the Experiencing Ability variable. This information was missing due to the lack of availability of therapy rooms and scheduling problems for administration of the Experiencing exercise for three of the sixty-five individuals. These individuals subsequently began receiving services before measurement on this variable was possible. Analysis substituted means since three instances of missing data out of sixty-five cases on one of

seventeen variables measured per subject was felt to be a rather small portion of the overall data base and did not warrant eliminating whole cases.

All variables were examined to detect extreme values and ensure that no mis-entries were made in the data base. While no extreme cases were detected, the Frequencies command of the SPSS programme revealed that the Internal Locus of Control variable did display excessive skewness and kurtosis. Internal Locus of Control showed peaked kurtosis and moderate negative skewness. While normal distribution values for kurtosis and skewness are zero, kurtosis for the Internal Locus of Control scores was 3.932 with a standard error of .586 while skewness was -1.490 with a standard error of .297. The Internal Locus of Control scores were transformed by reflecting and taking the square root with satisfactory results. The transformed variable had a kurtosis of 1.043 and a skewness of .406.

It was also revealed that SCL-90-R scores for subjects matched by classification to treatment showed excessive skewness at time three (one month follow-up). Skewness was 1.445 and the standard error of skewness was .421 yielding a standardized value of 3.43 compared to a critical value of 3.08 at alpha .001 (30 DF). However, the criterion measure was not altered since the distortion was only for one group at one of three time points. There were no unusual values for kurtosis.

No multivariate outliers were identified using SPSS regression's Residuals, Standardized Scatterplot and Mahalanobis'

Distance subcommands.

Therapist Effects

This study involved a number of therapists, each providing services to a different number of groups. While the limited number of subjects per group precluded the use of statistical procedures to examine possible therapist effects, a visual inspection of Table 3.1 suggests that variability is almost as great across groups run by any one therapist as across groups run by different therapists. For example, the pre-post difference in stress levels for groups run by RET Therapist A ranges from .19 to .56, for groups by Focusing Therapist A from .17 to .34, for groups by RET Therapist B from .20 to .38 and for groups by Focusing Therapist B from .29 to .46. On the other hand, between-therapist differences range from .17 to .56. The range of possible scores on the SCL-90-R is 0.01 - 4.00.

Manipulation Check

The purpose of the manipulation check was to ensure that treatment was better than no treatment. Also, since Focusing has not been used specifically as a stress management approach, it's effectiveness needed to be determined.

As specified in Chapter 2, sixty-five subjects received treatment and thirty subjects served as a five-week waiting list control group. All subjects were given the SCL-90-R as a pre-measure. At the end of the treatment/waiting period, all subjects were given the SCL-90-R again as a post-measure.

Table 3.2 presents the average SCL-90-R scores and standard

Table 3.1

Therapist Effects: Average Improvement on SCL-90-R Across Administrations

Therapy	Therapist	N	Post - Pre Treatment Difference	Follow-up - Pre Treatment Difference	Follow-up - Post Treatment Difference
RET					
	A	5	.19	.21	.02
		2	.56	.75	.21
	B	6	.38	.52	.14
		6	.20	.30	.09
	C	6	.22	.25	.03
	D	7	.20	.19	-.01
Focusing					
	A	6	.17	.28	.11
		5	.32	.34	.01
		5	.34	.33	-.12
	B	4	.29	.40	.11
		4	.46	.38	-.08
	C	3	.44	.58	.14
	D	3	.41	.58	.18
	E	3	.27	.30	.03

N.B. Total width of SCL-90-R is 0.01 - 4.00.

Table 3.2

Mean Scores and Standard Deviation Values on the SCL-90-R for All Groups at All Administrations

	Administration					
	Pre-Treatment		Post-Treatment (Post-Waiting for Controls)		Follow-up	
	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.
Focusing Treated	.748	.264	.424	.277	.371	.277
RET Treated	.664	.276	.405	.274	.345	.320
Focusing Classed	.627	.278	.367	.242	.274	.250
RET Classed	.779	.263	.462	.301	.435	.340
Class Match to Treatment	.681	.254	.415	.308	.349	.350
Class Mismatched to Treatment	.731	.301	.415	.248	.366	.271
Controls	.616	.277	.558	.319	No follow up done	

deviation values for all groups at all administrations of this criterion measure.

Given the differences in observed means between groups at the pre-treatment administration of the SCL-90-R, $p < .05$, an analysis of variance was performed comparing group means with SCL-90-R pre-treatment values serving as a covariate.

Comparison of treatment to no treatment effects on measures of the SCL-90-R was done utilizing an analysis of covariance. Two a priori comparisons were made. One comparison was between treatment (RET and Focusing Treatment groups) and no treatment subjects. The second comparison was between Focusing and Waiting-List Control subjects. Table 3.3 presents the cell means and analysis of variance. There was a significant difference between treatment conditions over time, $F(2, 91) = 6.32$, $p < .003$. Dunn's multiple comparison procedure (Kirk, 1968) was utilized. The observed value for the treatment ($N=65$) versus no treatment comparison ($N=30$) was .145 and the critical value was .1222, $DF=91$, $p < .05$. Therefore, treatment subjects significantly improved as compared to waiting list control subjects on the pre-post administration of the SCL-90-R. The observed value for the Focusing treatment ($N=33$) versus no treatment comparison ($N=30$) was .14 and the critical value was .1397, $DF=91$, $p < .05$. Therefore, subjects receiving Focusing as a treatment significantly improved over waiting list-controls.

Testing of Hypotheses 1 and 2

Hypothesis 1 postulated that RET would be more effective in

Table 3.3

Cell Means and Analysis of Covariance - Treatment versus
Waiting-List Control

Cell Means		
RET (N=32)	Focusing (N=33)	Waiting-List Control (N=30)
.41	.42	.56

Analysis of Covariance					
	SS	DF	MS	F	p
Covariates	2.137	1	2.137	36.209	.000
TREATMENT	.746	2	.373	6.321	.003
Residual	5.370	91	.059		
Total	8.252	94	.088		

reducing stress as measured by the SCL-90-R in that class of subjects categorized as RET-CLASSSED (Sensing as measured by the MBTI, and Cognitively anxious as measured by the CSAQ), and that Focusing would be more effective in reducing stress as measured by the SCL-90-R in that class of subjects categorized as FOC-CLASSSED (Intuitive as measured by the MBTI, and Somatically anxious as measured by the CSAQ). Table 3.4 presents the Treatment by Classification interaction.

Hypothesis 2 suggested that these reductions in stress would be maintained at one month follow-up. Table 3.5 presents the effects over time.

The MANOVA portion of SPSS , was utilized to test for the treatment by classification interactions while holding SCL-90-R pre-treatment scores as a covariate. There was no significant difference in homogeneity of variance. Table 3.4 shows no treatment, class, or treatment by class effects. Power is small at .08 indicating that significant differences might not be detected even if they were to exist. Table 3.5 shows that both groups significantly improved over time however, $F(1, 61) = 5.43, p < .05$.

The ANOVA portion of SPSS compared Matched-to-Approach to Mismatched-to-Approach groups over time with pre-treatment SCL-90-R scores as a covariate. Table 3.6 shows that there were no significant differences between matched to approach and mismatched to approach subjects. Table 3.7 shows that both groups significantly improved over time, $F(1, 62) = 20.01, p < .05$. Power

Table 3.4

Analysis of Variance - Treatment by Classification Interaction
On SCL-90-R Scores

(Tests of Between-Subjects Effects)

	SS	DF	MS	F	p	Power
WITHIN CELLS	6.87	60	.11			
REGRESSION	2.29	1	2.29	20.01	.000	.993
TREATMENT	.01	1	.01	.13	.721	.051
CLASS	.08	1	.08	.66	.420	.164
TREATMENT BY CLASS	.01	1	.01	.07	.793	.046

Table 3.5

Analysis of Variance - Treatment by Classification Interaction
On SCL-90-R Scores

(Tests Involving TIME Within-Subjects Effect)

	SS	DF	MS	F	p	Power
WITHIN CELLS	1.27	61	.02			
TIME	.11	1	.11	5.43	.023	.628
TREATMENT BY TIME	.00	1	.00	.01	.932	.036
CLASS BY TIME	.04	1	.04	1.84	.180	.265
TREATMENT BY CLASS BY TIME	.00	1	.00	.10	.750	.049

Table 3.6

Analysis of Variance - Comparison Between Matched and Mismatched Subjects Based On SCL-90-R Scores

(Tests of Between Subjects Effects)

	SS	DF	MS	F	p	Power
WITHIN CELLS	6.96	62	.11			
REGRESSION	2.73	1	2.73	24.29	.000	.998
MATCH/MISMATCH VARIABLE	.01	1	.01	.08	.775	.047

Table 3.7

Analysis of Variance - Comparison Between Matched and Mismatched Subjects Based on SCL-90-R Scores

(Tests Involving TIME)

(Within-Subject Effect)

	SS	DF	MS	F	p	Power
WITHIN CELLS	1.31	63	.02			
TIME	.11	1	.11	5.17	.03	.607
MATCH/MISMATCH VARIABLE BY TIME	.00	1	.00	.12	.73	.050

for the test of significance between the two groups was low at .05 for both comparisons.

Correlations Among Variables Employed
Primarily as Procedural Checks

Each client was asked to rate his level of satisfaction with the services received at the end of each of the five sessions. Originally, this procedural check was included to provide the therapist with a measure of performance as rated by the client.

Also, clients were asked to report the extent to which they used the techniques they learned throughout the course of therapy during the period between the end of services and the one-month follow-up meeting. Clients had not been asked to practice the techniques and so this measure captured spontaneous use of techniques between the time services ended and the one-month follow-up.

It was felt that examining the relationships among client satisfaction, use of technique, and outcome might lead to an understanding of aspects of outcome which were not identified through the analysis of classification by treatment effects.

Of note, as it may affect the results of analysis, is that the range of scores on the level of satisfaction measure ranged from 82 to 144 while the use of techniques measure was a six category measure with limited variability.

In order to examine the relationship between improvement and procedural checks, three types of difference scores were computed. Difference 1 was the difference score between Pre and

Post SCL-90-R scores, Difference 2 was the difference score between Pre and Follow-up SCL-90-R scores, and Difference 3 was the difference score between Post and Follow-up SCL-90-R scores.

The Correlations portion of SPSS, with a Spearman subcommand was utilized to ascertain the correlation between satisfaction with services and reductions in reported stress (Pre - Post difference), between use of techniques during the one month follow-up period and reductions in reported stress (Post - One Month Follow-up), and between overall level of satisfaction with the services and use of technique. A Bonferroni adjustment was done to correct the alpha level for several correlations. In order to maintain an experiment-wise alpha level of .05 for these comparisons, the critical value for significance becomes .05/3 or .017 level of significance.

The main reason for this analysis was to see if there was a relationship between satisfaction, use of techniques and outcome.

There was a significant correlation ($p < .008$) between satisfaction and Difference 1. This correlation of .30 indicates a positive relationship in that greater decreases in levels of reported stress at Time 2 correlates with increased levels of reported satisfaction with the services delivered.

There was a significant correlation ($p < .005$) between satisfaction and Difference 2. This correlation of .32 indicates a positive moderate relationship in that greater decreases in levels of reported stress at one-month follow-up correlates with increased levels of reported satisfaction with

the services delivered. Table 3.8 summarizes these results.

There was a significant correlation ($p < .007$) between use of techniques during the one month follow-up and level of satisfaction with the services received. This correlation of .30 indicates a positive relationships in that higher levels of satisfaction correlate with higher levels of use of the techniques during the one month period. Means and standard deviations for client satisfaction and use of techniques are presented in Tables 3.9 and 3.10, respectively.

Because there was a relationship between use of techniques, satisfaction and outcome, it was felt that an exploration of use and satisfaction in relationship to treatment and classification might shed light on aspects of outcome which the treatment by classification analysis did not capture. The ANOVA portion of SPSS was utilized to explore whether or not there were any relationships between level of satisfaction and use of techniques, and the way subjects were classified or the treatment they received.

While there were no significant differences between treatment groups or classifications on Use, Tables 3.11 and 3.12 show that there was evidence ($p < .076$) indicating that use of techniques was almost significantly utilized more by one class of subjects than another during the one-month follow-up period. Power for use on classification was .43 and observed power for both use and satisfaction for classification was .38 (alpha .05).

There was a significant difference between classifications

Table 3.8

Spearman Correlation Coefficients - Use of Techniques,
Client Satisfaction with Services and Outcome

	DIFF 1 (Pre-Post) N (65)	DIFF2 (Pre-Follow-up) N (65)	USE N (65)
SATIS	.30 (p = .008)	.32 (p = .005)	.30 (p = .007)

Table 3.9

Client Satisfaction Means and Standard Deviations Obtained by Subjects Who Received RET or Focusing Treatments and Were Classified as RET-Classed or FOC-Classed

Treatment	Subject Classification	Client Satisfaction Scores		
		N	Mean	S.D.
RET	RET-Classed	16	116.31	11.39
	FOC-Classed	16	113.19	16.49
Focusing	RET-Classed	18	122.39	13.81
	FOC-Classed	15	124.93	12.68
For Entire Sample		65	119.22	14.20

Table 3.10

Client Use of Techniques Means and Standard Deviations Obtained by Subjects Who Received RET or Focusing Treatments and Were Classified as RET-Classed or FOC-Classed

Treatment	Subject Classification	Use Of Techniques Scores		
		N	Mean	S.D.
RET	RET-Classed	16	3.38	1.46
	FOC-Classed	16	3.44	1.41
Focusing	RET-Classed	18	2.78	1.11
	FOC-Classed	15	3.87	1.13
For Entire Sample		65	3.34	1.31

Table 3.11

Multivariate Analysis of Variance - Use of Techniques and Client Satisfaction By RET and FOC Classification

MULTIVARIATE TESTS OF SIGNIFICANCE						
TEST NAME	VALUE	EXACT F	HYPOTH.	ERROR DF	p	Power
			DF			
PILLAIS	.059	1.88	2.0	60.00	.162	
HOTELLINGS	.063	1.88	2.0	60.00	.162	
WILKS	.941	1.88	2.0	60.00	.162	
ROYS	.059					
						.38

Table 3.12

Univariate Analysis of Significance - Use of Techniques and Client Satisfaction by RET and FOC Classification
(D.F. = (1,61))

VARIABLE	HYPOTH. SS	ERROR SS	SS	HYPOTH. SS	ERROR SS	F	p	Power
SATIS	1.36	11517.09	1.36	188.81	.01	.933	.04	
USE	5.36	100.53	5.36	1.65	3.25	.076	.43	

of subjects and the level of satisfaction with services ($p < .05$). Tables 3.13 and 3.14 show that subjects receiving Focusing were significantly more satisfied than subjects receiving RET, $F(1,61) = 6.81$, $p < .05$.

Exploration of Other Predictors

MBTI and CSAQ scores were utilized in determining the classification of individual subjects into either the RET-CLASSIFIED group or the FOC-CLASSIFIED group. However, measures on a number of other potential predictor variables were taken but were not implicated in the determination of which classification group an individual subject would be placed.

In order to explore the appropriateness of choosing the MBTI and CSAQ as measures upon which to classify subjects, it was felt that conducting a multiple regression on all potential predictors of outcome, including those not utilized for classification purposes, might provide information regarding the choice of variables with which to make better classification decisions for future research.

SPSS Stepwise Regression was utilized to explore the relationship between decreases in stress as measured by the SCL-90-R and the possible predictors of outcome identified in Chapter 1. Decreases in stress, as measured by the SCL-90-R, were represented by difference scores. Difference 1 was the difference between pre and post-treatment scores on the SCL-90-R, Difference 2 the difference between pre-treatment and follow-up scores, and Difference 3 the difference between post-treatment and follow-up

Table 3.13

Multivariate Analysis of Variance - Use of Techniques and Client Satisfaction by RET and Focusing Treatment

EFFECT..TREATMENT

MULTIVARIATE TESTS OF SIGNIFICANCE (S=1, M=0, N=29)

TEST NAME	VALUE	EXACT F	HYPOTH. DF	ERROR DF	p	Power
PILLAIS	.12	4.10	2.0	60.00	.021	
HOTELLINGS	.14	4.10	2.0	60.00	.021	
WILKS	.88	4.10	2.0	60.00	.021	
ROY	.12					.7

Table 3.14

Univariate Test of Significance - Use of Techniques and Client Satisfaction by RET and Focusing Treatment
(D.F. = (1,61))

VARIABLE	HYPOTH. SS	ERROR SS	HYPOTH. MS	ERROR MS	F	p	Power
SATIS	1284.80	11517.08	1284.80	188.80	6.81	.011	.73
USE	.11	100.53	.11	1.65	.07	.793	.05

scores.

Stepwise regression was utilized because there was no conceptual framework upon which to decide which variables might be more important in prediction of outcome. In fact, the MBTI and CSAQ were chosen because each had two subscales which meant we did not have to do a split mean to determine the classification of any given subject. None of the other variables (VR, AR, RBI, MHLC, or EA) had built-in scales distinguishing different groups. It was impractical to wait until all possible volunteers entered the study before identifying the mean score around which all subjects would be classified on each variable. It was much more convenient to utilize the MBTI and CSAQ to categorize subjects as soon as their pre-measures were obtained. This analysis is intended to explore the appropriateness of that decision.

Appendix N presents the correlation matrix among predictors and the difference scores on the criterion measure. There is a strong negative correlation between Sensing and Intuition which is expected since the Sensing-Intuition dimension of the MBTI is a bi-polar scale.

Variables explored in the multiple regression include sensing and intuition from the MBTI, somatic and cognitive anxiety from the CSAQ, Rational Behaviour Inventory scores, Locus of Control scores from the MHLC (transformed variable), verbal and abstract reasoning scores from the DAT, satisfaction and use scores.

Table 3.15 summarizes the findings of the SPSS stepwise

Table 3.15

Stepwise Multiple Regression - Difference 1 (Pre-Post
Difference on SCL-90-R Scores)

ENTERED ON STEP 1: Cognitive Anxiety

Multiple R .336

R Square .113

Adjusted R. Square .099

Standard Error .268

F = 8.03999 Signif F = .0061

VARIABLES IN THE EQUATION

	B	SE B	BETA	t	p
Cognitive	.020	.007	.336	2.835	.0061
(Constant)	-.018	.114		-.155	.8771

VARIABLES NOT IN THE EQUATION

VARIABLE	BETA IN	PARTIAL	MIN TOLER	t	p
Sensing	-.252	-.223	.696	-1.803	.0762
Exper. Ab.	-.072	-.076	.982	-.596	.5531
RBI	.055	.051	.785	.405	.6866
LCIT1	-.034	-.036	.996	-.286	.7757
Intuition	.193	.171	.702	1.369	.1759
Somatic	.239	.250	.969	2.034	.0462
Verbal R.	.141	.150	1.000	1.191	.2381
Abstract R.	.073	.077	.998	.608	.5454
Satis.	.266	.281	.988	2.305	.0246
Use	.096	.101	.970	.798	.4279

Table 3.15 (cont'd)

ENTERED ON STEP 2: Client Satisfaction Level

Multiple R .428
 R Square .183
 Adjusted R Square .157
 R Square Change .058
 Standard Error .260

F = 6.95066 Signif F = .0019

VARIABLES IN THE EQUATION VARIABLE

	B	SE B	BETA	t	p
Cognitive	.018	.007	.308	2.664	.0098
Satisfaction	.005	.002	.266	2.305	.0246
(Constant)	-.623	.285		-2.186	.0326

VARIABLES NOT IN THE EQUATION

VARIABLE	BETA IN	PARTIAL	MIN TOLER	t	p
Sensing	-.180	-.160	.645	-1.265	.2108
Exper. Ab.	-.112	-.121	.962	-.954	.3436
RBI	.045	.044	.780	.343	.7328
LCIT1	.032	.035	.929	.271	.7869
Intuition	.126	.114	.664	.894	.3749
Somatic	.196	.209	.935	1.672	.0997
Verbal R.	.184	.202	.967	1.607	.1132
Abstract R.	.071	.078	.986	.613	.5420
Use	.007	.007	.860	.052	.9586

regression analysis for Difference 1, that is, the difference score between pre and post-measures on the SCL-90-R. Cognitive Anxiety and Client Satisfaction Level together account for 16% of the variance in decreases in stress shown between pre and post treatment administration of the SCL-90-R. However, upon examination of the variables not in the equation after step 1, one sees that the significant t value for somatic anxiety is 2.034 ($p < .05$) and that the significant t value for sensing is -1.803 ($p < .08$). This analysis does not support any of the variables as significant predictors of outcome at time Difference 1.

Table 3.16 summarizes the findings for Difference 2, that is, the difference score between the pre-treatment and one-month follow-up administrations of the SCL-90-R. Client Satisfaction and Verbal Reasoning were not significant predictors of decreases in stress and account for 16% of the variance. There do not appear to be any significant predictors of outcome for Difference 2.

Table 3.17 summarizes the findings for Difference 3, that is, the difference score between the post and one-month follow-up administrations of the SCL-90-R. Intuition accounted for 5% of the variance. This does not lend support to the idea that the MBTI is a predictor of outcome.

Results from the stepwise multiple regression do not provide support for any of the variables to be good predictors of outcome.

Table 3.16

Stepwise Multiple Regression - Difference 2

(Pre - One-month Follow-up SCL-90-R Scores)

ENTERED ON STEP 1: Client Satisfaction Level

Multiple R .322
 R Square .104
 Adjusted R Square .090
 Standard Error .278

F = 7.29980

SIGNIF F = .0088

VARIABLES IN THE EQUATION

	B	SE B	BETA	t	p
Satisfaction	.007	.003	.322	2.702	.0088
(Constant)	-.439	.294		-1.495	.1400

VARIABLES NOT IN THE EQUATION

VARIABLE	BETA IN	PARTIAL	MIN TOLER	t	p
Sensing	-.082	-.086	.973	-.676	.5017
Cognitive	.170	.179	.988	1.430	.1577
Exper. Ab.	-.183	-.192	.985	-1.538	.1291
RBI	.065	.069	.994	.543	.5894
LCIT1	.035	.036	.944	.280	.7800
Intuition	.087	.091	.982	.722	.4731
Somatic	.198	.204	.959	1.644	.1052
Verbal R.	.283	.296	.978	2.439	.0176
Abstract R.	-.045	-.048	1.000	-.376	.7079
Use	.087	.087	.903	.690	.4927

Table 3.16 (Cont'd)

ENTERED ON STEP 2: Verbal Reasoning

Multiple R .427
 R Square .182
 Adjusted R Square .156
 R Square Change .066
 Standard Error .268

F = 6.91069

SIGNIF F = .0020

VARIABLES IN THE EQUATION					
	B	SE B	BETA	t	p
Satisfaction	- .008	.002	.364	3.136	.0026
Verbal R.	.013	.005	.283	2.439	.0176
(Constant)	-1.052	.379		-2.781	.0072

VARIABLES NOT IN THE EQUATION					
VARIABLE	BETA IN	PARTIAL	MIN TOLER	t	p
Sensing	-.039	-.042	.945	-.327	.7449
Cognitive	.166	.183	.967	1.452	.1516
Exper. A.	-.134	-.145	.943	-1.142	.2578
RBI	.123	.123	.953	.968	.3370
LCIT1	.015	.016	.929	.121	.9038
Intuition	.042	.045	.951	.351	.7266
Somatic	.138	.146	.906	1.148	.2553
Abstract R.	-.159	-.166	.865	-1.310	.1950
Use	.039	.040	.869	.315	.7541

Table 3.17

Stepwise Multiple Regression - Difference 3

(Post - One-Month Follow-up on SCL-90-R Scores)

VARIABLE ENTERED ON STEP NUMBER 1: Intuition

Multiple R .253
 R Square .064
 Adjusted R. Square .049
 Standard Error .197

F = 4.32225

SIGNIF F = .0417

VARIABLES IN THE EQUATION

VARIABLE	B	SE B	BETA	t	p
Intuition	.007	.003	.253	2.079	.0417
(Constant)	-.045	.055		-.821	.4146

VARIABLES NOT IN THE EQUATION

VARIABLE	BETA IN	PARTIAL	MIN TOLER	t	p
Sensing	.123	.055	.189	.435	.6648
Cognitive	-.056	-.049	.702	-.382	.7035
Exper. Ab.	-.096	-.097	.958	-.768	.4455
RBI	-.081	-.080	.915	-.630	.5309
LCIT1	-.007	-.007	.980	-.058	.9542
Somatic	-.159	-.152	.854	-1.213	.2297
Verbal R.	.101	.103	.980	.814	.4189
Abstract R.	-.176	-.181	.999	-1.452	.1515
Satisfact.	.012	.012	.982	.095	.9246
Use	.146	.144	.912	1.147	.2557

Summary

There was a statistically significant difference between treatment versus no treatment. Subjects receiving treatment showed significant improvement over waiting-list control subjects. Focusing, as a "debutante" stress management technique was significantly valid as a treatment approach.

There were no therapist effects. Variability in overall improvement in stress levels across groups run by the same therapist was greater than variability across groups across therapists.

There were no significant classification by treatment interactions. Nor were there any significant differences between subjects matched versus mismatched to approach. The main hypotheses were not supported.

There were significant correlations between client satisfaction, use of techniques and outcome. More importantly, there was a significant difference between treatments received and client satisfaction. Subjects receiving Focusing were significantly more satisfied with services received than were subjects receiving RET.

Regression analysis did not show any variables to be significant predictors of outcome when all subjects were examined together regardless of classification.

While this study demonstrated that treatment works and that Focusing works as well as RET, it failed to demonstrate that personality variables can predict differential outcome.

CHAPTER 4

DISCUSSION

Introduction

This chapter will discuss results in relation to the literature review presented in the first Chapter. Following this, there will be a discussion regarding the reasons for failure to support the main hypotheses. This chapter will conclude with the key implications for this study to both clinical practice and future research.

A) Results in Relation to the Literature ReviewWas this Study a Reasonable Test of the Hypotheses?

The literature review presented in the first Chapter revealed a number of variables which might be implicated in differential outcome. These were cognitive-somatic anxiety, personality type, irrational beliefs, locus of control, experiencing ability, and cognitive characteristics.

In order to test the idea that differential prediction of outcome could be demonstrated by these variables, two classes of individuals were identified and half of each group was provided with either Focusing or RET as a stress management intervention. These two approaches were selected because they were not only different from each other but their theoretical underpinnings were appropriate for the exploration of the specific variables identified in the literature review as possibly important in differential outcome.

The criterion measure was a broad base tool which included

items assessing individual distress at the biological and/or psychological and/or social levels of functioning.

Prior to the arrival of volunteers, there was no way of determining either the number of volunteers nor the specific types of presenting difficulties. Therefore, selection was made on a realistic number of inclusion criteria and the SCL-90-R was selected as the criterion measure. The inclusion criteria were: males aged 25-45, moderately stressed, and classified as either cognitively anxious on the CSAQ and a Sensing type on the MBTI, or somatically anxious on the CSAQ and an Intuitive type on the MBTI.

Each subject received either Rational Emotive Therapy or Focusing for fifteen hours in a group situation. Half the subjects who were classified according to their Sensing preference on the MBTI and their cognitive anxiety on the CSAQ were provided with Rational Emotive Therapy while the other half received Focusing. Half of the subjects classified according to their Intuitive preference on the MBTI and their somatic anxiety on the CSAQ were provided with Rational Emotive Therapy while the other half received Focusing. It was felt that this design was a reasonable test of the hypotheses which stated that the two classifications of client would respond differentially to Focusing and Rational Emotive therapy. More specifically, it was hypothesized that RET-Classed individuals would benefit more from RET and that FOC-Classed individuals would benefit more from Focusing. It was also hypothesized that these gains would be

maintained after one month.

The hypotheses were not supported. In a following section, we will discuss reasons why we did not find support for the main hypotheses, but first we will discuss what we did find.

What was Found

There was a significant difference between treatment and no treatment controls. Focusing and Rational Emotive Therapy work over no treatment. This is particularly interesting since Focusing has not been considered as a stress management technique. This expands the clinician's repertoire of stress management tools. Also, Rational Emotive Therapy and Focusing may be considered to be broader in scope and deeper in therapeutic usefulness than are the usual stress management techniques, for example breathing or progressive relaxation. They offer options which provide the client with the possibility of greater meaning than other techniques and circumvent the usual criticisms of stress management which are that stress management is superficial, cosmetic, or simplistic.

Another finding revolves around the issue of client satisfaction and drop-out rates.

Following ethical guidelines for research with human subjects, subjects were told that they were free to drop out of the study on a number of occasions and indeed ten subjects did drop out after having begun receiving services. Nine of these subjects dropped out of the Focusing treatment and only one dropped out of the RET treatment. Of the nine that dropped out,

five had been RET-Classed and four had been FOC-Classed and the same proportions were matched and mismatched to approach. This information is important in that while Focusing was as successful in reducing stress as was RET, subjects may have found it initially difficult to accept the approach and this has implications for utilizing Focusing as a stress management technique. Nine drop-outs from Focusing represents 9/32 or 28%. Investigating the reasons why people dropped out resulted in one predominate comment from subjects: "I don't have time to take stress management training!" However, the investigator suspects that the real reason has more to do with the idea that Focusing is more "foreign" to the usual cognitive ways in which we function in our daily lives and so more people had difficulty adapting to a Focusing way of addressing stress than to a Cognitive RET way of addressing stress. To approach someone and introduce the idea that bodily felt experiences hold solutions to stressors is considerably more foreign than introducing the idea that cognitions affect our reactions to stressors. RET, as a cognitive approach, applies much of the usual logic to stress which we utilize in problem solving on a daily basis.

However, in pondering the feasibility of utilizing Focusing as a viable stress management technique, one needs to weigh the possibility of higher drop-outs at the very start of the treatment against the statistically significant results presented in the previous chapter showing that subjects receiving Focusing were more satisfied than were clients receiving RET. It would

seem that once subjects are "over the hump" in understanding how Focusing works, that they are more satisfied with services received through a Focusing modality than with RET.

There were significant correlations among client satisfaction, use of technique, and outcome. Furthermore, the statistically higher levels of satisfaction found among subjects receiving Focusing indicates that not only is Focusing advisable providing that subjects stay with the approach but also that paying attention to client satisfaction and practicing the techniques between sessions generally may lead to better outcome. The implications will be discussed towards the end of this chapter.

Assuming that the design was appropriate and that results are real, this means that perhaps personality characteristics and differential outcome might not be as strongly linked as is outcome with client perception of therapy and the client's behavioural inclination to utilize what he or she learns in the course of and after treatment.

Possible Reasons for Not Finding Significant Results For the Main Hypotheses

The above section was based on the assumption that the study was appropriately executed with high power, etc.. However, as with any study in this area, there are limitations which may provide alternative reasons other than the conceptual ones advanced above explaining why the main hypotheses were not supported.

While the design would appear to be a reasonable test of the hypotheses that certain classes of individuals would benefit more from a specific kinds of treatments, there were a number of limitations which will be discussed below in the exploration of possible reasons for not finding significant results for the main hypotheses.

(i) Power of Statistical Tests

While there are several reasons why power might be low in a test, the interpretation of low power remains the same (Cohen, 1988). Low power means that there might have been a significant difference but because of problems with subjects N, alpha level, type of test (unidirectional or bidirectional), parametric versus non-parametric, and the size of the difference between the two means, the test could not identify a real difference were one to exist. Power was low in the treatment by classification interaction analysis. As such, it cannot be said that evidence of differential effectiveness was not there, but low power means that we could not pick up on these differences were they to exist.

There are a number of ways though that the methodology could have been improved in order to have been able to say something more definite about treatment by classification interaction studies of this kind. These are discussed in the following section.

(ii) Methodological Limitations

Manpower, financial, and site constraints defined this study

to a large extent. Low power was related to insufficient numbers of clients and so important relationships could not possibly have been statistically revealed. Fortunate to have volunteer staff and enough money for advertisement costs, this study made it clear that adequate research in the area of personality variables predictive of differential outcome would involve more resources than were available for this study. However, if one were to erase all of these real life constraints, research design could have been improved in a number of ways:

(a) Longer Training Period

Each subject received fifteen hours of group administered stress management training. Group facilitators reported that rapport and trust between group members evolved by the third meeting. As such, participants may not have been wholly comfortable and at ease in disclosing themselves until the very end of the training period. Perhaps seven or eight sessions would have been more appropriate than five in ensuring that participants fully engaged in the group process of stress management training. This methodological improvement may have resulted in larger decreases in stress which might have translated into a clearer classification by interaction effect.

(b) Larger Sample Size

The study had a total of ninety-five participants (65 treatment subjects, 30 control subjects) after screening and drop-outs. At the onset of the study, it had been hoped that greater numbers of volunteers would respond to advertisement.

(c) Classification Variables

The literature did not provide evidence that one predictor might be more powerful than another in exploring the differential outcome hypothesis. We selected the classification variables mostly out of convenience and clinical hunch. However, selecting subjects on the basis of a split half of upper versus lower locus of control, based on empirical evidence, would have been a more prudent choice of classification variable.

(d) Criterion Measure

The SCL-90-R was chosen because of its ability to pick up on a broad range of symptoms. However, that characteristic itself might have limited the possibility of detecting differential outcome. If the presenting symptom was anxiety for example, a significant decrease in that symptom might be masked by the fact that other symptoms also assessed by this measure showed no change. In this sense, choosing a broad based tool may be a limitation to this kind of research.

(e) Therapist Experience

Some group facilitators could have been more experienced in the stress management technique they were delivering. While they recorded their sessions and received weekly supervision, there were a few instances, especially during the first two sessions, where inexperienced therapists did not clearly know how to handle a situation within the context of that approach's techniques. While the incidents were small, more experience in the stress management technique being delivered may have increased the

effect.

(f) Biorhythm Control

This study did not control for the time of day of delivery of services and the differential effects of time of delivery could have on the learning potential of subjects experiencing the learning during different phases of their biorhythms (Klein and Armitage, 1979; Kleitman, 1970).

(g) Control for Interactions on Control Group

There was no control for interactions on the waiting conditions. While this group was similar to the treatment groups in terms of level of stress displayed on the criterion measure, the control subjects were not categorized as being sensing-and-cognitively-anxious or intuitive-and-somatically-anxious as were the treatment subjects.

(iii) Choice of Therapies

It was felt that the choice of the two therapies was appropriate to the variables being investigated for differential outcome. The two therapies were sufficiently different in theory and sufficiently different in practice to distinguish them not only from each other but also in terms of the "poles" inherent in the definition of the variables utilized. Not only were the theoretical underpinning quite different, but also the procedures followed and techniques utilized in the delivery of services was very different one from the other. A common criticism of comparative research is that the two approaches utilized are not sufficiently different and so the possibility of differential

outcome is diluted. It is not felt that this was the case for this study.

(iv) Assumption that Matching is Best for Optimal Outcome

Perhaps one implication for the concept of matching is this: Perhaps it is not a matter of matching approach to the client's habitual style of displaying stress or habitual preferences regarding types of information they prefer to deal with but rather, perhaps it is a matter of providing the client with training or an approach which develops the less developed side of that individual. By emphasizing a very different way of viewing stress problems from that which the client habitually prefers, we may be broadening the coping abilities of the individual.

This might explain why the two classifications improved equally regardless of being matched or mismatched. There may have been a cancelling effect in that mismatched people were given something which broadened their usual understanding of themselves. Perhaps for some people, encountering a new approach is more helpful, and perhaps with others, refining their habitual approach is more helpful. The classification of subjects for this study did not take this possible variable into account.

Is this Line of Research Feasible?

Stiles, Shapiro and Elliot (1986) point out that while there is consensus regarding the efficacy of psychotherapy over no treatment, there is no consensus regarding the relative effectiveness of diverse therapies even when personality characteristics are addressed. The results of this study, if the

methodological limitations addressed above were resolved, might have supported their statements. However, Stiles, Shapiro and Elliot (1986) point out that there are:

"serious strategic difficulties with the matrix paradigm. The number of cells created by the multidimensional matrix renders the scheme unrealistic as a basis for progress. In principle, to evaluate 10 types each of clients, therapist, technique and setting, a matrix of 10,000 cells must be used! In practice, Smith et al. (1980, pp. 95-98) noted that even a database of some 500 studies is insufficient to yield reliable estimates for all cells of an eight diagnoses by six treatments matrix. At the level of the single study, the National Institute of Mental Health's (NIMH; 1980) collaborative project on the psychotherapy of depression illustrates the enormous costs of comparing just 12 cells: four treatments (cognitive therapy, interpersonal therapy, and clinical management with imipramine pharmacotherapy or with placebo) X one category of client problem (unipolar depression) X three regional centers. Horowitz (1982) persuasively outlined the difficulties facing psychotherapy researchers trained to conduct large-scale matrix paradigm studies, who are confronted with the reality of the resources and time required to complete but a single study to that standard".

These difficulties were definitely encountered in this study and this is not surprising considering the complexity of the phenomena as presented in the first Chapter. While there is still logical appeal in this approach, Stiles, Shapiro and Elliot (1986) point out that after 20 years of work we still have not been able to clearly identify the variables which lead to differential effectiveness and that this knowledge, if ever identified will come very slowly. In sum, it is very difficult, if not impossible, to capture the complexity of human functioning on the stress phenomena through the application of a few questionnaires.

Not only might our assessment tools be too non specific to identify relevant differentiating variables at the onset, but they may also be too insensitive to particular outcome changes which differentiates treatments (Stiles, Shapiro and Elliot, 1986). For example, overall, subjects experience a decrease in reported levels of stress. However, the meaning, quality, long term implications of the intervention, and range of impact on the various aspects of the person's life are not assessed through the usual outcome paradigm and yet, these factors may be important differentiating qualities between therapies for certain types of individuals. We do not have access or the tools or the methodologies to investigate these possibilities.

Therefore, it is difficult to answer whether or not this line of research is feasible. The results of this study however do point to areas of research which might be more appropriate than pursuing the personality-match-to-approach idea. These are discussed below.

Are we Looking at the Right Things?

This section will examine factors which were not considered in this study but might have been important in mediating results or gaining a fuller understanding of the results. Most of the items discussed below come from anecdotal information gained during the course of executing this study.

(i) Social Support

This study did not address the issues of social support as it relates to stress either prior to treatment or during the

treatment process. It is possible that group interaction was therapeutic in and of itself and that this factor was partially responsible for the lack of hypotheses support. Many of the therapists reported that the break provided during each three hour session was filled with animated friendly banter. One group agreed to keep on meeting after the one-month follow-up period had expired. Several individuals reported to the primary investigator that one of the things which the study had brought to their attention was the loss of pre-marital male friends and how the study had made them aware of that loss. Their stress may have been augmented by a lack of social support provided through a male buddy group.

Therefore, an assessment of the subjects social system prior to admission into the study and an assessment of the impact of group interaction would have been useful information in discussing the results of the study and may have shed some light on why the main hypotheses were not supported. Is it possible that the positive impact of group interaction masked differential outcome due to matching of classification of subject to approach?

(ii) Therapist-Client Matching

Stiles, Shapiro and Elliot (1986) summarize the common features of therapies which are responsible for general effectiveness as warmth, rapport, and exposing the client to a new perspective. This study did not specifically assess the presence of these factors.

Nor was there any direct evaluation of therapist and client

matching. Indirectly, we have client satisfaction questionnaires and supervision of audiotapes which might have revealed any obvious therapist and client mismatches. However, when therapy is conducted in groups, these kinds of mismatches would probably be more difficult to identify than in one-on-one therapy. Therapists volunteering to conduct groups for this study were given the choice of which therapy they would deliver. In a different study, looking at the match between therapist and client characteristics might show a different result than the design of this study which looked at the match between therapy and client characteristics.

(iii) Motivation

One could go one step further and suggest that for certain subject pools, subjects share common features which are responsible for general effectiveness. Subjects for this study were well-educated, successful, motivated volunteers. Perhaps these were factors leading to good outcome regardless of classification or treatment modality. Lack of support for the main hypotheses may be in part due to the type of volunteers who made themselves available for this study.

Self-efficacy was probably high in this group of well educated, highly motivated individuals who had to cross many selection barriers to achieve admission into the study. Without the admission hurdles, perhaps a less motivated group would have comprised the subject pool and perhaps there would have been a decrease in self-efficacy affecting differential outcome.

Also, the sessions were called "training" and not "therapy", thereby providing subjects with a certain degree of perceived control which may have led to higher levels of self-efficacy.

(iv) Client Satisfaction And Use of Techniques

Results show that level of satisfaction with the services and extent to which subjects used the techniques learned at training during the one-month follow up were important in relation to outcome. Overall level of subject participation (as evidenced through use of techniques) (Orlinsky and Howard, 1986) and subject perception of having been helped or treatment effectiveness (as evidenced through reported satisfaction) (Luborsky et al., 1983) may be important results in this study and form a focus.

Subjects who are more satisfied with the services rendered use the techniques more often after training. This affects outcome. Perhaps client satisfaction and engaging clients in utilizing what is used in therapy outside of therapy are more relevant variables than personality as a predictor of outcome. We did not focus on these elements in this study but perhaps research should place more emphasis on satisfaction with services and use of techniques towards achieving the goal of optimal outcome for the client.

(v) Variables Predictive of Outcome

As shown in the multiple regression results, client satisfaction, cognitive anxiety, somatic anxiety, verbal reasoning and intuition do not appear to be predictors of

outcome. Perhaps other variables would be more useful as predictors of differential outcome.

(vi) Biorhythms

Controlling for individual biorhythms might not only clean up unclear results in this area of research but also provide for an alternative understanding of stress which may yield novel approaches to stress management. Lund (1974) points to the likelihood that stress-prone individuals may be identified through an examination of biorhythm desynchronization. Specific therapies might be developed to re-calibrate biorhythm systems. This approach may be more basic and relevant to stress management than the categorization of individuals according to personality characteristics, which can be thought of as secondary or as yet one more step removed from more primary processes which are more directly evaluated through an examination of biorhythms.

B) Implications for Clinical Practice

Focusing as a Viable Stress Management Technique

On a more positive note, Focusing can be successfully utilized for stress management. It works. Focusing does embody many of the elements found in currently accepted stress management techniques. It is similar to the body relaxation techniques in that it promotes a sympathetic body state where breathing and relaxation of muscles occurs in Step 1 of the approach. It goes beyond simple relaxation however in that solutions and understandings of stress are found through experiences in the body which are then symbolized into words that

fit the bodily felt experience. The experience reveals what is needed to reduce stress and so solutions come from the individual in a gentle and anchored-to-experience fashion. Focusing has been utilized for some time now as a general psychotherapy approach for a variety of difficulties, the same variety of difficulties for which other approaches have been utilized in efforts to assist clients. To this writer's knowledge however, Focusing has never been explicitly utilized for stress management training. Therefore, one value of this study is to have presented Focusing as a viable stress management tool which goes beyond simple relaxation of the body. This study also provides empirical research on this approach.

An implication for clinical practice however is that clinicians need to carefully introduce Focusing to offset the tendency for subjects to quit before having experienced the benefits of Focusing and before having had a chance to evaluate its benefits appropriately. As a technique which has a rationale somewhat foreign to the usual ways in which humans conduct themselves in this society, it appears to take longer for individuals to buy into this approach than perhaps to other approaches. This study experienced most of its drop-outs from the Focusing approach and yet individuals receiving Focusing reported significantly higher levels of satisfaction as compared to individuals receiving Rational Emotive Therapy. The exact reason for this relationship however remains unclear.

Client Satisfaction

Another implication for clinical practice emerging from this study is that client satisfaction is important to maintain on a session-by-session basis. The clinician can evaluate his services at the end of each session through a session evaluation form such as the one utilized in this study. This provides useful feedback to the clinician which he or she might not otherwise have unless an explicit effort is made to secure this kind of information. Clinicians may assume that everything is fine and clients may not realize the full power of their consumerism in receiving quality services from their clinician. Since this study shows that client satisfaction is related to outcome and related to the extent to which clients use techniques after training, clinicians need to pay more direct attention to satisfaction.

However, more research is needed in the area of identifying individual response styles when reporting satisfaction.

Use of Techniques

Another finding from the study which has implications for clinical practice is that clients who utilize the techniques have a better chance of benefiting from them. That may sound silly but it would be interesting to find out the extent to which clinicians track the frequency of use of what clients learn in therapy when they are between sessions. As Davis, Eshelman, and McKay (1988) point out, stress management techniques do not work, cannot work, unless they are utilized religiously in order to

recalibrate the various systems of the individual which have become habituated to a certain response style as a results of exposure, often over a long period, to a variety of subtle and not so subtle stressors. Habits are hard to break and take an act of will to change. Clinicians might assume that clients utilize techniques between sessions when in fact they might not. Behavioural therapies tend to be better at this kind of practice tracking through the prescription of log sheets and record books which clients maintain between sessions. Clinicans generally however need to be more aware of the importance of practice of stress management techniques where insight alone can be insufficient when dealing with a phenomena which is so obviously linked with physiological processes.

C) Implications for Research

There are several implications for further research which arise from this study:

Choice of Predictor Variables

The multiple regression would indicate that as far as choosing predictor variables in the study of outcome, the choices made in this study for classification purposes could not be substantiated as good ones. Other limitations prevented this study's ability to either support or contest the Uniformity Myth. Power was low and so there might have been something there, had sample size been larger. However, subsequent research which could overcome some of the limitations encountered in this study might have a better chance at further exploring the idea of

utilizing personality variables as predictors of differential outcome. Controlling for level of satisfaction and ensuring the practice of techniques by clients through more explicit encouragement than was given in this study might yield more interpretable results than did this particular study.

Client Openness to New Approaches

Does the client prefer to keep things the same or does the client display a preference for variety and change which would make that individual open to re-framing or developing novel coping mechanisms? Assessing this factor prior to the kind of research which this study represents would control for something which could seriously affect the results. There could have been varying degrees of openness to new experience found among members of each classification ranging from some who are not at all open to viewing reality from a new perspective to some who are quite open to re-framing experience and understanding.

The Neo Personality Inventory (Costa and McCrae, 1985) has subscales under the domain of "openness" which might have been a useful measure of the extent to which a person is willing to entertain and integrate a new approach.

A useful measure of this might be one in which a person evaluates the degree to which the approach is different from his or her usual way of looking at things and then rates its value or subject interest in continuing with that way of understanding stress and stress management.

Researchers may find it useful to focus on this aspect in

future research when exploring differential outcome.

Social Support

Anecdotal information gleaned through the course of executing this study indicates that some attention to the curative power of social contact for stress should be paid in this kind of research. Assessment of social support systems pre and during intervention might be important to outcome over and above the impact of the interventions themselves.

Pursuability of this Line of Research

A last item regarding implications for research involves the larger view and reality that capturing the complexity of human functioning is always a very difficult task. An attempt was made in Chapter 1 to capture the complexity of the stress phenomena for any given individual. Is the stress acute or chronic? Is the stress perceived as good or bad? Is the stress even perceived at a conscious level? Is the stress reaction a reflection of genetic predisposition? How disruptive is the stress symptom to the individual? How does the individual appraise the stressor and his or her ability to deal with it? To what extent is dealing with stress incorporated into the overall calibration of the individual's feedback systems? How easy or hard is it to dislodge a person from that "groove"? Does a person's reactivity level have implications for short term versus longer term outcome? How aware is the person of the true stressor, their own displacements, their own projections? To what extent is a person's stress self-inflicted through poor

lifestyle habits and how does the continuation of poor lifestyle habits mediate therapy and outcome? At what stage in the stress recovery does therapy intervene and how does that impact outcome? Is the individual's analysis of his or her own stress realistic? These questions deal with all sorts of fine details which are hard for the investigator to tease out for the purposes of meaningful outcome research. Each question can become a study in its own right. When one views these complexities with the logistic complexities of running these kinds of studies, one appreciates that research in this area has a lot of work to do and that as Stiles, Shapiro and Elliot (1986) point out, we have a long long way to go.

Conclusions

This chapter discussed the results of the study. Discussed were whether or not this study was a reasonable test of the hypotheses, what was found in this study, and possible reasons why the main hypotheses were not supported. Also, this chapter presented implications for clinical practice and research arising from the results.

The main value of this study was to introduce Focusing as a viable stress management technique, discuss limitations of this kind of research, and offer possible focal points for future research in the area of utilizing variables as predictors of differential outcome.

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APPENDIX A

Advertisement

STRESSED????

Researchers at the UNIVERSITY OF OTTAWA
are looking for English-speaking males between
the ages of 25 and 45 to assist in a study of
stress-reducing techniques. Selected participants
will receive 15 hours of stress management training.

Call: Suzanne Weld
School of Psychology
University of Ottawa
564-9483

VOUS SOUFFREZ DE STRESS????

Une equipe de chercheurs de l'Universite d'Ottawa
est a la recherche de sujets masculins, ages de 25 a 45 ans,
de langue anglaise, pour une etude sur des methodes
de diminution du stress. Les sujets choisis
beneficieront d'une quinzaine d'heures de formation au cours
desquelles ils apprendront a mieux transiger avec le stress.

Contactez: Suzanne Weld
Ecole de Psychologie
Universite d'Ottawa
564-9483

APPENDIX B

Standardized Telephone Screening Procedure

Thank you for calling. We will be conducting a research study on different stress management approaches aimed at decreasing levels of stress experienced by men between 30 and 45 years of age.

Are you between 30 and 45 years of age?

YES _____ NO _____
Answer must be yes

(If no, thank him for calling and say goodbye)

What is your age? _____

I would like to tell you about the project and what is involved. Is this a good time. This will take about 15 minutes.

YES _____ NO _____

(If no, arrange for a better time) Phone: _____

When: _____

This study has been approved by the Research Ethics Committee of the University of Ottawa. The project is supervised by a registered psychologist in the province of Ontario.

We are looking for people with particular characteristics for our study. There will be two testing sessions in addition to this phone call before we know whether or not you will be a participant. In the event that you do not have the characteristics that we are looking for, we will provide feedback on the tests you have taken. Also, you are free to discontinue your participation with this study at any time.

Participation in this project involves:

1. Answering some questions during this phone call.
2. Coming in for two testing sessions. The tests are measures of stress, personality, and aptitude and are all pencil and paper tests.
3. Having your physician fill in a questionnaire to ensure that your participation in our study does not endanger your health.

4. Participating in a total of five consecutive weekly group session lasting approximately three hours each (15 hours of services). The group will consist of a maximum of six participants and one counsellor who will be either an experienced therapist or a senior graduate student in the doctoral clinical psychology programme.
5. Filling in brief questionnaires after each session and keeping a brief log between sessions.
6. Filling in two questionnaires one month after the end of the training at which time you will be coming in to receive feedback on your test results.

In total, your involvement in this study will take at most 25 hours spread approximately over two months.

Are you still interested in becoming a participant?

YES _____ NO _____
Answer must be yes

(If no, inquire if the person requires a referral and record it: _____,
say thank you and goodbye.)

(If yes, continue)

If you are selected, there is a possibility that you may be placed on a waiting list for approximately 5 to 6 weeks. In the event of such a delay, would you still be willing and able to participate in the study?

YES _____ NO _____
Answer must be yes

(If no, inquire if the person requires a referral: _____,
say thank you and goodbye.)

(If yes, continue)

Now that you know more about the extent of your involvement in the study, I would like to begin by asking you about a dozen questions. If you meet these criteria, we will be setting up a time for a testing session. Okay?

1. Is English your first and still dominant language? _____
Answer must be yes

(If no, ask if the person requires a referral and record it:

say thank you and goodbye.)

(If yes, continue)

2. Do you experience any problems related to alcohol/drugs?

Answer must be no

(If yes refer to AA (523-9977), Rideauwood (728-1727), or the ROH (724-6508), thank the caller and say goodbye.)

(Record referral: _____)

3. Have you received any psychiatric or psychological treatment in the past year?

Answer must be no

(If yes, ask if the person requires a referral and record it:

say thank you and goodbye.)

4. Will you be participating, as far as you now know, in any form of psychological, medical or psychiatric treatment in the next three months? (eg. scheduled surgery, some other already planned group sessions through some agency)

Answer must be no

(If yes, ask if the person requires a referral and record

it: _____
say thank you and goodbye.)

(If no, continue)

5. Have you had a medical check up in the past year?

Answer should be yes

(If no, go to question 7)

(If yes, continue)

6. Did your medical check up result in a clean bill of health?

Answer must be yes

(If no): Specify: _____

7. Can you go have a medical check up so that we may consider you for inclusion in this study?

Answer must be yes

(If no, ask if the person requires a referral and record it:

say thank you and goodbye.)

(If yes, continue)

8. Have you ever been treated in the past for a stress-related symptom such as hypertension or ulcers?

Answer must be no

(If yes): Specify: _____

If it sounds quite severe, ask if the person requires a referral and record it:

say thank yo and goodbye.)

(If no, continue)

9. In the past year, have you experienced the following:

Detention in Jail _____

Death of a Spouse _____

Unemployment _____

Marital Separation from mate _____

Death of a close family member _____

Major personal injury or illness _____

Marriage _____

Answers must be no

(If yes, ask if referral is required:

say thank you and goodbye.)

(If no, continue)

10. Now, on a scale of 1-10, how would you rate the degree to which you are stressed as compared, in your own estimation, to most other people. Zero would be very much less, five would be about the same as other people, and ten would be very much more than other people.

0	1	2	3	4	5	6	7	8	9	10
Very					About the					Very
Much					same as					Much
Less					others					More

Rating should be between 4 and 9. Ask the caller why he would say that about his rating.

DISPOSITION OF CALL

1. Does not meet criteria.

Basis of rejection: _____

Referred to: _____

2. Meets criteria.

So far, you seem suitable for this study. Let me take your name and phone number and set up an appointment for you to come in for the first of two testing sessions before the groups can begin. Okay?

Just before that however, I would like to say that while we are very pleased to see that you are interested in the study, I want you to know that you are not, at any point in time, obligated to continue with the study. Also, if you experience any distress during the project, please feel free to speak to your counsellor or all me.

If, for some reason you are not selected to go on with the study as a result of the testing, you will be given feedback on the testing you will have taken. This feedback will be provided to you either in a group or individual setting. Also, if you are

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not selected as a subject for this study, but you would like to know where to go to receive services, we will provide you with a number of possible alternatives.

NAME: _____

TEL.: _____ (W)

_____ (O)

Inform prospective subject of date, time and place for the group testing session and give directions for parking, etc..

DATE: _____

TIME: _____

Thank you very much for your interest and cooperation. I would like to give you a number to protect confidentiality. Please put this number on a piece of paper and put it in your wallet. At the group testing session you will need it to locate your envelope of materials. Alright? Thank you and I look forward to meeting you. Goodbye.

ASSIGNED FILE NO.: _____

APPENDIX C

Instructions for Initial Testing Package

Once subjects were seated, comfortable and had received their testing package, the following instruction was delivered:

"Welcome to our study. As you already know, this is the first of two testing sessions to see whether or not you have the particular combination of characteristics we are looking for to test our hypotheses. Each test describes one characteristic.

Also, as you already know, you will receive about three hours of feedback on these test results whether or not you participate in the study beyond this first testing session. Please be aware that the more accurately you fill in the questionnaires, the more personally meaningful the feedback of your results will be for you.

Gentlemen, if you will please now open your envelopes I would like to go through the contents with you one item at a time and tell you a little about each of the tests.

The first item is a consent form which basically outlines the same information which we gave you when you initially called us about the study. I would like you to take your time in reading it. Please feel free to ask any questions. (Wait & field any questions).

Would you please sign and hand in the consent form. We will give you a copy to take home with you before you leave today. (Assistant gathers the forms which will be witnessed while the subjects are filling in the questionnaires).

The next item is the physician's letter and questionnaire. As we indicated to you on the phone, we need to ensure that your health is not compromised by your participation in this study. That is, if you need medical attention, we would prefer that you be getting that attention rather than be participating in this study. Please read the letter which we will be sending to your doctor and have a look at the questionnaire which he or she will be filling in. (Wait) Your physician will need your consent in order to fill in the questionnaire so please fill in the top section of the questionnaire. (Wait) Please hand in these forms. (Assistant collects forms and while the subjects are filling in questionnaire, assistant checks that the information is complete and that we can locate the address of physician identified by the subject on the form).

Now I would like to tell you a little bit about each of the questionnaires before you fill them in.

The first questionnaire is the blue sheet. It is called the SCL-90-R which stands for Symptom Check List. This is our main measure of your stress level. Please note that it is a two sided sheet. The SCL-90-R will tell us how stressed you are compared to most other people.

The second questionnaire is the Cognitive Somatic Anxiety Questionnaire. It is a 14 item questionnaire which tells us something about the general way in which you experience stress. Due to past learning, experience, and genetic factors, you may experience and display your stress in generally either a

cognitive or somatic way. There are no right or wrong answers here. As you know, we are interested in finding out what combination of personality factors help us figure out which stress management approach works best with different people.

The next questionnaire is the Multidimensional Health Locus of Control Scale. This questionnaire tells us something about what factors you think are responsible for your state of health.

The next questionnaire is called the Rational Behaviour Inventory. This questionnaire tells us something about your belief system and how your beliefs might mediate your response to a stressor.

Next we have the Myers Briggs Type Indicator. Please answer this questionnaire on the computer sheet and not in the booklet. Note that the answer sheet already has your number on it so all you have to do is fill in the little windows here (hold up sheet and indicate) that correspond to the question numbers from the questionnaire (hold up questionnaire). There are 186 questions in all. This questionnaire describes your preferences and we are interested in seeing how a person's preferences might impact the degree of benefit which different people get out of different stress management approaches.

That's all the testing for today. Please answer each question. Before starting a particular test please make sure that you have read the instructions which go with that test carefully.

If you have any questions at any time please feel free to

ask."

Questions are fielded. As subjects work through the questionnaires, consent and physician forms are checked.

When the subject has completed the testing, all of that subject's materials are placed back into his numbered envelope, he is given his copy of the consent form, any problems with the physician's questionnaire is clarified, and the subject's next testing appointment is booked.

APPENDIX D

Consent Form

This form provides your consent to participate in a research study. The study is being conducted at the University of Ottawa under the direction of Dr. H. P. Edwards, Dean of Social Sciences, and carried out by Suzanne Weld, B.A., Doctoral Candidate.

The purpose of the study is to investigate the differential effectiveness of types of stress management approaches.

Selection for this study will be made on the basis of a number of criteria. That is, subjects may or may not be selected for participation in the study on the basis on individual characteristics. However, your consent is required in order to carry out this screening process and then to provide services should you be selected to participate in this research.

The stress management approaches being investigated are designed primarily to help learn ways of dealing more effectively with stressful events. However, because individuals will be assigned randomly to either of two treatment groups or to the control group, there can be no choice as to the condition to which any given person will be assigned. If assigned to the control group, there may be a 5-6 week delay in receiving services and feedback of test results.

Subjects selected, for the treatment groups, will meet for three hours per week for five consecutive weeks in small groups conducted by experienced counsellors. The counsellors will be either practicing psychotherapists from the region or senior doctoral candidates in clinical psychology. All counsellors will be supervised by registered psychologists. Part of this supervision involves the audio taping of the sessions in order to ensure that the therapists are providing a specific service.

In addition to your participation in the groups, we will be asking you to fill a number of questionnaires. One questionnaire will be filled in by your physician. A variety of other questionnaires, most quite short in length, will be filled in by yourself during the testing sessions, after the end of each session, in between sessions, and one month after the end of the sessions at the time you receive your test result feedback.

If selected for the control groups, there will be a 5-6 week waiting period. At the end of this waiting period we will ask you to fill in one questionnaire and we will provide feedback on the testing taken during the two testing sessions. At that time, and if you still desire services, services will be provided

either in the form of 5 consecutive group sessions (3 hours each) or 5 consecutive individual sessions (1 hour each) if your schedule does not permit participation in the group sessions.

Whether selected for treatment or control groups, all subjects will minimally participate in two testing sessions and receive feedback on the testing results. Maximally, subjects will receive testing, services and feedback on testing results.

There are no known negative effects from the treatments to be used in this study. This study has been approved by the Research Ethics Committee of the University of Ottawa.

We ask that you inform your counsellor if you begin any medication or alternate psychotherapy programme during the course of this study.

Any personal information from your physician, test results, interview materials, or feedback materials will be kept strictly confidential.

Finally, you are free to drop out of the study at any time.

I am informed of, and agree to participate in this study.

Signature

Witness

Date

APPENDIX E

Physician's Letter and Questionnaire

(On University of Ottawa Letterhead)

Date:

Dear Doctor:

Your patient has expressed an interest in taking part in a study being conducted at the University of Ottawa under the direction of Dean Edwards, Ph.D.. The purpose of the study is to investigate the differential effectiveness of two stress management programmes.

In order to satisfy ethical and standardization requirements for the study, certain inclusion/exclusion criteria must be met. To this end, would you be so kind as to complete the attached brief questionnaire regarding your patient and return it to us as soon as possible in the addressed and stamped envelope provided?

The questionnaire includes a paragraph signed by your patient authorizing you to release the requested information.

If you would like further information regarding this questionnaire or the nature of the research, please feel free to call Suzanne Weld at the University of Ottawa (564-9483).

We thank you for your cooperation in our research on stress management.

Yours sincerely,

S. Weld
Doctoral Candidate

H. P. Edwards, Ph.D.
Dean
Social Sciences
University of Ottawa

AUTHORIZATION:

Patient's Name: _____

Doctor's Name: _____

Date: _____

I hereby authorize the above named physician to answer the following questionnaire on my behalf. This information will be used only for research purposes and strict confidentiality will be maintained.

Client's signature_____
Witness

QUESTIONNAIRE:

- | | Yes | No |
|--|-----|-----|
| 1. Is the client's stress of a severe enough nature to warrant pharmacological treatment? | ___ | ___ |
| 2. Would absence of medical attention to the client's stress symptomatology, if there is no change in degree over the next three months, result in a compromise to the client's physical well-being? | ___ | ___ |
| 3. Has this client been prescribed medication to assist in dealing with stress over the past year? | ___ | ___ |
| 4. Has this client received a full medical check-up in the past year? | ___ | ___ |
| 5. And has this check-up resulted in a clean bill of health? | ___ | ___ |
| 6. In your opinion, would you say that the stress levels that your client is currently experiencing are mild to moderate and are not an immediate threat to his physical health? | ___ | ___ |

APPENDIX F

Focusing Manual

Instructions to staff personnel conducting group testing:

Explain that "this exercise consists of a set of instructions in thinking which has been found to be helpful to some people. It isn't meant to be a test, and no one will ask you what you thought about. You will be asked whether you have found this method of thinking helpful. That is all".

Explain to the subject that "the exercise involves listening to a tape for just seven minutes. I will knock on the door signaling the end of the exercise so you don't have to worry about the time going by. Do not think about the time going by but rather put your attention into the taped exercise".

Turn on the tape and leave the room for 7 minutes. Upon return, have the client fill in the Postfocusing questionnaire.

Tape Recording

This is going to be just to yourself. What I will ask you to do will be silent, just to yourself. Take a moment just to relax.....(5 seconds).

All right - now, just to yourself, inside you, I would like you to pay attention to a very special part of you.....(5 seconds).

Pay attention to that part where you usually feel sad, glad, or scared.....(5 seconds).

Pay attention to that area in you and see how you are now.

See what comes to you when you ask yourself, "How am I now?" "How do I feel?" "What is the main thing for me right now?"

Let it come, in whatever way it comes to you, and see how it is.....(30 seconds).

If, among the things that you have just thought of, there was a major personal problem which felt important, continue with it. Otherwise, select a meaningful personal problem to think about. Make sure you have chosen some personal problem of real importance in your life. Choose the thing which seems most meaningful to you.....(10 seconds).

Of course, there are many parts to that one thing you are

thinking about - too many to think of each one alone. But, you can feel all of these things together. Pay attention there where you usually feel things, and in there you can get a sense of what all of the problem feels like. Let yourself feel all of that.....(30 seconds).

As you pay attention to the whole feeling of it, you may find that one special feeling comes up. Let yourself pay attention to that one feeling.....(1 minute).

Keep following one feeling. Don't let it be just words or pictures - wait and let words or pictures come from the feeling.....(1 minute).

If this one feeling changes, or moves, let it do that. Whatever it does, follow the feeling and pay attention to it.....(1 minute).

Now, take what is fresh, or new, in the feel of it now.....and go very very easy. Just as you feel it, try to find some new words or pictures to capture what your present feeling is all about. There doesn't have to be anything that you didn't know before. New words are best, but old words might fit just as well. As long as you now find words or pictures to say what is fresh to you now.....(1 minute).

If the words or pictures that you now have make some fresh difference, see what that is. Let the words or pictures change until they feel just right in capturing your feeling.....(1 minute).

Now I will give you a little while to use in any way you want to, and then we will stop.

Knock on door at end of 7 minutes and have subject fill in questionnaire.

APPENDIX G

Postfocusing Questionnaire

CLIENT NO.: _____

In this questionnaire we are seeking your help in evaluating the instructions which were just read to you. Please do not omit any questions. Just be honest, there are no right or wrong answers. Answer as fully as you can.

1. Please describe what was happening to you in the last 7-8 minutes.

2. How did the feeling change after you got the words or picture?

3. What was the best thing about doing this?

4. What was the worst thing about doing this?

5. What surprised you most about all this?

6. How was thinking this way different from the way you usually do it?

7. Many people get lost near the start and then the rest does not make sense. Did that happen to you?

Yes_____ No_____

8. Some people use words and feelings. Others use pictures and feelings. Which did you find most important?

Words_____ Pictures_____ Neither_____

THANK YOU

APPENDIX H

Rating Client Experiencing Ability

Client No. _____

Rater: _____

Scoring

Rater is SURE the subject DID FOCUS _____

Rater does not know, but thinks the subject PROBABLY
DID FOCUS _____

Rater cannot tell whether or not subject focused _____

Rater does not know, but thinks the subject PROBABLY
DID NOT FOCUS _____

Rater is SURE the subject DID NOT FOCUS _____

APPENDIX I

Client Satisfaction Questionnaire

Post Session #: _____

File #: _____

Please help us improve our program by answering some questions about the services you have received TODAY. We are interested in your honest opinions, whether they are positive or negative. Please answer all of the questions. We also welcome your comments and suggestions. Thank you very much, we really appreciate your help. Circle your answer:

1. How would you rate the quality of service you have received today?

5	4	3	2	1
Excellent	Good	Neutral	Fair	Poor

2. To what extent is our program meeting your needs?

5	4	3	2	1
Excellent	Good	Neutral	Fair	Poor

3. If a friend were in need of similar help, would you recommend our program to him or her?

5	4	3	2	1
Definitely	Probably	Neutral	Probably Not	Definitely Not

4. How satisfied are you with the amount of help you have received today?

5	4	3	2	1
Quite Satisfied	Mostly Satisfied	Indifferent	Mildly Dissatisfied	Quite Dissatisfied

5. Have the services you received helped you to deal more effectively with your problems? (Not applicable post first session only.)

5	4	3	2	1
Yes, a great deal	Yes, somewhat	Neutral	No, not really	No, made things worse

6. In an overall, general sense, how satisfied are you with the service you have received?

5	4	3	2	1
Very Satisfied	Mostly Satisfied	Neutral	Mildly Dissatisfied	Quite Dissatisfied

7. Please include below any further comments that you may have.

APPENDIX J

Inter-Session Log Sheet

Client No. _____

Therapist _____

Between Session # _____ and # _____

Date: _____

Situation: _____

Signs of Stress: _____

Initial Tension Level:

0	1	2	3	4	5	6	7	8	9	10
None					Moderate					Extreme

What you did to deal with the stress: _____

Resulting Tension Level:

0	1	2	3	4	5	6	7	8	9	10
None					Moderate					Extreme

APPENDIX K

Demographic Information

PARTICIPANT NO.: _____

Would you please complete the following:

AGE _____

LEVEL OF EDUCATION _____
(include partially completed degree)

OCCUPATION _____

HOW YOU FOUND OUT ABOUT THE STUDY:

Citizen Ad - Living Section: _____

Citizen Ad - Business Section: _____

CBO Radio Interview: _____

CHEZ Radio Interview: _____

Pennysaver Ad: _____

Cinemaguide Ad: _____

Fulcrum Ad: _____

Notice on your office board: _____

Notice on campus board: _____

Your Employee Assistance Program: _____

Your in-house publication at work: _____

Through your wife or friend: _____

Your doctor: _____

Other: _____

If you wish to receive a summary of the results of this study, please write in your name and address on the envelope provided. Thank you very much for your assistance.

APPENDIX L

Feedback Summary Sheet

Participant #: _____

MBTI Type: _____

	Participant Result	Group Mean Range	General Population Mean
SCL-90-R	_____	43-(63.0)-81	50
RBI	_____	02-(14.8)-29	26.35
Verbal Reasoning	_____	52-85	30-70
Abstract Reasoning	_____	27-66	30-70
Experiencing Ability	_____	01-(02.6)-05	Norms not developed
Locus of Control	_____	12-(27.9)-36	25.55
CSAQ - Somatic	_____	07-(14.9)-29	Norms not
- Cognitive	_____	07-(14.5)-31	developed

Readings

- Davis, Martha, Eshelman, Elizabeth Robbins, and McKay, Matthew (1988). The Relaxation and Stress Reduction Workbook. Third Edition. Oakland: New Harbinger Publication.
- Derogatis, L.R. (1982). Self-report measures of stress. In Leo Goldberger and Shlomo Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects. New York: The Free Press.
- Ellis, A. and Harper, R.A. (1961). A new guide to rational living. Hollywood: Melvin Powers Wilshire Book Company.
- Gendlin, E.T. (1978). Focusing. New York: Everest House Publishers.
- Myers, I.B., and Myers, P.B. (1980) Gifts Differing. Palo Alto, CA: Consulting Psychologists Press, Inc..
- Selye, H. (1980). Selye's guide to stress research. Volume 1. New York: Nostrand Reinhold Co..

APPENDIX M

Use of Techniques

Participant No. _____

During the past month, how often have you utilized any of the techniques learned through your participation in the sessions?

Please put an "X" beside only one of the following:

None at all	_____
Once during the month	_____
2-3 Times during the month	_____
Once a week	_____
2-6 Times a week	_____
Once a day or more	_____

Of the strategies/techniques utilized, please describe, in your own words, what you used, in order of preference.

Most Used First:

1.

2.

3.

4.

5.

6.

7.

8.

APPENDIX N

Pearson Correlation Coefficient
(Treatment Subjects)

	SEN	COG	EA	RBI	LC	INT	SOM	VR	AR
SEN									
COG	.55 p=.00								
EA	-.17 p=.10	-.14 p=.14							
RBI	.28 p=.01	.46 p=.00	.05 p=.34						
LC	.15 p=.11	.06 p=.32	.05 p=.36	-.01 p=.47					
INT	-.90 p=.00	-.55 p=.00	.21 p=.05	-.29 p=.01	-.14 p=.13				
SOM	-.34 p=.00	.18 p=.08	.15 p=.13	.15 p=.11	-.06 p=.33	.38 p=.00			
VR	-.13 p=.16	.00 p=.49	.22 p=.04	-.17 p=.90	.10 p=.21	.14 p=.13	.20 p=.06		
AR	.08 p=.26	.05 p=.35	.19 p=.07	.18 p=.08	.20 p=.05	-.03 p=.39	.13 p=.16	.33 p=.00	
D1	.01 p=.47	.34 p=.00	-.12 p=.18	.20 p=.06	-.01 p=.46	-.05 p=.35	.29 p=.00	.14 p=.13	.09 p=.24
D2	-.13 p=.15	.20 p=.05	-.14 p=.14	.09 p=.24	-.04 p=.37	.13 p=.15	.26 p=.02	.23 p=.03	-.04 p=.37
D3	-.21 p=.05	-.18 p=.08	-.04 p=.38	-.15 p=.12	-.04 p=.37	.25 p=.02	-.04 p=.38	.14 p=.14	-.18 p=.07

Legend:

SEN = Sensing
 COG = Cognitive Anxiety
 EA = Experiencing Ability
 RBI = Rational Behaviour Inventory
 LC = Locus of Control
 INT = Intuition
 SOM = Somatic Anxiety

VR = Verbal Aptitude
 AR = Abstract Aptitude
 D1 = Difference 1
 D2 = Difference 2
 D3 = Difference 3