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A qualitative case analysis of mindfulness meditation training in an outpatient stress reduction clinic and its implications for the development of self-knowledge.

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A QUALITATIVE CASE ANALYSIS OF MINDFULNESS MEDITATION TRAINING IN AN OUTPATIENT STRESS REDUCTION CLINIC AND ITS IMPLICATIONS FOR THE DEVELOPMENT OF SELF-KNOWLEDGE

A Dissertation Presented

by

SAKI FREDERIC SANTORELLI

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ABSTRACT

A QUALITATIVE CASE ANALYSIS OF MINDFULNESS MEDITATION TRAINING IN AN OUTPATIENT STRESS REDUCTION CLINIC AND ITS IMPLICATIONS FOR THE DEVELOPMENT OF SELF-KNOWLEDGE

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Qualitative and quantitative methods were combined to examine the experience of eight adults referred for mindfulness meditation training (MMT) within the context of a group, out-patient, hospital-based, stress reduction clinic. Through interviewing, observation and document analysis, three aspects of experience were investigated: the subjective experience of learning meditation; the application of meditation-based coping skills in daily life; and the effects of the training on perception of self. Individual and cross-sectional case study methods were used to examine longitudinally, the classes and common patterns of experience of participants during and following the conclusion of the intervention.

In addition, the experience of participants was examined within the theoretical framework of Self-Knowledge Development Theory (SKT) in an attempt to understand how people at differing stages of self-knowledge, as delineated by the theory, experienced and utilized MMT.

Results suggest that: 1) the majority of participants showed reductions in medical symptoms (MSCL) and in clinically elevated levels of psychological distress (SCL-90R) on outcome measures; 2) common patterns of experience characteristic of mindfulness meditation practice emerged progressively during and following the intervention among patients with diverse diagnoses; 3) the interdependent nature of the formal and informal dimensions of mindfulness meditation may be particularly important in the development of positive long-term changes in health behavior in the lives of medical patients; 4) there is an interactive, learning cycle between skill development (formal meditation), application of skills in daily life (informal meditation), and perception of self that functions as a self-motivating force, fostering continued skill development following the conclusion of the intervention; and 5) there is variance in the participant's use of the intervention that appears to be consistent with and further defines elements of the Situational and Pattern stages of Self-Knowledge Development Theory.

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CHAPTER 1

INTRODUCTION

Purpose

This dissertation describes a qualitative case study that explored: 1) the subjective experience of adults engaged in Mindfulness meditation training (MMT) [Kabat-Zinn, 1990] within the context of a group, out-patient, hospital-based behavioral medicine clinic; 2) examined the possible relationship to and consequences of this learning on such areas as the development of coping strategies, the redesign of lifestyle, as well as possible changes in attitude and perception of self; and 3) makes an initial attempt to describe and understand the experience of participants in terms of Self-Knowledge Development Theory [Alschuler, Evans, Tamashiro & Weinstein, 1975].

Background

This research was conducted over a four-month period of time in 1990-1991 in the Stress Reduction Clinic, a clinical service of the Division of Preventive and Behavioral Medicine at the University of Massachusetts Medical Center.

Through interviews, observation, and document analysis, three aspects of the study participants's experience were investigated. These included: 1) the participant's

subjective experience of learning mindfulness meditation; 2) the various ways they attempted to apply meditation in their daily lives during and after the conclusion of the intervention; and 3) the possible effects of this training on their perception of self.

This research is an outgrowth of my interest in three interactive areas: meditation, medicine and education. First, meditation and medicine are becoming allied in contemporary healthcare and meditation has been proven useful as either primary or complimentary treatment for a variety of medical conditions including substance abuse [Marlatt, Pagano et al., 1980; Shafii, Lavely et al.,1975], chronic pain [Kabat-Zinn, Lipworth & Burney, 1985], hypertension [Benson & Wallace, 1972a], stress [Kabat-Zinn, Sellers & Santorelli, 1986; Kabat-Zinn & Skillings, 1989], chronic obstructive pulmonary disease [Kabat-Zinn et al, 1988] and anxiety [Kabat-Zinn, Massion, Kristellar et al., 1991].

As a long-time student of meditation I have been actively involved in the application of meditation or what has been recently termed "the consciousness disciplines" [Walsh, 1980], in contemporary medical and educational settings. In particular, I have become increasingly interested in understanding the interactive nature of the content of clinical meditation training eg. methods and

techniques taught, and the process of this training as experienced by learners.

Secondly, behavioral medicine, a relatively new interdisciplinary field focusing on the relationship between behavior (internal and external) and health, has welcomed meditation-based research exploring what has been termed "bio-psycho-social" factors in health and illness [Engle, 1977]. Recent evidence demonstrating the reversal of coronary artery disease (CHD) through lifestyle change alone, without the use of drugs or surgery [Ornish, Brown & Scherwitz, 1990: Ornish, 1990], and increasing epidemiological evidence that psychosocial factors are involved in the etiology and progression of CHD [Jenkins,1975; Williams, 1989], in the development of cancer [Speigel,Bloom el al, 1989; Speigel & Speira, 1991], and in illness in general [Kitawaga, 1973; Dohrewend, 1974; Syme, 1984] suggest the importance of psychosocial or psycho-educational support and treatment interventions. Behavioral medicine, in recognizing the necessity of merging the rigor of the laboratory with the directness and relevance of field settings for what has been termed "ecological validity," represents an interdisciplinary approach to healthcare that is now beginning to recognize the necessity and utility of both quantative and qualitative research methods for the development of increasingly refined and improved clinical treatment models.

Thirdly, because there appears to be a strong relationship between "lifestyle" factors and health, treatment models with an educational orientation towards "skill" development are becoming an increasingly important aspect of healthcare. The consciousness disciplines, with their emphasis on self-knowledge development and psychological competence, represent a distinct approach to psychological education. Just as Western psychological education is intended to "teach and demystify the behavioral sciences in a preventive-educational mode" [Shovalt, 1977, pg.473], so too is meditation training intended to "teach and demystify," thus enhancing a person's capacity for self-knowledge by offering a systematic method of self-inquiry based on a firm theoretical foundation derived from Eastern psychological paradigms that include developmental models of human growth [Wilbur, 1981; Brown & Engler, 1986; Dubs, 1987].

It appears that the confluence of Eastern and Western currents of self-knowledge education are contributing to a more comprehensive psychosocial educational orientation in medicine. For too long, patient education has been associated with information dissemination while "therapy" was kept in the hands of the professional. The results of this study underscore, from the patient's point of view, both the importance and the power of well-informed, bio-psycho-socially competent learners collaborating on their

own behalf with well-informed, bio-psycho-socially competent teachers in the service of increased wellbeing.

Significance

Although much has been reported about the results of meditation training utilized in a clinical setting [Shapiro, 1980; Murphy & Donovan, 1988], there is a paucity of data attempting to describe the range and patterns of experience of adults engaged in learning and applying meditation skills in the context of a clinical setting.

Hypothesis-seeking research is essential for a refined understanding of the meditative process when used clinically and for the design of valid research and improved clinical treatment models. There is a definite paucity of knowledge concerning the subjective experience of people learning meditation skills in a clinical setting, how they actually utilize and apply meditation training as a self-regulatory coping strategy during and following the conclusion of a clinical intervention [Shapiro, 1980; Kabat-Zinn, et al.,1986] and what effect, if any, this learning may have on their perception of self.

A variety of meditative approaches have been utilized in clinical studies [Michaels, Huber & McCann, 1976; Kabat-Zinn, 1982; Kutz, Borysenko & Benson, 1985]. This study focuses on the clinical application of a distinct form of meditation known as Mindfulness meditation [Thera, 1962;

Deathridge, 1975; Kabat-Zinn, 1990]. The origin, theory, practice and application of Mindfulness meditation training in behavioral medicine settings is outlined in this chapter and discussed in detail throughout this dissertation.

Currently, mindfulness meditation training (MMT) is being used in hospital-based behavioral medicine clinics as a self-regulatory coping strategy intended to assist people in 1) learning more effective and appropriate ways of coping with chronic medical conditions; 2) learning the <u>how</u> of making positive changes in a lifestyle (mental patterns and behaviors) that may either be contributing to a current medical condition or that may put that person at increased risk of a future illness and 3) as a means of altering beliefs, assumptions and perceptions about self, others and the world that may limit a persons capacity for increased self-regulation. Clinical outcomes suggest that short-term self-regulatory training interventions based on mindfulness can contribute to the development and/or maintenance of positive health status [Deathridge, 1975; Kabat-Zinn, Tarbell et al, 1988; Kabat-Zinn & Skillings, 1989; Weinberger, McLeod, McClelland et al. 1990].

This study was undertaken in order to further probe three elements of clinical meditation research and training:
1) the dynamics and internal experience of beginning meditators <u>learning</u> mindfulness meditation;
2) the various ways in which these learners attempt to <u>apply</u>

MMT in their daily lives during and after the intervention; and 3) possible alterations in health behavior, attitude and perception of self of learners engaged in MMT.

Significance for Meditation-Based Clinical Research

Although much is known about the results of clinical interventions utilizing mindfulness training [Kabat-Zinn, 1990; Kabat-Zinn, et al., 1991], little is known of the pathways by which people actually experience the learning of meditation-based self-care strategies. The present study has increased our knowledge of the range of patterns, stages and skills experienced by adult learners utilizing training in mindfulness meditation well as shedding light on a variety of implicit competencies encouraged by MMT. Additionally, as will be discussed, it offers some initial insights into the ways that people at varying stages of self-knowledge development might learn and utilize these skills.

Contemporary meditation research has proceeded in a variety of different directions:

A) experimental research on the physiological correlates of various meditation practices [Das & Gastaut, 1955; Anand, Chinna & Singh, 1961a; Kasamatsu & Hirai, 1966; Benson,1975; Delmonte, 1984];

B) the self-regulatory characteristics of meditation training [Shapiro & Zifferblatt, 1976a; Kabat-Zinn, Beall & Rippe, 1984; Bernhard, Kristeller, Kabat-Zinn, 1988] and the

"altered state" dimensions of meditation [Tart, 1969; Davidson, 1976; Deikman, 1982];

C) phenomenological investigations of beginning and advanced meditators, primarily although not exclusively engaged in intensive meditation practice in extended retreat settings [Walsh, 1965; Walsh, 1977; Kornfield, 1979; Brown, 1986; Tart, 1986].

The present study was intended to supplement phenomenological data on the early stages of meditation, focusing on understanding not only what occurs during formal meditation practice periods ("formal" practice) but how people attempt <u>to apply</u> meditation-based skills in daily life ("informal" practice), during and after the intervention. Although there is some data on the phenomenology of advanced stages of meditation [Goleman, 1972; Brown, 1977; Brown & Engler, 1986], little attention has been directed towards either the beginning phases of mindfulness meditation practice or the phenomenology of "informal" practice. The elaboration of an extensive knowledge base about the ways in which people transfer and utilize skills intended to assist them in long-term lifestyle change is extremely important at this time in particular because self-managed change is deemed to be an increasingly crucial element of positive health-care. A well-developed base of knowledge in this area can also assist clinicians in developing about more effective ways of

tailoring interventions and utilizing mindfulness meditation training.

Research focusing on the subjective/phenomenological domain of meditation may be crucial for several reasons:
A) understanding the range and patterns of these subjective accounts may lead to a more accurate understanding of the possible effects of mindfulness meditation;
B) it might inform researchers about the <u>implicit</u> competencies developed through meditation training as reported by beginning meditators, eg. deepened proprioception of bodily states, ability to observe or "see" thoughts rather than to see the world through these thoughts; and
C) since meditation has been reported to result in a range of inner or subjective experiences in people, including deep states of calmness, relaxation and insight that in turn can influence perception of self, and the perception of self in relationship to others and to the world [Shapiro, 1980; Kabat-Zinn, 1990], it may be crucial to document what is happening to people internally. In the context of increasing scientific evidence suggesting that self-perception may play an important role in health and illness [Seeman & Seeman, 1983; Williams, 1989], this study sought to examine the domain and changing dynamics of self-perception as it relates to MMT employed within a behavioral medicine setting.

Significance for Meditation-Based Phenomenological Research

During the last decade an increasing number of researchers have called for phenomenological investigations of meditation as a means of describing and understanding more precisely the subjective experience of meditators [Walsh, 1977; Brown & Engler, 1986; Dubs, 1987]. Researchers contend that understanding what occurs internally may be crucial for two reasons:

First, a number of meditation studies suggested there were no differences in physiological changes between meditation and other self-regulatory strategies [Michaels et al, 1976; Marlatt et al, 1980] yet in some cases subjects reported meditation as "more profound, deeper, and/or more enjoyable than comparative control groups" [cited in Shapiro, 1983, pg.62] [Curtis & Wessberg, 1975; Morse et al., 1977; Cauten & Prymak, 1977]. This suggests that although there may be no differences in overt behavior or in certain physiological measures between meditation and other self-regulatory strategies, subjective differences may occur which may be important from a clinical and research perspective.

Second, given that there are a variety of different types of meditation it is important to identify what kinds of skills and behaviors actually occur during different aspects of meditation training. This would allow for a more refined understanding, comparison and assessment of

mediation with other kinds of self-regulatory strategies [Shapiro, 1980].

Therefore, this study recorded and examined the range and patterns of experience associated with mindfulness meditation as reported by adults engaged in MMT within the context of a hospital-based, out-patient behavioral medicine clinic. To do so, a qualitative/phenomenological approach was chosen because this approach emphasized a relationship between the researcher and subjects that fostered a detailed investigation and analysis of the on-going experience of participants over time. Thus, the study design and methodology increased the possibility for documenting and understanding more accurately the lived experience of participants during and after the clinical program.

This study is framed within an established phenomenological tradition of classical meditation research [Goleman, 1971; Brown, 1977; Goleman, 1977; Dikeman, 1982] as well as building upon contemporary meditation-based phenomenological investigations [Maupin, 1965; Lesh, 1970; Osis et al, 1973; Kohr, 1977; Kanas & Horowitz, 1977; Kirsch & Henry, 1979]. Since the systematic use of MMT is a relatively new in clinical behavioral medicine, there has been to dateis as yet no other research than the present study which has used a phenomenological approach for investigating a clinical intervention of this kind.

This domain of inquiry is a logical next step in research if meditation is to be utilized more effectively in medical and educational settings. Therefore, the emphasis of this study was on the process or subjective/ phenomenological experience of people engaged in systematic meditation training in a clinical setting.

This study should provide a forum for discussion intended to extend the application of meditation training as it is presently conceived of and utilized clinically and educationally. For the most part, researchers and clinicians have conceived of and used meditation as a "technique" for relaxation. Although this has been a useful application of meditation, it has also perpetuated a highly restricted view of meditation that may have left much of its clinical and educational potential untapped [Hanh, 1976; Kornfield, 1979; Kabat-Zinn, 1990]. Because meditation has been conceptualized as an isolated, time-bound "technique", intended to evoke a particular state (eg. relaxation) the continuity of meditation practice known as "moment-to-moment attention" (mindfulness) has been overlooked. Yet it is precisely this continuity of practice which we will define here as "informal" meditation, that may account for much of the utility of meditation as a means of coping with the stress, pain and illness encountered in daily living [Kabat-Zinn, 1990; Kornfield, 1979].

Significance for the Application of Self-Knowledge Theory

Self-Knowledge Development Theory (SKT) was developed by a group of educators at the University of Massachusetts [Alschuler, Evans, Tamashiro, Weinstein, 1975]. Theoretically, it has its roots in the structured developmental work of Piaget [1968], Kohlberg [1972], Flavell [1982], and Kegan [1982], and posits an invariant, irreversible sequence of stages in the development of people's reasoning about their internal experience. The theory was intended to answer what the authors described as a critical need in the area of humanistic/psychological education: the need for precision in developing and sequencing educational goals and in sequencing developmentally-based curriculum interventions.

Although there are many definitions of self-knowledge, Weinstein and Alschuler [1984, pg.4] define it as follows:

> Self-knowledge consists of verbalized categories by which one describes oneself. In general these categories identify one's stable distinctiveness and similarity to others along with any associated judgments. When people categorize themselves they refer to such aspects as their behaviors, abilities, characteristics, relationship to themselves, to others, and to the environment; values associated with experiences; and goals, ideals, expectations and intentions.

Weinstein & Alschuler [1985] suggest that self-knowledge is generated by the "self-system" that consists of three distinct yet interactive components: experience, mental operations and self-describing behaviors or theories. As such, an individual's personal experience is organized

through mental operations that then organize that person's description of and theories about him/herself.

Self-knowledge theory describes how self-knowledge develops over time. There are purported to be four stages of SK development: elemental, situational, pattern and transformational.

The Elemental Stage

In the elemental stage descriptions of experience are discussed in terms of the external elements of events. Internal aspects of experience such as thoughts and feelings are generally absent and descriptions are disjointed and fragmented. They does not appear to be any causal relationship between elements of the experience.

The Situational Stage

In this stage elements of a given experience take on causality and links between aspects of events are described. Thus there appears to be a situational unity. A major hallmark of the stage is the inclusion of a person's internal experience in the description of experience. A growing cohesion between external events and internal experiences is also expressed although people at this stage do not yet discern a consistency of responses across situations but conceive of themselves as acting different in every situation.

The Pattern Stage

As the descriptor "pattern" suggests, people at this stage of S-K recognize a consistency of internal responses across varying situations (eg. "Whenever she says that I feel like running away"). Thus, internal patterns tend to dominate situations as the person does not yet see the possibility of taking control of patterns, that is, exerting intentional internal action on an internal pattern.

The Transformational Stage

In this stage people come to recognize internal patterns as a part of a larger "self-system." Patterns are thus seen as a discrete aspect or element of the system that can be related to or affected by other aspects of their internal system. Because they understand the nature of these internal relationships (eg. between patterns and between themselves and their patterns) descriptions of this stage recount the capacity to "see" patterns and to take internal action to interrupt or modify them.

The course in Education of the Self developed by Gerald Weinstein at the University of Massachusetts, utilizes S-K theory as a means of sequencing curricula and developing educational interventions for specific populations of students. This course is designed primarily for an educational setting and emphasizes learning strategies primarily intended to disrupt dysfunctional response

patterns [Sweitzer, 1985]. Importantly, many strategies rely on the learners increasing competency for self-observation. They facilitate development of the "skill" of self-observation. Although not explicitedly stated in S-K theory or in its application, there appears to be a tacit or implicit link between the capacity of a person to self-observe and the development of self-knowledge.

Recently, Weinstein [1991, personal communication] has theorized that the capacity to self-monitor the "self-system" (eg. experience, mental operations and self-describing behaviors or theories as defined by S-K theory) may be fundamental to the development of S-K. Since a fundamental feature of mindfulness meditation practice is to cultivate the capacity to accurately self-observe, S-K theory provided a useful framework for investigating how a mindfulness-based intervention was experienced and utilized by people at differing stages of S-K as measured by an instrument (the ERT2) developed by Weinstein & Sweitzer, [1984].

As will be discussed in the Review of the Literature, a number of studies have attempted to apply S-K theory in education and counseling [Alschuler, Evans, Tamashiro & Weinstein, 1975; Tamashiro, 1976; Phillips, McLain & Jones, 1977; Ziff, 1979; Phillips, 1980; Duhl, 1982]. This study is an initial attempt to describe the various ways that people at differing stages of self-knowledge, as delineated

by S-K theory, experienced and utilized the same intervention. It does not address the question of changes in S-K due to the intervention.

Meditation is purported to be a form of self-knowledge education [Welwood, 1979]. An inquiry utilizing self-knowledge development theory (SKT) offers: 1) insight into how people engaged in the same MMT intervention but who may express reasoning about their internal experiences differently (eg. differing stages of S-K), developed and applied meditation both formally and informally; and 2) provided insight and explanatory power about the intervention itself in terms of SK theory. Thus, the research and applied knowledge base of both meditation training and S-K theory were enhanced.

Mindfulness Meditation

Mindfulness meditation has roots in Theravadan Buddhism where it is known as satipatthana vipassana or Insight meditation [Deathridge, 1975; Kabat-Zinn, 1982]. In Pali "sati" means "remembering" or "mindfulness" and "upatthana" means "place of abiding" or "establishment". Thus satipatthana means "establishment of abiding attention" or the establishment of mindfulness" [Hanh, 1990]. Its origins can be found in the Satipatthana Sutta, or the Sutra of Mindfulness [Goleman, 1972; Hanh, 1990].

Deathridge [1975], in discussing mindfulness meditation in the context of psychotherapy, described it as a "client-centered" approach to self-knowledge, as it assumes that only the individual can help him/herself and that within each human being is the potential to do so. As such it is a self-treatment process wherein the training <u>is</u> the treatment.

The practitioner of mindfulness meditation attempts to intentionally regulate attention to achieve moment-to-moment awareness. The "fields" of awareness known as The Four Establishments of Mindfulness [Hanh, 1990] include an awareness of the body, of the breath, of each bodily movement, of feelings, of thought and emotion and everything that has a relation to oneself. The practitioner attempts to maintain 1) stability of attention as the objects of attention change over time, 2) a non-judgmental awareness of present-moment experience as well as 3) an attitude of non-striving.

This attitude of non-striving might best be described as a letting-go of the impulse to perform or achieve a particular state of mind, or to "fix" or change oneself in any way. Instead, the meditator deliberately assumes the attitudinal stance of attending to whatever enters the field of attention. This is classically referred to as "bare attention"in Buddhist texts. It has been described as:

> an accurate, non-discursive registering of the events taking place without any reaction to those events

> through mental evaluation (good-bad)...a careful, deliberate observation of all mental and physical activity, the purpose of which is coming to know one's own mental processes as thoroughly as possible [Thera, 1962, cited in Deathridge, 1979, pg.209-210].

This definition suggests an important difference between Eastern and Western self-observational strategies involving <u>both</u> the attitude and behavior involved in the activity of observation. Mindfulness meditation and behavioral self-management both focus attention on both inner experience and the external environment [Maupin,1965; Shapiro & Zifferblatt, 1976]. However, the intention of observation in the mindfulness meditation is to maintain awareness of the "present moment" without attachment, judgment or discursive thinking. This is different from the way self-observation is used in behavioral self-observation where the process involves an active focus on specific internal or external environmental events, utilizing aids such as behavioral charts, counting mechanisms and written evaluations gathered from present moment experiences with the intention to capture an accurate description of a behavior as the first step in changing it [Shapiro & Zifferblatt, 1976]. Thus, the thrust in MMT is one of developing calmness and stability of attention that leads to a deep looking into the objects of attention. This involves a "letting go" of judging, ruminating or trying to change experience (non-striving) as compared to an active focus aimed at dwelling on data. As has been previously

discussed, in MMT the critical factor is not <u>what</u> is observed but <u>how</u> it is observed, eg. non-evaluatively, non-discursively. Western self-observation skills on the other hand involve an intentional focusing on a specific problem area in order to actively bring about change.

In MMT the meditator is not asked to "push away", "deny" or "pursue" thoughts, feelings or body sensations. The intention is to develop a capacity to 1) know oneself directly (one's mind/body processes) by developing an increasing depth of concentration and stability amidst the changing field of attention; 2) to then begin to have the power to shape or control mental processes; and 3) to become free from previously unknown and therefore uncontrollable mental processes.

Initially, the meditator establishes a focus of attention on the breath (inhalation and exhalation) and/or other bodily sensations. This is intended to stabilize attention in the <u>present</u> moment. Whenever the meditator becomes aware of the mind moving away from the awareness of breathing, s/he is instructed to "gently and firmly" bring the mind back to mindfulness of breathing. Thus there is no attempt to berate oneself for the loss of focused concentration nor any attempt to pursue thoughts and feelings. As the meditator continues to engage in this process, s/he begins to discover the capacity of the mind to

"witness" or observe a wide range of mind/body events such as tension, ease, thoughts, emotions.

This capacity to witness or observe is not one of standing outside of the object of observation. Instead, the action of the observing mind is one of penetration, a joining with the object. The function of mindfulnes is one of penetrating and understanding the object of observation by participation [Hanh, 1990]. The Sutra on Mindfulness uses the words "observing the body in the body", "observing the feelings in the feelings" to describe this process of participation, suggesting that full participation in the object of awareness is the activity of mindfulness.

As the meditator begins to develop an increased ability to maintain concentration and calmness, s/he becomes increasingly capable of attending to thoughts and emotions as descrete, observable events. As this occurs, the meditator begins to develop insight into the causes of behavior, as perception of the intentions that precede any action or behavior rises. Thus the meditator begins to be able to bring control of behavior back to the conscious level.

Mindfulness practice involves both "formal" meditation sessions and practice in daily life. These interactive aspects of practice have been referred to respectively as "formal" and "informal" practice [Thera, 1962; Kabat-Zinn, Lipworth, et al.,1984; Kabat-Zinn & Chapman-Waldrop, 1988].

Formal meditation refers to the daily discipline of meditation practiced at a specific time of day for a specific amount of time. Informal meditation, referred to as "mindfulness in everyday life" [Hanh, 1976; Kabat-Zinn, 1990] involves the development of an on-going continuity of attention described as "moment-to-moment" awareness. The aims of informal meditation are 1) to dissolve any boundary artificially constructed by the beginning meditator between "meditation" (as a "formal" time-bound discipline) and the rest of one's daily life, and 2) to cultivate informal practice as a means of enhancing, generalizing and making more applicable in daily life the attentional strategies initially developed in formal meditation.

Research focused on the therapeutic application of meditation suggests the importance of both the formal and informal dimensions of mindfulness meditation [Kabat-Zinn, Lipworth, Burney & Sellers, 1986; Kabat-Zinn, 1990] while further indicating that informal meditation may be an important strategy for developing and maintaining positive long term changes in health behavior and health status beyond the time constraints of a particular treatment program. Therefore, this study sought to record, examine and understand the range and patterns of these distinct yet interdependent dimensions of mindfulness meditation when utilized by adults in a hospital-based behavioral medicine clinic.

Because many researchers and clinicians have conceptualized meditation as a time-bound technique done for a specific amount of time at a particular time of day (eg. "formal" meditation), clinicians have given little attention to what has been termed "informal" meditation. Informal meditation defined as:

> an intentional shift in awareness invoked to cultivate a relaxed moment-to-moment attention (mindfulness) during one's day [Kabat-Zinn, 1982, pg.34].

involves the development of attention that is neither bounded by time nor limited to particular situations as is formal meditation. There is evidence that it may be an important element for developing and maintaining long-term changes in lifestyle [Kornfield, 1979; Kabat-Zinn & Chapman-Waldrop, 1988].

It is my contention that the informal aspects of mindfulness practice have not been fully understood or appreciated by many practitioners attempting to utilize meditation in a clinical setting. Yet as shall be discussed in the literature review, it is the "continuous" or "informal" aspect of mindfulness meditation practice that may account for much of the potential utility of meditation as a self-regulatory strategy.

Conclusion

At the heart of mindfulness training is the emphasis on awareness or observation. The intention is to cultivate a

"fullness" of attention that encompasses every aspect of experience. In the context of this research, the people engaged in MMT within the clinical setting were systematically instructed in the development of mindfulness meditation. No emphasis was placed on the religious or cultural traditions from which these disciplines arose. Instead the emphasis was on self-observation and the cultivation of increasingly refined sensitivity to these various domains of human experience. Participants engaged in the systematic development of the "skill" of self-observation.

The capacity to self-observe is an explicit cornerstone of mindfulness meditation training and appears to be an implicit aspect of Self-Knowledge Development Theory. Given these facts, this study has attempted to describe the ways in which participants, within the context of an out-patient behavioral medicine clinic, learn, experience and apply mindfulness meditation in daily life. Although there are discrete categories of inquiry that have been reported, such as changes in perception of self [SP], these categories are subsumed within a larger frame of reference - the capacity to carefully and <u>caringly</u> observe.

It should be noted that careful self-observation is not the end point of meditation practice. As concentration is cultivated through regular practice, the capacity to keenly observe becomes possible. A refined and honed capacity to

observe can lead to understanding and insight about the subtle activities of the body, mind, and emotions which may in turn reduce the suffering associated with stress, pain and illness.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

There are four major areas of literature to be reviewed. The first area is the literature chronicling an overview of contemporary meditation research. This will include a discussion of the theory and origins of meditation as well as a review outlining contemporary meditation research when utilized as a self-regulatory strategy. In addition, an operational definition of meditation will be presented and an examination of the primary classes or types of meditation will be discussed in order to place this study in a well-delineated context.

Secondly, this review will explore phenomenological meditation-based research, examining both its logic and its methods. This is intended to place the study within an established research tradition. Other ways of using phenomenological methodology in order to examine a meditation-based behavioral medicine intervention are also suggested

Thirdly, there will be a discussion describing the derivation of Self-Knowledge Development Theory and it's use in this study as a method for beginning to understanding the ways people at different or similiar stages of self-knowledge utilize the same intervention.

Finally, there will be an in-depth presentation of research investigating mindfulness meditation training. The discussion will be limited to MMT research conducted in out-patient behavioral medicine settings and will examine the results as well as the limitations of these studies. The mindfulness meditation research will then be discussed within the context of phenomenologically-based meditation research as a means of shedding light on the methodological direction of this dissertation.

The Convergence of Eastern and Western Psychological Disciplines

Within the last two decades, meditation disciplines have become the subject of both popular and research interest in the West. Recently, meditation practices from oriental traditions such as Zen Buddhism [Shapiro & Giber, 1978; Shapiro, 1978], Yoga [Ajaya, 1983] and Vipassana [Deathridge, 1975; Kabat-Zinn, 1990] have been introduced into a variety of therapeutic settings for self-regulation. There have been numerous studies of the physiological correlates of these practices [Anand, Chinna & Singh, 1961a; Goleman & Schwartz, 1976; Kasamatsu & Hirai, 1966; Woolfolk, 1975], as well as a variety of both theoretical and clinical reports concerned with the potential efficacy or negative effects of these practices in such diverse fields as psychotherapy [Shapiro & Zifferblatt, 1976], stress reduction [Kabat-Zinn, 1982], counseling [Lesh, 1970], human

development [Wilbur, 1979] and education [Linden, 1973].

It has been suggested that these practices, collectively termed "consciousness disciplines", are founded on assumptions about human nature that differ markedly from models upon which Western psychology and behavioral science rest [Walsh, 1980; Ajaya, 1983]. Walsh describes the paradigmatic assumptions of the consciousness disciplines:

> Our usual state of consciousness is severely suboptimal; multiple states, including true "higher" states exist; and through intensive mental training it is possible to attain states of consciousness and psychological wellbeing beyond those currently described by traditional Western psychologies, as well as profound insight into the nature of mental processes, consciousness, and reality (Walsh, 1980, pg.664).

The meditative traditions may have much to offer behavioral medicine in general and clinical behavioral medicine in particular [Deikman, 1982; Kabat-Zinn, 1990]. It is possible that the therapeutic value of relaxation modalities and cognitive-behavioral therapies developed within the Western psychological paradigm might be considerably enhanced through an interaction with intensive meditation practice and its more inclusive paradigm. Currently, this cross-fertilization of Eastern and Western psychological paradigms is occurring in medicine. This research was intended to examine the experience of adults utilizing meditation in a clinical intervention created for the express purpose of exploring a synthesis of Eastern and

Western psychological paradigms in the service of increased health and wellbeing.

Contemporary Applications of Meditation

During the past twenty years there has been an increasing attempt to utilize meditation in clinical and educational settings [Walsh, 1983; Kabat-Zinn, 1990]. As noted in Chapter 1, there is a considerable body of research suggesting the usefulness of meditation as a self-regulatory strategy in clinical and behavioral medicine settings [Wallace, Benson & Wilson, 1971; Kabat-Zinn, 1982; Kutz, Borysenko & Benson, 1985; Kabat-Zinn, et al., 1991]. Meditation in one form or another appears to have been proven useful as either a primary or complimentary treatment for a variety of medical conditions including hypertension [Benson & Wallace, 1972a], chronic pain [Kabat-Zinn, 1982; Kabat-Zinn, Lipworth & Burney, 1986], substance abuse [Shafii et al., 1975; Marlatt et al., 1980], stress [Kabat-Zinn & Skillings, 1989] and in the reduction of anxiety states [Kabat-Zinn et al., 1991].

Meditation can be defined as the intentional self-regulation of attention from moment-to-moment [modified from Goleman and Schwartz, 1976; Kabat-Zinn, 1982]. As can be seen, this definition is devoid of either the cultural or religious beliefs and languages from which meditation practice has arisen. Intention is described asa key

element, the content of thoughts is accorded relatively little importance, while awareness or consciousness of the process of thought is accorded great importance. The context - conscious attention is viewed as the most important element [Shapiro, 1980, Kabat-Zinn, 1982; Kutz et al., 1985]. Finally, although images can abound during meditation practice, they are not seen as a goal in the cultivation of mindfulness. Thus, meditation in general, and mindfulness meditation in particular, should not be a priori equated with exercises using visualization or guided imagery although they are used in particular meditation traditions.

Meditation practices can be divided into two major types or classes; concentration meditation and mindfulness meditation [Ornstein, 1972; Brown, 1977]. The most widely known (in the West) and researched form of concentration meditation is Transcendental Meditation. A central characteristic of concentration meditation is that attention is directed and sustained towards a single object. In concentration meditation all other mental activity is viewed as a distraction from the object of concentration.

Mindfulness meditation "emphasizes the detached observation, from one moment to the next, of a constantly changing field of objects" [Kabat-Zinn, 1982, pg.34]. In mindfulness meditation, attention can be, but need not be restricted to a single object. The emphasis is on the

cultivation of a responsive, non-attached observation of a continually changing field of objects. Concentration on a single object such as the flow of the breath is often used to stabilize attention. Once this stability is established, the field of attention can then be systematically expanded to include all physical and mental events including body sensations, thoughts, feelings, fantasies, and memories as they occur from moment to moment. Thus the meditator can cultivate awareness of a broad range of events without necessarily dwelling on any particular one. A central characteristic of mindfulnes practice is that no object entering the field of awareness is considered to be a distraction. This mode of self-observation is referred to as bare attention [Nyanapontka, 1973], choiceless awareness [Krishnamurti, 1969], or shikan-taza in Zen, meaning "just sitting" [Kapleau, 1969].

Many meditation practices include elements of both concentration and mindfulness. For instance, in Vipassana meditation, the meditator may chose a single object of concentration, such as the flow of in-breaths and out-breaths, to develop concentration and calmness. As these qualities become more established the meditator may then be encouraged to systematically expand the field of attention to include awareness of a variety of internal and external stimuli.

The intention of this is to cultivate the qualities of mindfulness (moment-to-moment awareness) and insight.

Meditation as a Self-Regulatory Strategy

For the most part, researchers have conceptualized meditation as a self-regulatory strategy (SRS). It is frequently conceptualized in research as an independent variable, while a health outcome such as hypertension or stress is considered a dependent variable. Contemporary research has suggested that meditation can have a beneficial effect on a variety of medical conditions including hypertension [Benson & Wallace, 1971], chronic pain [Kabat-Zinn, 1990], substance abuse [Shafii et al, 1975; Marlatt et al, 1980], anxiety [Kabat-Zinn, et al., 1991], and chronic obstructive pulmonary disease [Kabat-Zinn, Tarbell et al., 1988]. Collectively, these meditation-related physiological changes have been termed "the relaxation response" by Benson [Wallace, Benson & Wilson, 1971; Benson, 1975].

Experimental results suggest alterations in brain physiology during meditation. Studies report increased frequency of alpha rhythm activity [Anand et al., 1961a; Kasamatsu & Hirai, 1966; Jennings & O'Halloran, 1984; Delmonte, 1984] and increased hemispheric synchronization/coherence associated with creativity [Das & Gastaut, 1955; Dillbeck & Bronson, 1981]. Electroencephalogic research has established distinct EEG

patterns for waking, drowsy, sleep and hypnotic states as differentiated from meditation-related EEG changes [Gellhorn & Kieley, 1972], as well as distinguishing distinct patterns associated with concentration and mindfulness forms of meditation [Anand et al. 1961a; Kasamatsu & Hirai, 1966].

In summary, experimental evidence indicates meditation may have a variety of positive therapeutic effects although some studies suggest that meditation may not be any more effective than other self-regulatory skills for treating certain clinical disorders [Michaels et al, 1976; Kirsch & Henry, 1979]. However, in some cases, even where objective measures do not differ between meditation and other self-regulatory strategies, subjects have reported meditation as more profound, deeper, meaningful and/or enjoyable than the comparative control groups [Curtis & Wassberg, 1975; Morse et al, 1977; Cauten & Prymak, 1977].

Meditation-Based Phenomenological Research

Although there is much evidence supporting the efficacy of meditation as a self-regulatory skill, it suggests at best, only a portion of the potential value of meditation. Meditation from the perspective of the consciousness disciplines is primarily a means for cultivating wisdom. Thus, meditation practice can also be seen as a method of working with and dissolving "unskillful" mental habits and behaviors eg. greed, selfishness, resulting from a distorted

sense of self as well as altering perceptual habits about oneself and the world thus leading to a more unified, accurate and accepting view of oneself, of others, and of the world [Shapiro, 1980].

The psychological changes that can accompany deepening phases of meditation have been referred to as "mystical states" [Davidson, 1976], and more recently as "altered states of consciousness" [Tart, 1975; Shapiro,1980].

Describing meditation as an altered state consciousness has three major flaws. First, it describes meditation in terms of effects, eg. calm, relaxed, empty. Secondly, it may lead one to conceptualize meditation as being a discrete, uniform "altered state." Although there are experiences common to different forms of meditation, different forms may produce varying experiences and there are a variety of techniques for creating alterations in consciousness eg. drugs, hypnosis. Furthermore, conceptualizing meditation as a discrete "state" reinforces an inaccurate view of meditation that easily leads to a sense of striving or accomplishment that originates from the view of having to "perform" in a certain manner in order to produce a certain "state." The term is meant to differentiate this aspect of meditation from the view of it as self-regulatory strategy. Thirdly, conceiving of meditation as an altered state suggests that there is something "special" or extraordinary about meditation that

is removed from daily life. This viewpoint has the potential for blinding researches and clinicians to a crucial qualitative question about meditation practice: Can it assist people in appreciating and living their everyday lives more fully, in each moment?

As evidenced by the research literature, a host of subjective/phenomonological changes occur during meditation. These include enhanced imagery ability [Heil, 1983], increased perceptual motor ability [Orme-Johnson, Kolb & Hebert, 1977] and "deautomization", defined as an increased flexibility of perceptual and emotional responses to the environment [Deikman, 1966]. Reports suggest an increased empathy for others [Lesh, 1970], greater patience and an increased ability to more comfortably self-observe [Kabat-Zinn, 1982]. Other subjective accounts include an increased sense of equanimity, as well as rapture and bliss [Kornfield, 1979], clearer perceptions of personal motivations and behavior [Kornfield & Goldstein, 1988] and experiences of ineffability [Goleman, 1971; Shafii, 1973].

In addition, a host of negative effects have been reported which are similar to those cited in classical meditation texts. These include, anxiety, tension and anger [Walsh, 1965], increased body pain [Kornfield, 1979], hallucinations [Walsh, 1965], the "flooding" of previously unconscious material into awareness [Santorelli, 1984]. Other negative effects include withdrawal and dissociation

and the possibility of precipitating psychotic episodes in people with a history of schizophrenia [Walsh & Rauche, 1979].

Recently Western researchers have begun to conduct more phenomenologigal investigations of meditation in order to understand and describe more precisely the subjective changes during meditation [Walsh, 1977; Brown & Engler, 1986]. Researchers contend that understanding what occurs internally may be crucial for three reasons.

First, a variety of studies focusing on physiological and explicit behavior changes occurring within meditating subjects found no differences between meditation and other self-regulatory strategies [Michaels, 1976; Marlatt et al., 1980]. Yet in some cases subjects reported meditation as "more profound, deeper, and/or more enjoyable than comparative control groups." [cited in Shapiro, 1983, pg.62]. This suggests that although there may not be any differences in overt behavior or physiological measures between meditation and other self-regulatory strategies, subjective differences occur and may be important from a clinical and research perspective.

Second, given that there are a variety of differing types of meditation, it is important to begin identifying what kinds of implicit or internal skills and behaviors actually occur during meditation. Understanding the range and patterns of internal behaviors might allow for a more

refined comparison and assessment of various meditation methods with other kinds of self-regulatory techniques.

Third, as has been discussed, meditation appears to bring about strong subjective experiences in individuals who sometimes report these experiences as being life changing as their perception of self, others and the world becomes altered. Since the role of internal events is deemed to be extremely important domain of study in cognitive psychology [Mahoney & Thorenson, 1974] and in education [Weinstein & Alschuler, 1985; Roberts, 1987] it may be critical to understand what occurs internally.

Methodology of Meditation-Based Phenomenological Research

Three distinct research methodologies have been employed when subjective/phenomenological studies of meditation have been attempted. The first method has involved studying classical meditation texts as a means of ascertaining a cartography of meditation experience as described in these traditional sources [Goleman, 1972; Deikman, 1982; Brown, 1977]. In many cases these texts then provided a map of meditation experience or served as a schemata of developmental stage sequences for various forms of meditation that could then employed as a benchmark for various meditation studies [Brown, 1977; Brown & Engler, 1986; Dubs, 1987].

A second mode of inquiry has employed a standard scientific study design, whereby the investigator gathers data from individual(s) participating in an experiment. Although there are many variations on this basic design, the researcher and the subject are always <u>different</u> individuals. These studies have attempted to incorporate retrospective-content analysis of meditation in terms of reported thought intrusion [Kanas & Horowitz, 1977], factor analysis of self-reports about the meditation experience, rater coding of the meditation experience [Lesh, 1970; Maupin, 1965] and verbal reports from the client after specific meditation sessions [Osis, Boker & Carlson, 1973; Kohr, 1977].

During the last decade a third approach for exploring the phenomenology of meditation has been attempted. This method of research calls for the experimenter and the subject to be the <u>same</u> person. Several studies incorporating this mode of research have recently been carried-out by individuals trained in the behavioral sciences and in a consciousness discipline. These approaches have generated an extensive source of data that may have considerable bearing on the direction and development of meditation research as concepts become better understood and hypothesis are generated [Walsh, 1977; Kirsh & Henry, 1979; Shapiro, 1980; Walsh, 1983; Tart, 1986].

I have found no meditation research attempting to utilize a qualitative/phenomenological design within a

clinical setting. This dissertation study was founded on a research design that included a researcher/meditator participating within a community of learners (in this case, people learning meditation in the context of a clinical setting) who have elected to become acutely attentive to their subjective meditation experiences thus becoming "co-researchers and co-subjects":

> It is clear that the discipline and rigor involved in this sort of research is formidable. The rigor is essentially one of mindfulness, of inner alertness, of knowing what is and is not going on while it is and is not going on, of keeping in mind a second-order objective while fulfilling a first-order objective. It has its analogue in oriental forms of consciousness training, eg. satipatthana (mindfulness) in Buddhism (Heron, 1981 pg.164).

For the most part, phenomenologically-based meditation research has attempted to catalogue and describe various "state" changes in subjects. While this is important, it was not my primary interest.

Although one aspect of the study investigated state changes or the implicit, internal events of beginning meditators, other components of this research were aimed at 1) uncovering and describing the possible <u>consequences</u> or <u>effects</u> of those internal events in terms of how they might orient study participants in terms of <u>utilizing</u> meditation-based skills in everyday life; and 2) describing and understanding the possible effect of meditation training on the participant's perception of self.

A review of the following phenomenologically-oriented meditation studies may prove useful in understanding the orientation of this dissertation study.

Maupin [1965] utilized Zen breath meditation and had "blind' judges rate naive meditator's subjective experience over the course of nine sessions. Based on this self-report data meditators were then rated as most resembling one of five categories of experience, eg. "befogged," "relaxed, "effortless concentration."

Deikman [1966] using a concentration form of meditation, had participants focus on a blue vase. Participants meditated alone in a quiet room and over the course of the experiment were exposed to increasingly longer sessions (5-15 minutes). The experiment lasted for twelve sessions, over the course of three weeks and with the exception of three sessions, all meditation was practiced with auditory stimulus (music or verbal material) played in the background. Deikman found strong subjective changes in the meditator's normal perceptual experiences including: perceptual changes in intensity of color and alteration of shape. Some subjects reported "merging with the object" and "loss of bodily feelings."

Lesh [1970], using an adaptation of Maupin's scale found essentially the same results while also suggesting an increased capacity for empathy among counselors exposed to Zen meditation.

Kornfield [1979] conducted a phenomenological study using data generated from meditators at five two-week retreats and one three-month retreat. Participant's reported their subjective experience to the meditation teachers every two or three days and also completed questionnaires that asked about sleep\food intake, changes in clarity of perception, concentration and mindfulness and predominant meditation experience.

Deikman [1966] and Kornfield [1979] asked subjects to report directly to the experimenters, who analyzed the data while Maupin [1965] and Lesh [1970] had raters code the experiences on a five-part scale. Deikman, Maupin and Lesh monitored participants at the conclusion of each session whereas Kornfield interviewed participants at fixed intervals (every 2-3 days).

In another attempt to examine the phenomenological aspects of meditation, Osis [1973]) and Kohr [1977] replicated findings that purported to assess the possible dependence or independence of mood states prior to the meditation session on the session itself. The hypothesis suggested that if mood prior to the session does not determine the outcome of the session, then meditation might be construed as an altered state of consciousness. Participant responses, determined by subjective report on a number of different questionnaires, and analyzed using multivariate procedures showed, in both experiments,

<u>independence</u> of psychological mood prior-to-session with the exception of some anxiety states that appeared to be a negative factor during the meditation session. The results of these experiments suggest that meditation did produce a state of consciousness different from the state a person brought to the meditation session.

> Good sessions frequently occurred regardless of feeling tired or depressed prior to the session. In these sessions there seemed to be an ability to let go of negative emotion or to move beyond fatigue [Kohr, 1977 p.202].

In a phenomenological study of beginning meditators participating in a three-month mindfulness meditation retreat, Kornfield [1979] found that the frequency and intensity of altered states had rapidly <u>diminished</u> at the time of the follow-up study. It was hypothesized that these "altered states" correlated with the depth of concentration cultivated during the course of the retreat and that these experiences diminished as the frequency and intensity of meditation practice was reduced following the conclusion of the retreat. However, students did report, "more positive, long-lasting changes in the area of such traits as openness, equanimity and a relaxed attitude towards life." In accounting for these reports Kornfield suggests that unusual altered states may be closely related to the deepened levels of concentration cultivated during intensive mindfulness practice while "long term trait changes appear to be more related to the development of mindfulness and equanimity

that then becomes integrated into everyday life". In fact, the follow-up data suggested that for many of these meditators, the integration of mindfulness into everyday life was a crucial part of their entire meditative growth process. Thus, long-term "trait changes" may be much more a function of "mindfulness" or moment-to-moment attention than of discrete "state" changes.

Just as Kornfield's research suggested changes occurring at times other than during meditation, other researchers have attempted to examine the same phenomena. These studies looked at self-concept and perceived behavior change and gathered data using pencil and paper tests [Seeman et al, 1972; Nidich et al., 1973; Hjelle, 1974; Otis, 1974; Shapiro, 1978]. All of these studies reported that meditators changed more than control groups in the direction of positive mental health, self-actualization and positive personality change. These reported changes included self-perceived increase in capacity for intimate contact, increased spontaneity, acceptance of aggression and inner directedness. The above studies did not attempt to study actual behavioral changes associated with the self-reported findings.

Therefore, Shapiro [1978], in an attempt to learn more about behavioral change by means of other than pre and post test scores, asked participant's to monitor nine factors on a daily basis, eg. feelings of anger, feelings of anxiety,

feelings of creativity, negative self-thoughts, positive self-thoughts, feeling of creativity, seeing beauty in nature. The experimental group practiced Zen meditation both formally and informally. It reported significant changes in a favorable direction of less feeling of anxiety, more feeling of creativity, etc. Shapiro's emphasis on longitudinal experience was a valuable addition to phenomenological methodology despite the fact that it is unclear what parts of the intervention were responsible for these changes.

Brown and Engler [1986] attempted to correct some of these inconsistencies and unanswered questions in a study involving both beginning and advanced meditators.

Brown and Engler's [1986] study involved 50 American and Southeast Asian meditators and teachers. All were practitioners of Vipassana (insight) meditation, a form of mindfulness meditation originating in Theravadin Buddhist tradition. Subjects were followed for three months and grouped by skill level using both teacher ratings and a questionnaire designed by the researchers to reflect classic stage criteria of meditation. In addition, the Rorschach was administered to all participants to investigate <u>perceptual</u> processing rather than personality dynamics. The researchers concluded that these meditators moved through invariant stage sequences (Table 1, pg.45). In each stage they appeared to <u>perceive</u> in ways distinctly different from

preceding or following stages. Participants appeared to process the Rorschach in unique ways that were in close agreement with meditation stage predictions based on classical Theravadan texts.

Table 1. Purported Stages of Vipassana Meditation

Stage	Primary Characteristics
Beginner	Pre and Post protocols remained unchanged yet increased awareness of internal world ie. thoughts, fantasies. Beginning meditators began learning the "skill" of adapting to the flow of internal experience.
Samadhi (concentration)	Capacity of the meditator to be less distracted by internal events and perceptual experiences. Increased quality of attention and concentration. Awareness of process rather than content becomes more dominant. Increased awareness of moment-to-moment change.
Access Samadhi	Stable and steady attention. Absorption in the objects of meditation.
Insight	Sustained observation of the moment-by-moment nature of the mind. Noticing of thoughts and feelings from inception to disolution. This allowed for new knowledge or wisdom about the nature of 'self'. Recognition of sufferinng inherent in "normal" reactive mind. Insight into "selflessness" of mind, body and external perceptions.

Each group processed the inkblots in unique ways. The beginner's group did not differ pre and post meditation experience. The samadhi group Rorshachs were characterized by " its seeming unproductivity and a paucity of associative responses." Their comments were primarily on the pure perceptual features of the inkblot eg. colors, shading etc. Interestingly, the classic Theravadan descriptions of the early stages of samadhi describe a gradual reduction and eventual cessation of thought as well as perception without cognitive elaboration (the recognition of patterns). Meditators in this group found it difficult "to produce images and associations" since their primary attentional mode was one of "pure perception." The researchers reported these responses to be uncharacteristic of known normal or pathological responses. Importantly, the meditators in this group produced normal Rorschachs at pre-test. The insight group was characterized by responses that showed a "richness and an almost endless productivity" of associative elaborations. There was a high incidence of original responses, great variety and intensity of affect and frequent metaphoric uses of color. These post-test results were, once again, markedly different from pre-testing. The classical Theravadan descriptions of this stage underscore the meditators new found richness of experience. Interestingly, the meditators in this group remained unusually "non-defensive" and flexible in terms of their

capacity to interpret the Rorschach from a multitude of perspectives.

The Rorschach's of the most advanced participants of the insight group differed markedly from the other groups in so far as each subject viewed each card as a distinct aspect of Buddhist teachings on the alleviation of suffering.

Rather than viewing the inkblots as physical images upon which the contents of mind are projected, they regarded the inkblots themselves as a projection of mind. There was no loss of reality testing in any of the subjects.

These subjects were said to be enlightened yet as the classic meditation texts suggest, they experience the same contents of mind as prior to enlightenment but did not appear to react to it with the typical attitudes of attraction, aversion and indifference. Furthermore they appear to place themselves within a larger more universal context, as part of an inclusive, interdependent fabric of existence where life, death, form and emptiness mutually exist. Interestingly, the validity of results of the advanced insight group may be underscored by similar Rorschach responses found among Apache shamen [Klopfer & Boyer, 1961].

Although sequentially differentiated patterns of perception were traced in this study there is little data about the consequences these varying perceptual frameworks have in the day-to-day life of the meditator. Certainly the

report concerning the advanced meditators is intriguing but I am most interested in the earlier stages as they may provide a more practical understanding of the experiences encountered by meditators practicing within the context of a hospital-based, behavioral medicine clinic.

In another meditation-stages study, Dubs [1986] developed an eight stage developmental model of Zen practice (Table 2, pg.49). This was constructed on the basis of content analysis of participants' responses to the question: "Please describe what your meditations were like (physically, perceptually, emotionally, cognitively)". He also used previously constructed scales formulated by Maupin [1986] and Lesh [1970] to categorize meditation experience data. The following categories emerged:

Table 2. Purported Stages of Zen Meditation

Stage	Primary Characteristics
0. Soporific	Using Zen as a means of sedating oneself.
1. Derepression	Lifting repression of thoughts/ feelings.
2. Immersion	In thoughts, feelings, percepts.
3. Detachment	Ability to "observe" thoughts, percepts. The "observing ego." Able to "welcome" thoughts in a friendly manner without dwelling on them.
4. Intuition	Perception of synchronicities. For instance, gaining spontaneous insight into a problem not purposefully focused-on during formal meditation.
5. Partial Absorption	Separate sense of being dissolves yet feeling of individuality remains.
6. Complete Absorption	Feeling of individuality completely dissolves.
7. Prajna	Perception of oneness or "totality".
8. Trans-subjectivity	Interpenetration. A state wherein the subject experiences other people objects to be the same as s/he.

Dubs' research of Zen meditation yielded a greater number of discrete stages than the study with the Vipassana meditators. However both studies appear to trace qualitatively similar developmental processes. Importantly, in both cases, these studies appear to corroborate

phenomenological descriptions of stage development models found in traditional meditation accounts.

Although these studies appear to identify and describe a number of invariant stages of meditation there remains controversy concerning linear growth or development associated with meditation. Kornfield's [1979] phenomenological study of mindfulness meditators suggests a "non-linear" process characterized by periods of "regression, restructuring and reintegration" [Kornfield, 1979, pg.53]. He suggests that this non-linear view is important to take into account when designing research protocols as any methodology must be sufficiently sensitive to measure changes that allow for these non-linear characteristics to emerge.

Although these developmental studies are of value in terms of assessment and comparison of Eastern and Western developmental schema, they do not for the most part, provide much information about the various ways in which people at differing or similar domains of development utilize these varying levels of perceptual processing in the conduct of their everyday lives. Since this was one of the primary concerns of this study, the following review of literature from the field of Self-Knowledge Development Theory (SKT) is intended to provide an additional avenue for investigation.

Self-Knowledge Development Theory

Self-Knowledge Development Theory (SKT) was developed by a group of educators at the University of Massachusetts [Alschuler, Evans, Tamisharo & Weinstein, 1975]. Using a structural-developmental approach to self-knowledge, SKT posits an invariant sequence of stages in the ways people reason about their internal experience. In particular, this theory was developed as one means of providing a theoretically coherent map in the field of humanistic/psychological education.

Background

Self-Knowledge Development Theory, like all structural developmental theories is concerned with the structure, rather than the content of reasoning. These theories focus on how people reason, not what they reason about. They hypothesize that people make sense of the world through the organization of structures and that these structures are both the product of and the mechanisms for interaction with the environment. According to these theories there is a constant interactional relationship between the individual and the environment. An individual makes logical sense of the environment via their internalized system of understanding (structures) and in the process the system is modified. As these structures are modified they eventually give way to new, qualitatively distinct structures and this

allows the person to organize the environment in distinctly different ways. Stages of human development refer to these successive and logical processes as they occur over the life span.

Researchers such as Piaget [1968] have elucidated and elaborated on cognitive developmental theory. Piaget's work has been largely concerned with non-social cognition; the ways people reason about inanimate objects. However, this same approach has been used to examine social cognition; the ways people reason about animate beings. As a part of social cognition, Self-Knowledge Development Theory has sought to describe and understand, "<u>How</u> people develop knowledge about the self that interacts with the physical and social world" [Winstein & Alschuler, 1985, pg.19].

<u>Measuring Self-Knowledge</u>

In an attempt to develop a logical method for measuring self-knowledge researchers decided to used the raw data of people's experience. People establish knowledge about themselves by compiling the "data" of experience, conceiving of this experience in a various ways and expressing it as descriptions and hypotheses. In SK theory this data consists of all sensations, feelings, thoughts, and actions that an individual holds in <u>conscious awareness</u>. These data are explicated through mental operations. Mental operations such as categorizing, assigning causality, hypothesizing

alternative actions and consequences are then organized into coherent wholes or structures . As structures evolve into complex processing systems, they pass through an invarient sequence of hierarchial stages. These structures can only be inferred from the differences in their products. In SK theory, these products are the descriptions and hypotheses that people make about themselves. Self-knowledge refers to these descriptions, the external products of internally processed experience. It does not refer to the private, non-verbalized awareness of one's own experience.

In an attempt to measure self-knowledge, a standard method was created and the resulting instrument has been modified over time [Alschuler, Evans, Tamashiro & Weinstein, 1975; Tamashiro, 1976; Sweitzer, 1985]. This study used the most recent instrument [Sweitzer, 1985], the Experience Recall Test (ERT 2) (Appendix A), to measure S-K. In each modification of the instrument a similar but progressively refined method was utilized to ascertain stages of self-knowledge.

In early attepts to measure SK people were asked to remember a series of progressively distant, unforgettable experiences and to then pick one to recall in detail (see Appendix for a full description). They were then asked to respond to a series of questions and statements in writing. Initially this instrument was administered to 201 males and females between the ages of 7 and 76 in diverse social roles

and settings [Tamashiro, 1976]. A series of content-free geometric symbols were used to symbolize self-referral statements and the Guttman scaling technique [Guttman, 1950], was employed to determine if these symbols formed a developmentally hierarchial sequence. Initial validation research included the use of Lovinger's scale of ego development [Loevinger, 1976], as this personality measure and developmental theory was closely related to the focus of self-knowledge researchers. A second sample of data was gathered and independently coded without the inclusion of Loveinger's scale to minimize the bias associated with prior knowledge of subjects' ego levels (N=72). The results showed strong evidence supporting the hierarchial sequence of self-knowledge stages [Tamashiro, 1976].

Based on initial samples, four distinct stages of self-knowledge were identified. These are: elemental, situational, pattern and transformational. These stages were discussed in Chapter 1 and will again be discussed in Chapter 5.

Application of Self-Knowledge Theory

In application, S-K theory was intended to be useful in terms of goal setting, curricula sequencing and evaluation of educational interventions. The theory was intended to provide a means of quantitatively measuring changes in self-knowledge and as a means of evaluating educational

interventions. In addition, Ziff [1979] utilized S-KT to sequence questions in human relations training exercises and in the field of counseling it has been used by Sweitzer [1980] and Ivey [1984] to differentiate clients. It has also been used in family therapy settings [135]. In addition, Sweitzer [1985] has attempted to understand the movements (eg. changes in logic) that occur "with-in" stages, the intention being to refine S-K theory as a more useful educational tool.

Phillips [1977] studied self-knowledge levels in experimental and control groups to ascertain whether there would be any significant difference in the increase in S-K between groups involved in a developmentally based curriculum in substance abuse and those were were. A statistically significant difference was found in two of the four samples; no significant increase was found. Results showed the that the experimental group remained stable while the control groups decreased. Schiller [1983], studied the results of pre/post tests designed to determine the number of statements indicative of reasoning in the pattern and transformational stages of S-K, to see if there were significant changes after students participated in a semester long course (the Education of the Self). Although an increase was shown, there is no evidence that supports such changes as being indicative of developmental stage change.

Sweitzer [1985] has attempted to understand the movements (eg. changes in logic) that occur "with-in" stages, the intention being to refine S-K theory as a more useful educational tool. In an attempt to understand these changes, Sweitzer [1985] and Weinstein [1990] have continued to refine there understanding of SKT in terms of <u>with-in stage</u> growth. Weinstein has recently delineated the situationaal and pattern stages of S-KT into discrete sub-stages [Weinstein, 1992].

Weinstein and Alschuler suggest that the goal of self-knowledge education is to "develop students' competence in generating knowledge about the nature, causes, and consequences of their inner experience" [1985, pg. 22]. The authors of this theory recognize its limitations yet remain committed to systematically assisting people to become "natural students of their own experience" [1985, p.24) by consciously and systematically focusing on and using the "data" of everyday experience to increase self-knowledge.

Utilizing an educational format, Weinstein and Alschuler have made deliberate and systematic attempts at creating an educational environment that fosters development [Kohlberg & Mayer, 1972]. This has provided learners access to a nourishing environment where contradictions about habitual ways of thinking about self; exposure to perceptual modes at adjacent levels of SK; and carefully

constructed interactional awareness exercises are explored within an orderly, theoretically coherent context.

The goals and objectives of self-knowledge aquisition as formulated by SK theory are both emperically-based and field tested. In principle, these objectives are congruent with the goals of mindfulness meditation training particularly when applied in a clinical setting. The convergence of these distinct modes of self-knowledge development is a an underlying theme of this dissertation.

Mindfulness Meditation Research

The following studies examine the clinical effectiveness of mindfulness meditation training (MMT) as a self-regulatory coping strategy with people who have been referred by their physician's to an out-patient behavioral medicine clinic. In each of these studies both the "formal" and "informal" practice of mindfulness (moment-to-moment awareness) were emphasized.

Kabat-Zinn [1982] reported on 51 patients with chronic pain who had not improved with traditional care. Patients experienced low back, neck, shoulder and headache pain. In addition some also experienced facial, noncoronary chest pain, angina and gastrointestinal pain. After practicing mindfulness meditation for 10 weeks, 65% of the participants experienced less pain. In 1984, Kabat-Zinn et al conducted a four-year follow-up of patients suffering with chronic pain

conditions and showed similar improvement on the measures previously reported.

In 1985, Kabat-Zinn, trained 93 patients with chronic pain conditions in mindfulness meditation. Reductions were recorded in pain-drug usage, while activity levels and self-esteem increased. Statistically significant reductions were also reported in measures of present-moment pain, negative body image as well as anxiety and depression. A comparison group receiving traditional medical pain control procedures did not show significant improvement on these measures.

In 1987, Kabat-Zinn et al. studied 225 consecutive patients with chronic pain conditions who completed training in mindfulness meditation. The 51 patients in the 1982 study and the 93 patients in the 1985 study were a subset of 225 patients reported in this study. Major and significant physical and psychological improvements were recorded using the Pain Rating Index (PRI). Improvements were also recorded in negative body image (BPPA), number of medical symptoms (MSCL) and global psychological symptomology (GSI).

In addition, a number of studies investigating the clinical use of mindfulness meditation (MMT) have been conducted by Kabat-Zinn et al.. These include: outcomes with patients suffering a host of stress related medical conditions [Kabat-Zinn, Sellers & Santorelli, 1986]; adherence rates of a clinical population engaged in MMT [Kabat-Zinn & Chapman-Waldrop, 1988]; the use of MMT with

collegiate and Olympic rowers [Kabat-Zinn, Beall & Rippe, 1984]; the use of MMT for stress reduction among Roman Catholic priests [Kabat-Zinn & Santorelli, 1990]. Collaborative studies have also been carried-out with researchers investigating the impact of MMT on personality measures such as Affiliative Trust [Weinberger, McLeod, Mc Clelland et al., 1990], Stress Hardiness and Sense of Coherence [Kabat-Zinn & Skillings, 1989 & 1992] and with people diagnosed with chronic anxiety and panic disorders [Kabat-Zinn, et al., 1992]. Additional studies have focused-on the usefulness of mindfulness training with people suffering the ill effects of chronic obstructive pulmonary disease [Kabat-Zinn, Tarbell et al., 1988] and on the rate of skin clearing in people with psoriasis undergoing phototherapy [Bernhard et al., 1988].

In 1989 an MMT study was conducted with people suffering the ill effects of psoriasis [Bernhard et al., 1988]. There is some evidence that stress can trigger or intensive incidents of psoriasis therefore it was hypothesized that engaging in MMT might influence the rate of skin clearing. Ultraviolet light exposure is a one aspect of usual treatment but because ultraviolet light (UV) is associated with an increased risk of skin cancer the possibility of reducing exposure time through the use of mental techniques (eg. MMT and visualization) could be both

clinically relevant and important in terms of mind/body interactions in healing.

In this study a total of 23 patients were randomized in two groups; 13 in the meditation cohort and 10 in the usual treatment group. Results showed that "turning point" (TP), defined as the onset of noticeable improvement in the skin condition, occurred significantly earlier for the meditators; median 10 sessions for MMT group; 15.5 for usual treatment group. The half-way point was also earlier in the meditators but this was not statistically significant. The "clearing point" (CP) for the meditators was attained significantly earlier. The median time to clearing was 27 treatment sessions for the meditators, while it was >40 sessions for the usual treatment group. The proportion of subjects who achieved clearing within 40 treatment sessions were significantly different between the two groups (Fisher's exact test, p=.019). Among the meditators, seven out of eight subjects attained HP by 25 sessions, and five out of eight cleared in less than 40 sessions. In the usual treatment group, three out of seven reached the HP by 25 sessions and none cleared in less than 40 sessions. A replication study is now being conducted and will include a long-term follow-up component.

Although MMT has been demonstrated as a useful treatment choice for people coping with chronic medical problems, it also appears to have a positive effect in the

domain of "stress resiliency." Antonovsky's Sense of Coherence (SOC) and Kobasa's Stress Hardiness (SH) scales purport to measure personality characteristics that convey "salutogenic" benefits in terms of a person's capacity to resist the negative effects of stress.

In 1988, Kabat-Zinn and Skillings [1989] studied 475 medical patients referred to the SR clinic were subjects in this study. 347 people completed the intervention but because one of the principle instructors became sick during the course, complete post information was obtained on only 281 participants (59%). Results showed mean SOC and SH scores improved significantly over the course of the MMT intervention (8 weeks) among the completers. Mean percent change increases were in the range of 6-7%. These may be clinically significant, given that SOC and SH are thought to be personality variables resistent to change. A replication study was conducted in 1989 with another 475 patients referred to the SR clinic and once again mean change increases between 6-7% in SOC and SH were observed (Kabat-Zinn & Skillings, 1989). Follow-up studies were also conducted to assess the long term stability of changes in SOC and SH among completers (N=232) and non-completers (N=60) of the MMT intervention. Repeated measures analysis showed the maintenance of positive changes in SH among completers after three years while no positive changes were seen among noncompleters. For SOC further improvement was

seen between post and follow-up. No gender differences were observed (Kabat-Zinn & Skillings, 1992).

In a recently completed pilot study involving 23 people referred to the SR clinic for anxiety disorders (Kabat-Zinn, et al., 1992) the following results were shown. Patients were screened using the Structured Clinical Interview for DSM-111-R (SCID). Outcome measures included the Beck and Hamilton Anxiety and Depression Scales, Fear Survey, Mobility Index, and frequency and severity of panic attacks (PAs). Participants were followed weekly prior to treatment, during (8 weeks) and at 3 month follow-up. Repeated MANOVA and ANOVA and single-subject designs were used. Group outcomes showed large reductions on all measures from baseline to treatment end with maintenance over follow-up. Results include: Beck mean Pre: 18.9; Post 8.1, F/U: 7.0, $F=5.36$, $p<.01$. Ten persons reported 1-3 PAs/week at baseline; at post, 5 persons had 1 PA/wk; at F/U:3 persons reported 1 PA/wk.3. Most people (20/23) showed reductions in symptoms over treatment and through follow-up. These results suggest that MMT may be a highly effective, non-pharmacological intervention in the treatment of anxiety and panic disorders.

As a previously discussed, Kornfield's [1979] phenomenological study of mindfulness meditators found that it was important to consider <u>both</u> formal and informal aspects of practice. Likewise, in a study involving 225

chronic pain patients, Kabat-Zinn et al. [1986] found that it was important to consider <u>both</u> aspects of meditation practice when examining adherence rates and long term effects in a clinical stress reduction program featuring intensive practice in mindfulness meditation. In a follow-up study, clinical improvements achieved during the intervention period (eight-weeks) were maintained for up to four years after completion of the intervention with patients having chronic pain conditions. Between 58 and 83% of the responders at various follow-up times reported that they continued to meditate at the time of inquiry, in response to the question "Do you meditate anymore?" When formal meditation was looked at, 56% were meditating at least three or more times per week for 15 minutes or more at a time. This percentage fell to 30% at four years.

Responders were then asked to report the amount of "informal" practice, defined as "an intentional shift in awareness invoked to cultivate relaxed moment-to-moment attention (mindfulness) during one's day". "Often used" was reported by 51% at six months and 50% at four years. At six months, 46% assessed it as "very useful" and 54% at four years assessed it as being "very useful" in coping with daily life stress. In this study awareness of breathing in daily life (AOBDL) was the "informal" practice assessed. It corresponds to an intentional moment of awareness or

mindfulness and serves as a "potential means of modifying the way one perceives one's self and one's experience."

In this study, over 93% of respondents reported using some combination of both formal and informal practice, thus carrying the intervention well beyond its chronological boundary.

> There are strong theoretical and practical reasons which suggest that a learned and intentional use of moment-to-moment awareness can have a profound effect on pain perception, the experience of suffering, and on stress reactivity...the follow-up findings in the present study support the concept that such a mode of being and perceiving may be of on-going value in coping with the experience of chronic pain even in subjects who no longer practice the more formal dimensions of the meditation or practice them infrequently [Kabat-Zinn et al., 1986, pg.171].

The results of this study appears to underscore the classic meditation texts' injunction that meditation is not simply something that is done as an isolated activity but must be incorporated into one's life from moment-to-moment to appreciate its intended effect.

The previously reviewed MMT studies appear to provide evidence for the potential efficacy of "formal" and "informal" mindfulness training in the clinical setting. This dissertation study has attempted a detailed investigation of the various phases of the process people experience as they participate in this form of self-knowledge education.

Conclusion

There appears to be very little literature that examines 1) the phenomenology of beginning meditators in 2) the context of a medical setting who are 3) engaged in a form of self-knowledge education that has as one its primary goals 4) the development of a continuity of attention defined as "mindfulness." This review of the literature has attempted to outline concepts and issues relevant to this dissertation study.

The section on mindfulness meditation was intended to place meditation within the context of behavioral medicine interventions while examining the results of clinical mindfulness studies. Since this proposed study will emphasize a phenomonological/subjective exploration of people's experience of meditation, the phenomonological review was presented as a means of placing this proposed study within an established methodology used in other meditation-based research and to point out gaps in previous phenomonological approaches that have not examined the experience of people learning meditation within the context of a medical setting. The phenomenologically oriented meditation-stage studies likewise, were an attempt to present previous meditation-based developmental research that have posited broad stages of mindfulness meditation but that have not described either the a person's experience of the development of these various perceptual domains or the

possible effects of these changes in the lives of meditators. The section on self-knowledge theory was intended to address one possible means of examining the ways in which adults learning mindfulness meditation in the context of a behavioral medicine clinic utilize skills being learned as well as to examine the intervention in terms of its possible effect <u>across</u> a range of self-knowledge stages.

CHAPTER 3

METHODOLOGY

Overall Approach

This study utilized in-depth interviewing, participant observation and document analysis as a hypothesis-seeking methodology to examine the dynamics of a behavioral medicine intervention utilizing mindfulness meditation training in an outpatient stress reduction clinic. The purpose being to 1) explore the subjective experiences of people engaged in this training within the context of a medical setting; 2) to examine the possible relationship to and consequences of this learning on such areas as the development of various coping strategies, on health-habit formation, the redesign of a lifestyle, as well possible changes in attitude and sense of self; and 3) to attempt an initial understanding of how people at differing stages of self-knowledge, as defined by Self-Knowledge Development Theory, utilized this intervention.

The primarily focus of attention in this study was the participant's point-of-view. As such, qualitative methods were particularly useful since they emphasize understanding from the inside rather than from the outside.

> The commitment to get close, to be factual, descriptive and quotive, constitutes a significant commitment to represent the participants in their own terms...A major methodological consequence of these commitments is that qualitative study of people in situ is a process of discovery. It is of necessity a process of learning

> what is happening...It is the observer's task to find out what is fundamental or central to the people or world under observation (Loftland, quoted in Patton, 1980,pg.36-37, cited in Merriam, 1988).

The study site functions within an out-patient behavioral medicine setting with an explicit educational orientation that emphasizes a skills-based approach to health. As the researcher, I was less interested in evaluating the pre and post intervention results of this intervention and more intent on understanding the process as subjectively experienced by the program participants. Therefore, a qualitative case study method was chosen, which is particularly well suited when studying both the process and the content of a particular educational approach [Merriam, 1988].

Use of Previous Meditation-Based Research Methods

This study incorporated aspects of previously conducted research into the phenomenology of meditation. As has been discussed in the Review of the Literature, three distinct research methodologies have been utilized. Briefly, these include: 1) studies conducted primarily with advanced meditators whereby traditional meditation texts describing the cartography of meditation experience were used as a means of analyzing the experience of meditators being investigated [Brown, 1977; Brown & Engler, 1986];
2) studies were the experimenter and the subject were the

same person. Several of these studies have been conducted by individuals trained in the behavioral sciences and who have also been long-term meditators [Shapiro, 1980; Deikman, 1982; Walsh, 1983]; 3) meditation-based phenomenology studies using standard scientific design whereby the experimenter gathers data from the individual(s) participating in the experiment [Maupin, 1965; Lesh, 1970].

However, with the exception of a few studies examining the combination of meditation and individual psychotherapy [Deathridge, 1975; Shapiro & Giber, 1978], I have found no meditation-based phenomenological studies focused on an in-depth description and examination of the experience of people engaged in MMT within the context of a hospital-based behavioral medicine clinic. Therefore, this study was intended to supplement the paucity of clinical meditation research and incorporated questions and methodology used in previous phenomenological meditation research where appropriate. For example, questions pertaining to "formal" practice such as "Have you noticed any changes in perception this week?" "Have you had any unusual experiences since our last interview?" [Kornfield, 1979]. "Have you noticed any distinct changes in your attitude following your meditation practice?" [Osis et al, 1973; Kohr, 1977]. In addition, the study was longitudinal (16 weeks), thus incorporating methodology used by Kornfield [1979], whereby meditators were questioned at intervals over an extended period of time

and by Shapiro [1979], who inquired into behavioral change occurring outside of formal meditation sessions ("informal" practice). In addition, Kornfield included a "follow-up" component in his study [1979]), as a means of ascertaining possible changes following completion of the studied intervention. I was also interested in possible changes in lifestyle, attitude, and sense of self after the conclusion of the intervention, and therefore, included a follow-up dimension in this study.

Choice of the Research Site

The Stress Reduction Clinic, a behavioral medicine service at the University of Massachusetts Medical Center was chosen for three reasons. First, it has been in existence for twelve years and was the first hospital-based behavioral medicine clinic to utilize mindfulness training as the primary mode of treatment. Secondly, as an instructor in the SR&RP I wanted to know more about what might be occurring for participant's and I wanted to develop a systematic method of inquiry with which to do so. Thirdly, as discussed in the literature review, although there a body of outcome research about the clinical application of mindfulness meditation, this research was welcomed by the SR&RP staff because it proposed a unique form of inquiry which would compliment to previous research methods utilized to study patient outcomes. The staff viewed this research as

potentially useful in terms of developing a better understanding about what it is that they do and with whom!

Participant Selection Criteria

There were approximately 175 physician referred participants enrolled in the Fall 1990 teaching cycle of the SR&RP, with approximately 25 participants in each of 7 classes. Eight participants for this study were selected from one class with an enrollment list of 25 people. The study was limited to eight participants to insure an in-depth inquiry.

A letter was sent to each member of the Tuesday a.m. class (approx. 25 people) before the program began. The letter was intended as both an invitation to participate in the study and an explanation about the nature of the study. From the pool of fifteen people volunteering for the study, eight people were selected by lots. All criteria for the Study of Human Subjects were met. At the time of selection there were 18 females and 6 males enrolled in the Tuesday a.m. program. As a means of reflecting this gender ratio, six females and two males were selected for this study.

As further background for participant selection criteria it should be noted that two of the eight participants had prior meditation experience. On male had learning Transcendental Meditation (TM) approximately 15 years ago and was also a past participant in the SR&RP who

dropped-out because of scheduling conflicts. He had no consistent meditation practice.

A forty-five year old female media consultant had been practicing mindfulness meditation for approximately eighteen months. During a telephone conversation prior to the study she spoke with me about her previous meditation experience but didn't convey to me the depth of her practice. As it turned out, her practice was regular and consisted of one hour of sitting meditation and one hour of yoga per day. Had I full understood her past experience with mindfulness practice I have precluded her participation in the study. Since I did not find this out until after the onset I did accept her into the study and she was later randomized into the study as a participant. During the study she participated in two intensive retreats outside of the SR&RP and although the account of her experience in the SR&RP is important in terms of describing her perceived experience of meditation training as developed in a traditional meditation center and her training in the SR&RP, I chose not to include her in the individual case studies.

Data Collection Methods

In-depth interviewing was the central methodology of this study, utilized to examine the on-going experience of each participant during the four-month study period. Each participant was interviewed by this researcher four times.

Interviewing

Interview One occurred after the conclusion of first week of the program. Interview Two marked the halfway point in the intervention and was conducted after the conclusion of week four. Interview Three occurred during the final week of the program (week 8) and Interview Four, the final interview, took place eight weeks after the conclusion of the program (week 16).

Interviews were semi-structured and consisted of specific sets of questions while allowing the researcher to respond to emerging data generated through interviews and by my field observations. All interviews were audio-taped and transcribed verbatim.

The interview questions sought information about the participant's experience of learning mindfulness meditation; the application of mindfulness in daily life; and possible changes in perception of self.

Interview 1

During Interview 1 participants were asked to reflect on their experience of the first session of the SR&RP and on their initial experiences with the first week of daily meditation practice. There was a specific set of questions for all participant's although the order in which asked these questions were asked, varied from person to person. In addition, participant's were asked questions unique to their

specific life situations and perspectives as revealed through the course of the interview. Here are some examples of questions asked in interview one:

What does it mean to you to be a "patient?"

Do you identify yourself as a "patient" in the SR&RP?

Have you had an prior experience with meditation?

Please describe your experience of the Body Scan meditation this week?

Did you find it relatively easy or difficult to make the time to practice this week?

What was it like participating with twenty-five other people in class last week?

Are you learning anything new about your body, your breath, your mind, your sense of self?

Have you noticed any changes in your response to stressful situations this week?

If you were to think of your decision to participate in the SR&RP as a journey, where would you say you were heading?

During and following <u>interview one</u>, I made brief notes about the emerging themes of each participant. When the interviews were transcribed I read them several times and began an initial analysis of the data. This procedure became a crucial aspect of the study that I continued to employ during the remainder of the inquiry. Based on the data from the first interview, in conjunction with field observations, I began constructing <u>two</u> different sets of

interview questions for each participant. One set of questions were asked to all participants and focused on various aspects of the SR&RP shared by all study members, eg. home assignments. A second set of questions were unique to each individual and pertained to specific issues and areas that they identified as important. For example, one participant was beginning to make a life-cycle transition towards retirement. He identified this as being "very difficult" and at times quite "uncomfortable" because he felt that his sense of self was being disrupted. Constructing two set of questions afforded me the possibility of learning about and documenting the various ways participants experienced the content of the SR&RP in relationship to the unique psychosocial context of their lives during their participation in the program. This two-pronged approach allowed for multiple forms of analysis that focused on both the individual and collective experience of the process as it was reported by participants.

Interview 2

During interview two (following week 4) specific questions were asked to all participant's concerning their experience of "formal" meditation. These included: Please describe on a weekly basis your frequency of practice? The duration of your practice?

What has been your experience of "formal" practice, eg. with the body scan, the yoga, sitting meditation?
Have you noticed any changes in your ability to concentrate?
What has been the predominant experience in your formal practice this week? Has this been the same as or different than last week?
How do you remind yourself to practice?
Have you noticed any changes in the frequency and/or severity of your medical symptoms?
Have you noticed any changes in your sense of self since our last meeting?
If you had to name any internal competencies or skills that you might be learning what would they be?
So far, what has been your experience in attempting to use or apply what you are learning in everyday situations?
In addition, as will be discussed in chapter 5 (Results), participant's were also asked about individual themes.

Interview 3

Interview three (week 8) occurred at the completion of the intervention and changed somewhat in terms of format. Although I constructed a set of questions for all participants it was relatively small in number in comparison to interviews one and two. There were reasons for this change. During the latter-half of the intervention there seemed to be an emerging confluence between the "skills"

being learned and individual issues and themes. As the skills of self-observation developed, various dysfunctional habits or patterns became more evident to the participants. To explore this apparent developmental process further, I constructed in-depth, individual interviews with each participant. Questions emphasizing "informal" practice were also asked. Examples include:

What does it mean to you to practice meditation "informally?"

Have you made any specific changes in lifestyle during the last three weeks?

What has been most/least helpful in learning "informal " practice?

Have you noticed and changes in your capacity to cope with stressful situations?

Have you noticed any changes in the frequency of "mindfulness" in daily life?

Do you feel that the SR&RP has helped you cope with your medical condition?

Interview 4

Interview four (week 16) occurred 8 weeks after the conclusion of the intervention. Once again, two sets of interviews were developed. Interview questions included:

Do you continue to practice?

Frequency of practice? Duration of practice?

What type(s) of formal practice do you most/least prefer?

Have you experienced any lapses in <u>regular</u> formal practice? If so, are you practicing now? If yes, how did you "come-out" of the lapse? If no, can you say something about that experience?

Would you share some examples of how you use meditation skills in daily life?

Do you use any particular strategies to prepare for potentially stressful situations?

What is your experience of meditation practice, now?

Have you noticed any changes in the frequency, intensity or duration of your medical symptoms?

Participant Observation

Qualitative research posits the natural setting as the most direct source of data and sees the researcher as the primary instrument of data aquisition (Bogdan & Biklin, 1982). In this study I was a participant observer in each of the nine sessions of the program (approx. 27 hrs.). My intention was to listen for the various ways in which study participants spoke about self, program or meditation practice during the large or small group discussions, about ways they began to discuss their particular stressors and how they might have typically handled them or were beginning to experiment with modifying their responses.

The methodology I employed for conducting field observation included listening for verbal responses from participants as well as observing and noting the varying ways that they responded either verbally or non-verbally during the weekly sessions. The meeting room set-up was such that I had easy visual and auditory access to all participants, thereby allowing me flexibility and unimpeded observation during all sessions.

In addition to their verbal and non-verbal responses during the presentational and discussion segments of the individual sessions, I also payed close attention to the ways participants actually practiced the various meditation techniques in the classes.

These kinds of notes allowed me to document the <u>in-classroom</u> responses of the participant's while also providing possible points of clarification, intuition or further areas of investigation. In addition, I recorded fieldnotes during the individual interviews and maintained a personal log of my own reactions and responses about analysis, method, ethical dilemmas and/or conflicts that arose throughout the study.

Observation yielded less information than I had anticipated at the outset of the study. However, a number of entries did uncover important information when addressed during the interviews.

Document Analysis

Several types of documents that provided further descriptive and explanatory power about participants were included in the data analysis. These included physician referral letters, and the pre and post program medical records of participant's written by SR&RP staff members.

Medical and Psychological Measures

In addition to the analysis of documents already discussed, all study participants were administered medical and psychological symptom measures at pre (week 0), post (week 8), and follow-up (week 16). The ERT 2, a measure of self-knowledge development, was given to all participants prior to the beginning of the intervention.

The pre and post measures were completed by all participants in the SR&RP and were not administered by this researcher. Three instruments were used.

The MSCL

This is a medical symptom checklist used routinely in the SR&RP. It has medical and psychological symptoms that can be counted separately or combined to yield a total symptom score. In this study the total score was reported at pre, post and follow-up (Appendix B).

The SCL-90R

A standardized measure of psychological distress. It has nine separate symptom dimensions eg. anxiety, depression and a global score (GSI-General Severity Index) [Derogatis, 1983]. The GSI was reported in this study (Appendix C).

The ERT 2

All participants were individually administered the Experience Recall Test (ERT2), a measure of self-knowledge development (SK) [Alschuler & Weinstein, 1984 and Weinstein & Sweitzer, 1985], prior to the first session of the program by this researcher. The ERT2 is a two-part instrument. Part 1 asks participants to scan their memory for events they deem to be important. Next, they are to choose one experience in which they experienced a problem or conflict and are guided in recalling the details of the experience without discussing this verbally. In Part 2 subjects are asked to make written responses to questions that ask them to describe their thoughts and feelings about the experience (see Appendix A for the full text of the instrument).

In this study the ERT 2 was administered in order to determine, prior to the intervention, the participant's level of SK, but the results were not revealed to this researcher until the conclusion of both the individual and cross-sectional case analyses. Using the results of the instrument in this way allowed for an initial analysis

independent of and unbiased by S-K data while providing further explanatory power during the final phase of data analysis about the ways people at differing developmental stages of self-understanding utilized mindfulness meditation training. It also provided a method of triangulation [Rossman & Wilson, 1985; Marshall & Rossman, 1989] to enhance both the credibility and the dependability [Lincoln & Guba, 1985] of the study.

Data Management

This study generated a large amount of data, and data management became an important aspect of the methodology. Hand-written fieldnotes were retyped in computer files. Each person in the study had a separate file. Each date of field observation was filed separately and the context of the observation included. All fieldnotes were organized and paginated consecutively as they accumulated.

All interviews were audio recorded and transcribed verbatim. Two hard copies of each interview were produced. One was filed. The second was used for coding of the data. The interviews yielded approximately 1,000 pages of text. All documents were filed in separate folders and were maintained in a central location for easy access.

Analysis of the Data

Data analysis was grounded in inductive, hypothesis-seeking methods [Mullen & Reynolds, 1978; Marshall & Rossman, 1989; Merriam, 1988]. Categories were generated that reflected emerging themes and patterns. Emerging hypotheses were tested against the data and alternate explanations of the data were examined. Research questions were continually examined throughout the study as a means of understanding and rethinking the study as data emerged over the course of successive interviews.

The analysis relied on Merriam's formulation of qualitative case analysis [1988], particularly in terms of developing the individual cases. The cross-sectional analysis was influenced by the work of Yin [1984], as well as by aspects of the "grounded theory" method developed by Glazer and Strauss (1967) and by methods utilized by Kornfield in his phenomenological investigation of mindfulness meditation (1979).

Analysis began early in the study. Data gathering, analysis and conceptual integration occurred simultaneously. The ratio of these various procedures fluctuated during differing phases of the research.

Data Coding

The thrust of data analysis was on the uncovering of characteristic patterns described by participants concerning

their experience of learning and applying MMT, and possible changes in attitude and perception of self occurring during the study.

The analysis was two-tiered. The first level included the development of multiple categories of experience as they reflected each phase of the training process as uniquely experienced by each participant. This phase of analysis began by examining longitudinally the experience of each participant beginning prior to the intervention (week 0 - the regular SR&RP intake interview) and concluded with a final interview (interview 4) two months after the conclusion of the intervention (week 16).

Individual Case Study Analysis

Phase one of analysis culminated in the development of three individual case studies, chronicling, in the participant's own words their experiences during and following the intervention. Included in these individual case studies are the results of pre/post and follow-up medical and psychological symptom measures. These pre/post measures were administered to all participants in the SR&RP. Follow-up measures were included in this study as a means of continuing to assess changes in these measures in the study population over time. The quantative approach complemented the qualitative data analysis and furnished further credibility and support for the study.

The documentation and presentation of individual case studies was deemed important for two reasons. First, as mindfulness meditation becomes increasingly utilized in clinical settings, case studies provide a valuable blueprint of therapeutic experience for clinicians intending to include mindfulness in their particular settings. Secondly, by their very nature, descriptive qualitative case studies include both the content of a person's situation eg. symptoms and medical condition(s), as well as the context of a person's life in which those symptoms arise. The explicit analysis of both of these dimensions provides a more accurate representation of the individuals in the context of their lived experience, thus shedding considerable light on the application of therapeutic methods as occurring within the context of a person's life at present.

Two women and one man were chosen for the individual case studies. Each of these people's current situations represented a distinct developmental phase in the life of an adult and each of them reported that in addition to their medical conditions, part of their reason for enrolling in the SR&RP was to learn to cope more effectively with the tasks and turbulence associated with these developmental phases. In each case, the participant had been referred for chronic medical problems and, as will be discussed later, viewed their medical conditions and current developmental tasks as related.

Cross-Sectional Case Analysis

Following this phase of analysis, a second level sought to identify common themes and patterns among all eight participants in an attempt to uncover core variables leading to hypotheses about the learning of mindfulness meditation and its applications in specific developmental tasks. This comprised a more in-depth, systematic analysis of the data resulting in a description and examination of basic categories and sub-categories of experience during and after the intervention. This analysis is a cross-sectional case study of the participants' experiences during the four interview cycles of the study.

Data was coded into as many categories as possible and categories were discarded or changed as the gathering of data continued. The intention of the process was to develop core categories and substantive theory (Mullen & Reynolds, 1978; Mullen, 1978; Speigel & Spira, 1991) about the experience of adults learning mindfulness meditation in a hospital-based behavioral medicine clinic.

Basic Categories of Experience

At the outset of the study six basic categories of experience were established. However, early in the analysis, while interviewing and data collection was being conducted, the overlapping nature of these categories became apparent. Therefore, the six original domains of inquiry were subsumed into three basic categories. These were:

Learning Meditation [LM]; Application of Meditation in Daily Life [APM]; and Perception of Self [SP].

Within these basic categories of experience, sub-categories of experience were delineated from the data.

Sub-Categories of Experience

Following an analysis of the basic categories of experience, multiple sub-categories were established through further analysis of the data (Table 3, pg. 88). These sub-categories comprise experiences reported by participants over the course of the study. These reported experiences emerged progressively and were common to all participants, although there are important differences in reported experience within a sub-category of experience. These are discussed in detail in Chapters 5 and 6.

Table 3: Sub-Categories of Experience

Basic Category: **Learning Meditation [LM]**
Sub-Categories:

- Making time to practice
- Awareness of the body
- Sensitivity to breathing
- Awareness of thoughts and feelings
- Perception of stressful events
- Frequency of practice
- Internal sense of tension and ease
- Concentration
- Arousal of past trauma and early memories
- Non-attachment to mental content
- Lapses in formal practice
- Internal competencies
- Fluid adaptation to change
- Insight into behavior patterns
- Attitude towards life
- Personalizing formal practice
- The felt-sensation of regression
- Reengagement in formal practice

Basic Category: **Application of Meditation [APM]**
Sub-Categories:

- Body-based awareness in daily life
- Awareness of mind states in daily life
- Learning to "stop"
- Patterns of informal practice
- Decreasing distinction between formal and informal practice
- Sustained informal practice

Basic Category: **Perception of Self [SP]**
Sub-Categories:

- Perception of self as a patient
- Perceived mind-body relationship
- Sense of "self" and experience of illness
- Orienting towards a "healthier self"
- A sense of having been "asleep"
- "Friendliness" with self
- Rapport and connectedness
- Self-trust
- Self-acceptance
- Authenticity
- Sense of peace

The basic and sub-categories of experience were analyzed in each of the four cycles of interviewing as a means of ascertaining the longitudinal dynamics of MMT, and to document an emerging typology of experience characteristic of MMT. Importantly, the various sub-categories of experience emerged progressively over the course of the entire study and will be discussed in detail in Chapter 5.

Establishing Trustworthiness

Lincoln and Guba (1985) suggest four primary features for establishing the trustworthiness or "truth value" (p.290) of a study in terms of applicability, consistency and neutrality. These features are credibility, transferability, dependability and confirmability.

Credibility

Credibility was established through the use of four primary methods: fieldwork, triangulation, peer debriefing and member checking.

Fieldwork and Observation

All participants were observed over an extended period of time. I attending each of the nine (9) program sessions (approx.27 hrs.) and met with each person individually,

before, during, and following the conclusion of the clinical program.

Triangulation

Data from multiple sources was used to compare, corroborate, refute, and explain emerging trends. Multiple data sources included: field observations, interviews, pre, post, and follow-up measures, the ERT2, and intake and outtake interviews conducted by an SR&RP staff member other then myself.

Peer Debriefing

Peer debriefing was utilized as a means of establishing a feedback system with a number of peers who were not connected with the study. I was a member of a dissertation support group that served as a collective, peer debriefing process. The members of this group were not co-investigators but had become intimately familiar with the thrust of the research and were able to question and assess my written and oral presentations about the study as it progressed, thereby suggesting alternative interpretations and hypotheses. Thus they fulfilled an important function in terms of assisting me in maintaining clarity of thinking while minimizing the likelihood of misinterpretation of the data.

Member Checking

There was an informal attempt to incorporate member checking into the study. Although I did not return interview transcripts to participants, I did review with them what we had discussed during the previous interview. This allowed for greater accuracy about the themes, interpretations, and possible assumptions I had developed from the participants' words.

Transferability

This inquiry relied on detailed "thick description" [Bogdan & Biklen, 1982] of all phases of the process. In addition to the interviews and field work, descriptions of the context were also included in the analysis. As already described, I also maintained an account or 'audit trail' of my personal thoughts, feelings and study decisions.

Dependability

By definition the qualitative/interpretive approach to research assumes that the social world is always changing and therefore that study designs must be flexible enough to respond to those changes (Marshall & Rossman, 1989). Therefore, I have attempted to accurately document the setting of the study and the changes in design that were reflective of the changing understanding of the setting as the study continued.

Since dependability is the analog for reliability and consistency in positivist research, details of the design decision were explicitedly discussed and all field decisions about alterations in the proposed research strategies and focus were documented.

Confirmability

In qualitative inquiry, confirmability rests firmly on the data. As a researcher deeply interested in this particular area of inquiry, I attempted to control for bias by including; 1) An explicit description of all data collecting methods; 2) basing analysis firmly in the data; 3) discussing my own biases and subjectivity as they emerged during the study (for a comprehensive description of this see Peskin (1988); 4) making explicit and public, all strategies for the collection and analysis of data; 5) making public all decisions made about alterations in the research design; 6) preserving all data as a part of the process of inquiry; and 7) checking for and presenting alternative hypotheses.

Assumptions and Limitations of the Study

First, this study assumes that Mindfulness Meditation Training is a valid and useful clinical intervention that other health professionals and educators might also find

valuable. It is not an attempt to defend mindfulness meditation or it's application in behavioral medicine.

Second, it assumes that Self-Knowledge Development Theory is also a valid and useful model of one aspect of human development that clinicians and educators might also find valuable.

Third, the sample is small in number. Since the intention was to document and analyze longitudinally the in-depth experience of people engaged in clinical MMT, a small sample provided evidence and support for the categories of experience that emerged progressively during and after the intervention. In that sense, the small sample was useful as a means of initially ascertaining a typology of experience among people with diverse diagnoses who are engaged in MMT. However, a larger sample will be needed to verify and strengthen the results.

Fourth, this investigation involved only one behavioral medicine clinic utilizing MMT. Therefore, comparisons that might either corroborate, refute or supply alternative hypotheses can not be made about the emerging patterns of experience among participant's engaged in MMT in group-oriented, out-patient behavioral medicine settings. Nonetheless, the intention of this study was to simply <u>begin</u> such a process. The results provide a valuable point of orientation for clinicians and researchers interested in

furthering their understanding of the applications of MMT in a behavioral medicine setting.

Fifth, as a meditator and instructor in the SR&RP it is evident that I have certain biases about the clinical application of mindfulness and towards the intervention site. Instead of either denying or impulsively acting on these biases, I have attempted, in the spirit of mindfulness, to use this awareness in the service of the study. Largely speaking, I feel I was able to maintain a sharp sense of awareness of the unfolding process and yet at times I was jolted by the way I framed an interview question or how I responded to a participant's answer. The research process itself was one of mindfulness. On several occasions I marked these responses on the hard copy interview texts as examples for me to learn from and remember.

On the other hand, I found that my understanding of both the content and process of the intervention were invaluable in terms of developing the protocol, in the stimulation of hunches that positively influenced the direction of the stud,y and in deepening a sense of interest and curiosity that allowed me to engage in authentic relationships with the participants.

Sixth and finally, although aspects of the <u>content</u> of the intervention are documented and discussed, the emphasis is weighted towards recording and describing the individual and collective experience of the <u>process</u>. This was

intentional. The main thrust of this research was phenomenologically-oriented, focusing on the individual and collective experience of the participant's. However, this does limit and omit valuable content-oriented information that has been documented elsewhere (Kabat-Zinn, 1990).

Conclusion

It has been suggested by some researchers that qualitative inquiry might serve as a particularly useful approach in the area of health education (Mullen & Reynolds, 1978; Mullen, 1978; Speigel & Spira, 1991). Such an approach concerns itself with understanding meanings, interpretations and strategy development of participants. The intention is to describe more accurately the participant's world rather than preconceiving that world and its meaning for people. As a consequence, the interactions between people, health status and health education programs might be more accurately understood in a holistic sense, thus increasing the possibility for more refined, accurate strategies in health education programs.

CHAPTER 4

THE RESEARCH SITE AND THE STUDY PARTICIPANTS

The Research Site

The Stress Reduction Clinic at the University of Massachusetts Medical Center (UMMC) was the site of this study. The clinical program, known as the Stress Reduction and Relaxation Program (SR&RP), has been an outpatient behavioral medicine clinic at UMMC for twelve years. Clinic participants are referred either by physicians or psychologists and are required to attend an 8-week, 11-session program. Participants attend a 2 1/2 class once a week with 25-30 other class members as well as attending an 8-hour "retreat" during the 6th week of the program. Each participant attends an individual pre-program interview with a clinic staff member intended to give people the opportunity to discuss their individual situations and life stresses, to obtain a variety of medical and psychological measures as well as a relevant physical and psychosocial histories and to have participants formulate three self-selected goals they hope to accomplish through the program (typical examples: "to lower my blood pressure; "to sleep better"; "to develop peace of mind"; "to learn to cope in more positive ways," ie. "to stop smoking or overeating." The program is then described to them in detail and

those choosing to enroll agree to several explicitedly stated requirements.

Program Requirements

The following requirements are explicitedly discussed and agreed to by all participants in the SR&RP:

A. To attend each weekly 2 1/2 class for 8 consecutive weeks.

B. To practice home assignments 6 days per week for 45-60 min.per day for the next 8 weeks. Homework includes four "formal" meditation methods. These are 1) a Body Scan meditation practiced in the supine position; 2) Sitting meditation; 3) Hatha Yoga and 4) Walking meditation. The Yoga is taught and practiced as a form of mindfulness (eg. to cultivate a continuity of attention). With the exception of Walking meditation, the "formal" practices are practiced during an uninterrupted 45 min. period. Participants are introduced to each of these forms in classes and each week the skills are practiced and systematically deepened. To facilitate home practice and continued guidance, participants are given 2 audio-cassette tapes with the recorded meditation practices.

C. To record perceptions and insights concerning various aspects of stress as well as effects of simple awareness exercises in a workbook (15 min. per day).

D. To attend an 8-hour SR&RP "retreat" on a Saturday during the 6th week of the program. Participants practice mindfulness meditation in silence for approx. 7 hr. with the guidance of the SR&RP staff. During the final hr. participants are given the opportunity to discuss their experiences.

E. Each week participants are given "open-ended" assignments having to do with the development of on-going or "informal" practice. In some cases these assignments are explicit, eg. eating one meal mindfully during this week. However, in most cases, the intention of these assignments is not to necessarily give people explicit methods of informal practice but instead, to encourage them to begin exploring ways and situations where the deliberate intention to pay attention might be useful for them.

Other Program Components

In addition to practicing the various forms of meditation, classes consist of, various experientially-based awareness exercises, large or small group discussions and didactic presentations about stress. Discussion is primarily oriented around the participants' personal experiences with the meditation practices, insights they may have had about aspects of stress in their lives, difficulties or success they are experiencing in terms of developing aspects of the "formal" meditation practice, and ways they may be extending

the meditation (eg. moment-to-moment attention) beyond the formal practice periods.

Population Demographics

Ninety-two percent of the patients seen in the Stress Reduction Clinic are physician-referred. Eight percent are referred by other health providers including clinical psychologists, social workers and other therapists (Kabat-Zinn & Chapman-Waldrop, 1988). During the past twelve years 6,000 people have participated in this behavioral medicine clinic. Approximately forty percent (40%) of the patient population is referred by physicians within the University of Massachusetts Medical Center from a wide range of clinical areas including: primary care, anesthesiology, cardiology, orthopedics, neurology, gastroenterology, oncology, infectious disease and psychiatry. The remaining sixty percent (60%) of patients are referred by physicians with similar specialty areas from the greater Central Massachusetts area.

The age range of participants is between twenty-four to seventy-seven years old and the mean age is forty-three. Participants come from diverse educational and socio-economic backgrounds and these dimensions are documented in the description of study participant's. The enrolled participants have a wide-range of diagnoses and all

participate in classes that are heterogeneous in terms of diagnoses.

The Study Participants

As already discussed, there were eight participants in this study. This section serves as a brief introduction to each of these people and sets the stage for the in-depth, case analyses in Chapter 5.

Nicole Crosby

Nicole Crosby is a 42 year old female referred to the SR&RP for complimentary treatment of heart palpitations and tachycardia that she has had since childhood. Until ten years ago she was diagnosed as having an anxiety disorder but through use of a Holter monitor, a conduction problem was found in her heart. Although not considered life threatening, when her heart goes into tachycardia it is quite frightening for her and at times requires emergency room treatment to restore a normal heart rhythm. Since the time of diagnosis she has been treated with beta blockers and lanoxin. She also suffers from headaches on a daily basis and takes a variety of medications for this condition.

She describes her life as stressful during the last twelve months. Major stressors include: the death of her father, a brother who died at age 35 from diabetes, a daughter diagnosed with an endocrine problem and a son in

the U.S. Army, who is on stand-by for assignment to Saudi Arabia.

She has been self-employed for ten years and describes herself as "not one to sit still". This is her second marriage, she has been married for fourteen years and has three grown children, two daughters and a son, from her first marriage.

She exercises on a regular basis, is 5'4''and weighs 132 pounds. Her self-set goals for the SR&RP are 1) "to be more relaxed", 2) "to worry less", 3) "to anticipate less and 4) "to reduce the incidence of heart palpitations".

Ginger Deevers

Ginger Deevers is a nurse. She has glaucoma, high blood pressure and diabetes. She has been referred to the SR&RP for asthma, a condition she has had for fourteen years. Ginger has been taking steroid medication since 1977 for asthma. At times, she finds it very difficult to breathe and sometimes, panics when experiencing shortness of breath.

She is legally disabled and is enrolled in an undergraduate degree program. She is politically active and is optimistic about participation in the Stress Reduction Clinic. She has three children ages 35, 25 and 16. Her youngest child lives at home with her. She has two grandchildren whom she "loves deeply" and who were sexually

abused by their father who no longer lives with them, but who continues to have visitation rights. This, along with health concerns and financial worries, is a major source of stress in Ginger's life.

She is 4'11" tall, weights 180 pounds and is 51 years old. She is taking a variety of heart and respiratory medications on a regular basis. Her self-set goals for the SR&RP are; 1) "to learn how to not get so emotionally upset when crises happen, 2) not to panic when breathing stops, and 3) to keep my daughter's problems in perspective and not judge my son."

Ginger became sick during the second-half of the SR&RP and was hospitalized because of respiratory complications. As a result, she was unable to attend the last four sessions of the program but she was determined to, and did complete all four interviews. Because of her increasing absence, I chose to only include data from Ginger's first two interviews as they reflect her actual participation in the intervention.

Jim Marshfield

Jim Marshfield is a 53 year old ex-truck driver. Five years ago he was hurt in a work-related accident and since that time has experienced chronic arm and hand pain. He describes his life as being very difficult since 1984 when he was divorced. In 1985 he became injured and his

girlfriend died. Following those events he had five surgical procedures and in 1988 was hit by a car. Since early 1990 his Workman's Compensation claim has been frozen due to litigation, he has no money and is ineligible for social security benefits at this time. For the last six months he has been living rent free at a friends home and does odd jobs around the home as a means of contributing to his room and board. Prior to his injury he worked for the same company for 26 years. He describes himself as a "loyal employee" and feels "very angry and abandoned" by his company since the time of the accident.

Jim has three grown children whom he does not see very often and he misses them. He is 5'6'' tall, weighs 201 pounds and continues to engage in a hospital-based, pain control treatment regimen on a weekly basis. His self-set goals include: 1) "to feel better and be less depressed, and 2) to be able to check my temper more easily".

Kathy Treblehorn

Kathy Treblehorn is a forty-five year old media consultant. She is a recovering alcoholic of 11 years, is divorced and is a single parent with two teenage sons. Her mother is an active alcoholic, her father died seven years ago, and although she does not live with her mother, she is primarily responsible for her care.

She has been referred for job-related stress, works in a "very volatile area" and experiences a good deal of "time pressure." She has had a regular meditation practice for eighteen months and describes herself as "stressed out" by the pressure of competing interests "bombarding" her at work.

She is 5'8" tall and weighs 136 pounds. She exercises on a regular basis and says that when she is stressed that she tends to use cigarettes and caffeine and "wants to learn further application of what she already knows."

Denise Collins

Denise Collins is a 63 year old retired elementary school teacher with severe heart disease and diabetes. As a result of forty years of diabetes, Denise is now legally blind and has progressive peripheral neuropathy that has left her with no feeling from her feet to her knees. She also suffers from peripheral neuropathy in her hands and fingers. During the last six months she had increasingly frequent and severe angina attacks.

Denise was referred to the SR&RP to help her learn how to cope with major changes in her life resulting from her worsening condition. She reports a definite relationship between her level of emotional tension and anxiety and the incidence of angina. She is unable to continue regular drug treatment for angina because of diabetic complications.

Denise's self-set goals for the SR&RP are: 1) "to prepare to die peacefully;" 2) "to be able to keep calm in the midst of an angina attack; and 3) to be able to rely on me rather than a tranquilizer."

Denise was hospitalized during the fourth week of the SR&RP. Her family and the hospital minister reported that she continued to practice the meditation during her hospitalization and Denise insisted on checking out of the hospital "in order to complete unfinished business." She went home, finished knitting three sweaters, wrapped her grandchildren's Christmas gifts and met individually with her children. Three days later she was again hospitalized and died of congestive heart failure. I attended her memorial service at the invitation of her family. Following the service I spent several hours with her family and friends at her home. This was a moving experience for me. Family members shared the details of Denise' life with me and provided a framework for closure that was important to me as I had developed a close relationship with Denise through the medium of our research together.

Joan Kitteredge, Ann Lindsey and Harry Ogden are the remaining members of this study. Rather than meeting them in brief, their cases will be presented in a more detailed and comprehensive manner in **Part 1** of Chapter 5. The experiences of the previously described participants will be presented in more detail in **Parts 2 and 3** of Chapter 5.

CHAPTER 5

RESULTS OF THE INVESTIGATION

Introduction

This chapter presents the results of the inquiry discussed in Chapter three. It is presented in three parts.

Part 1 includes the individual case studies of three of the eight participants in this study. For the most part, these profiles have been constructed from each individual's own words. There is little commentary or theoretical analysis. The profiles are descriptive and dynamic, chronicling the participant's views of their on-going experience during the study.

Part 2 involves a more refined and detailed cross-sectional case analysis of the data. Basic categories of experience are identified and are further differentiated into sub-categories. These categories and sub-categories of experience are then described and examined in terms of the range, patterns, and changing nature of experience as described by the study participants. The individual case studies presented in Part 1 comprise the primary source of data and are supplemented with data from the five remaining study participants.

Part 3 is an initial attempt to describe and analyze the experience of the participants in terms of Self-Knowledge Development Theory. The focus of analysis is

concerned with seeking information about the ways people at differing stages of self-knowledge, as defined by S-K theory, actually experience and utilize the same intervention. The primary thrust of analysis is not aimed at assessing changes in self-knowledge, as defined by S-K theory, but more at understanding and interpreting the actuality of each person's experience when viewed within the context of self-knowledge theory.

Part 1: Three Individual Case Studies

The following guidelines are intended to clarify the development and presentation of the individual case studies:

1) Each profile begins with a summary about the participant as constructed from their evaluation interview prior to entry into this study. This interview is a regular component of the SR&RP whether a person was a study participant or not (Pre). This summary will include: a) results of their pre-program medical and psychological measures and b) their self-set goals decided at the time of the pre-program interview. The "pre-program" comments have been constructed by the participant's medical records and are not the arbitrary opinion of this researcher.

2) There were four interview times during the study. Each interview will be clearly indicated. To the right of the interview heading there will be a word or series of words in quotations. These are the words of the participants not the

interpretation of the researcher. These word(s) are descriptors, representing each participant's current view of life. The descriptors are their response to the question, "If your life at present was the title of a book, what would the book be entitled?" The meaning and nuances of these "life-titles" will be discussed in various sections of the analysis (Tables 6,9,12,14,15).

3) Following the pre-program comments there will be a brief description of the <u>current developmental task</u> that each participant reported as being a part of their reason for enrolling in the intervention. In each case, they viewed these developmental challenges as intimatedly related to their current medical condition.

4) Interview 2 occurred after week 4 of the SR&RP. This interview marks the halfway mark of the intervention.

5) Interview 3 was conducted at the conclusion of the intervention (week 8). Following this interview will be a summary of each participant's post-program outcome measures (Post). These are derived from the medical records obtained during the <u>regular</u> post-program evaluation interview attended by all clinic participants. Once again, these summaries are <u>not</u> the opinion of this researcher.

6) Interview 4 (week 16) was conducted two months after the conclusion of the intervention. Following this interview there will be an additional summary of outcome measures as

each participant once again filled-out the same medical and psychological symptom measures given at pre and post.

Joan Kitteredge

Joan Kitteredge is a 33 year old woman referred to the Stress Reduction Clinic for Irritable Bowel Syndrome (IBS). She has suffered with recurrent bouts of IBS for eight years and has been taking Bentyl and Zantac in order to alleviate stomach and bowel symptoms. In addition, she has had headaches since Junior High School. Although the frequency and severity of these headaches has varied over the last twenty-years, she reports having headaches on a daily basis for the past 2-3 weeks. Recently, the combination of visits from relatives, a series of sicknesses among her children, and the discovery of benign cysts in her breasts have led her to feel a growing sense of pressure that she describes as "a slow burn."

In addition to raising her three young children, she has a part time job. She has completed one year of college, states that "my kids are my first priority" and she has been married for 14 years. She describes her marriage as "good.

She is 5'5'' tall and weighs 162 pounds. She describes her dietary habits as "bad" and says that "I tend to overeat as a habit." She exercises on a regular basis, walking 5 days per week and characterizes these walks as "my time."

Her self-set goals for the Stress Reduction Program are: 1) To take things less personally; 2) To eat less out of stress and more for nourishment; and 3) To have more patience with my kids as this would reduce my symptoms.

Pre-Program Measures

Joan checks off 16 symptoms as problematic during the past month on the MSCL and her SCL-90R raw score is .44, indicating clinically-elevated levels of psychological symptomology.

Current Developmental Task

Joan is thirty-three years old and has three children under twelve years of age. She works part time and has an extremely busy schedule. Joan, like many of her female peers, is attempting to raise a family, work, maintain an intimate relationship and maintain her household and her health. The task is arduous and Joan is committed to perfection.

Interview 1 - "So Many Things Go on at One Time"

Joan is raising three young children, manages a household, operates a small home-based business and maintains a marriage with a "very supportive" husband who holds two jobs! Joan is "strong" and describes herself as

"the last responsibility" in terms of caring for her family and home.

She feels that she is "being treated for something that I've really let get out of hand over the years." However, she does not identify herself as a "patient" because she says that the high level of participation and self-responsibility inherent in the SR&RP "gives some control back to my life." Here is how Joan describes herself and her participation in the clinic:

> I know exactly why I chose to do it. I'm the kind of person that the more I know about myself and the way I work the more I like it. I like to learn new things and I guess I feel that just going through the program I'm going to learn a lot and maybe I can share some of it with others.

From the outset Joan felt quite comfortable as a participant. To her own surprise she gauges herself as "a lot healthier" than many of the class members. Before coming to the first class she thought of herself as being "in pretty bad shape." Because of this, she wonders if she belongs in the program yet reports feeling, "like we were all in the same boat together sharing some kind of common goal and I feel like I'm a part of a group."

Despite her full schedule, Joan is determined to practice the home assignments on a regular basis and has had to make some deliberate changes in her normal routines in order to do so. She describes this as "tough" but has elected to practice while her youngest child attends pre-school:

> I'd like to take that opportunity to either just go out and blow the afternoon for myself or stay home and clean but I have to be disciplined and that's the best time to do it because nobody's at home. I have to find the time and take it for me.

Joan says that being "in control" is very important to her. While describing her experience of the Body Scan meditation she reports feeling "really relaxed, really in control, too." As she detailed her experience of "relaxed control" she suddenly stopped, appeared bewildered and said, " I don't know if they're conflicting? I would have thought so and yet now, to be in control would be relaxing. It would be freeing":

> I guess when growing up, anybody who was in control seemed real tense...When I'm normally in control of a situation, in charge of a situation and have responsibility for it, it would tend to make me nervous. So being in control of any kind of situation, I guess, I put tension with it.

Following her first full week of practice she reports experiencing the quality of "relaxed control" in a typical situation with her children:

> Yesterday I noticed that when my girls were fighting I could sit there and calmly tell them to work it out, rather than go crazy which doesn't work anyway, which is usually my tendency and the two of them looked at me like something was wrong.

She describes her experience at that moment and how she felt:

> I would just say I was removed from the situation. I don't want to take everything so personally and probably that's exactly what happened. I didn't take it as if it's all my fault. I didn't take it that way this time. I could just gently intervene and let them do the rest. It wasn't as personal to me.

She then linked her internal experience of "taking things so personally" to her long-standing headaches and gastrointestinal problems:

> It wasn't my fault. I think that's what makes me so crazy and makes me ill. Because I have these expectations of my kids and when they don't live up to them it's a direct reflection on myself and I didn't take it that way. It's not like a whole big revelation that came from meditating. That's not what it is. It's just calming myself down.

After one week of practice she reports a growing ability to "just calm myself down" and to utilize this skill as a means of handling difficult situations. She is very intrigued by the Body Scan meditation: "I could actually feel my calf or my shin without moving it, without touching it" and says that she feels "good about focusing on the breath after going through childbirth training as I know the power you can have over your body."

Considering the importance of being in control in Joan's life, notice her present view of the mind-body link: "I know the power you can have <u>over</u> your body" [underline mine].

She describes herself as: " Having a tendency to always want things to be different from what they are" and says that hearing the meditation instruction that suggests the possibility of "learning to be with what is" has been very helpful for her "because it's less of a burden on myself." After pausing, she continues: "the burden isn't really imposed on me except for what I do to myself...it was just

refreshing, I don't know how long it's been since I just let myself be."

Although she has only been in the SR&RP for one week she talks enthusiastically about attempting to applying mindfulness practice in daily life. She felt "proud" to be able to continue practicing even when her tape recorder wasn't functioning and says she has begun to recognize a distinct connection between "when I get nervous and not breathing" and says that "I'm definitely more aware of what's going on." While walking her dog one morning she says:

> I realized I was tense over nothing. I mean there was nothing I could do. I couldn't leave for this appointment. I couldn't get my daughter to school any sooner There were so many things racing through my mind and when I realized what I was doing to myself because it's second nature for me to worry lately. It's just get up in the morning and worry about the day and all of a sudden I realized 'I don't have to be like this. I can take advantage of what I'm learning and just do it.' I took a real deep breath and it felt wonderful. I was outside. It was great. The crisp Fall air; that's a major switch; I still had to do everything but I wasn't as tense and when I'm tense I get sick.

Using the metaphor of a "journey" I asked Joan where she thought she might be "heading" as a participant in the clinic:

> Just to a more peaceful place. To me that means to just be content whatever's going on. Even in situations that are adverse, you may not like it but you can be content, I know it. In good times I'm not always content either. I'd like more. Just to be content and not to want things to be different, to just accept who I am and who we are as a family.

Interview 2: "Learning to Live, Learning to See"

Sustaining her intention to practice on a daily basis, Joan has been meditating six times a week for 45 minutes at a time. During the fourth class the instructor asked how many people were actively practicing and Joan <u>didn't</u> raise her hand. I entered this in my field notes intending to ask her about this in the second interview. Here is a part of our conversation:

I. "How often during the week do you actually practice?"

J. " Six times per week."

I. " Over the past three weeks has that fluctuated?"

J. " No, no the only trouble I had was this past week. I had no block of time on Friday and Saturday. It was terrible...I was miserable."

I. "So was your 'misery' associated with wishing that you could practice or feeling guilty that you hadn't?"

J. " That was it. I felt that missing those two days that I blew it. I was really disappointed about that. That's why I didn't raise my hand when the instructor asked who's actively practicing."

Joan is quite motivated to practice and says, "give me a moment and I will do it." She prefers the Body Scan meditation and says, "it does what it's intended to do." She describes it "as a very relaxing time." By the fifth week she reports becoming increasingly sensitized and familiar with her own bodily signals and is able to describe

what it feels like to be both "wound up" and "to move into a whole different phase" of feeling more at ease.

" Minimally," is how she characterizes her practice of the Sitting meditation (2-3 times per week). She feels that "it doesn't work as well as the other one" (body scan). She is emphatic that the reason for this is because she doesn't have the time to do both practices each day.

While describing changes in her body during the last three weeks she reports feeling "much better, especially fatigue wise as I've got much more energy." She also reports a noticeable decrease in both the frequency and severity of gastrointestinal pain. She then reflected on these symptom changes:

> I obviously feel good. But more than that, I feel like I'm taking control and it's going to work. I'm going to be able to live past 35, I'll be okay. I guess I almost wondered what my life would be if I kept up that pace. I knew I wouldn't die in a couple of years, but by the same token, the quality of my life was going down the tubes already. This brings it back to a better quality of life which is a simple awareness of what's going on. It's almost too good to be true.

When asked how she might account for the changes in energy and G.I. symptoms she states:

> I guess stress and what I mean by that is in a stressful situation I just revel in it, just enjoying watching myself go into a frenzy, almost saying well this is my life, and that does take a lot of energy. It was like a private joke between my husband and myself. I've told him several times this is my nature.

This is the clearest self-disclosure that Joan has shared either in class or during these interviews. She then

depicts changes in her self-perception over the last three weeks:

> I definitely feel like a stronger person. I've always thought that I was a strong person but now I feel I can be strong all the time...I can weather things if something goes wrong. I'm more than just going with the flow, actually directing the flow.

Following her remarks I asked her if she had been in any situations during the last three weeks where she couldn't direct the flow:

> I was only three or four blocks away from where I should be and I felt this rush of anxiety just sweep over my body, the same exact feeling I used to get if I was riding home on my bike and the street lights were going on, which meant that I was late..I knew it was going to be okay but I still felt that stupid anxiety in there and although I couldn't control what was going on around me, the red lights and the construction, I was able to, when I felt that anxiety, to just relax, my jaw was set, I was able to feel that and relax it. I was doing the white-knuckle bit on the steering wheel, I was able to calm myself down whereas in the past, the next day, which is today, I would have had a bad time with my stomach and everything and I'm okay.

From the above account, Joan seems to be widening her notion of what it means to be "strong" and "in control." When asked to characterize what "being in control" meant in the previously described situation, She responds:

> I was just in control about how I felt about it. I was not in control of the external circumstances. I was just relaxing, but I was strong because I realized the habits that I've formed over the years but would not let go of and I just let them go.

She then reflected on her changing sense of "being strong":

> I guess so. I guess it's more of an educational process, just knowing more about myself. I don't know, maybe strong isn't even the word I mean but that's the one that comes to mind.

She reports an increased capacity to concentrate during "formal" practice and says that there is some evidence that this is spilling-over into daily life. "I can capture more moments than I captured before...I've definitely opened up to the moment and not just the pleasant ones." As a consequence, she reports being increasingly able to "realize exactly what's important and what's not life threatening."

Perhaps this growing willingness "to open up" is revealed in her reflections about practicing the yoga homework:

> I said to myself, 'I can't do this' (a position). Then I thought I can at least try it, and I went for it and it was fine and I didn't die and I didn't have an anxiety attack. I found through that, that there is a lot more I can do than I've always told myself. I always told myself that you just can't do that. It's like when I was twelve or thirteen, when everyone is looking at you..I just didn't want to look foolish and that has carried through the rest of my life. It's sad. When my family skied I fell once..I never tried it again. I can see from doing simple yoga that I can trust my body more. That's kind of what it teaches you.

She describes meditation and yoga as "a part of my life" and says that it wasn't until she was unable to practice for two days that she realized "what a difference it's made in my life":

> It's okay that I missed those two days. I realized that the reason I've never taken time for myself is because of the way I was raised. This is exactly how I've been raised: 'It's the right thing to give everything away

> to everybody else and not worry about if you're left with anything at all.'"
>
> She reflected further about this:
>
> It's just not right. Because when you give everything away you don't even have anything left to give to them, the people you are so called sacrificing for, you're drained.

Once again, while sharing her experience of the yoga she noted a relationship between stretching physically and stretching psychologically: " Maybe that's why I feel so wonderful. There are a lot of different things going on now that I never would have even suspected would have come from this, just an openness to allow things that are going on to go on, like they're okay." She describes her changing sense of self:

> I'm beginning to see myself as more than just the way I would call my nature. I get mad and I stay mad and that's just the way I am, you know, it doesn't have to be that way!...And it's self-destructive as well.

While discussing the development of new internal skills or competencies it became clear that the development of what she described as a specific "skill" was also the most dominant way in which mindfulness in daily life was expressing itself in Joan's life:

> Appreciating the actual process of life as a moment-by-moment experience. Just being able to appreciate each little detail. I used to look at just the major things..something I had to get through. Now, rather than just having to get through things, I've realized there's a lot of things I've just let slip by because I was waiting for the big things to have to get through so it's more of a moment-by moment living, just actually living it...Not anxiously waiting for the fall-out, something bad to happen.

She speaks at length about utilizing this "skill" in a variety of situations and discusses her growing sense of mindfulness as it expresses itself as an attentiveness to both internal and external events. She now reports an evolving ability to "notice" thoughts such as, 'somebody's out to get me', without necessarily reacting to those thoughts as if they are true. She says this has begun to make a slow and steady difference in her experience of "taking things so personally" and as a result reports responding more assertively and less defensively in a variety of interpersonal situations.

During Interview 1 she talked about this pattern (taking things personally) and even began to experiment with using the awareness of breathing to "calm" herself when she felt herself becoming tense or overly identified with various situations. Now, not only does she report using the awareness of breathing to relax physically but additionally she is becoming increasingly capable of:

> Sometimes bringing my mind to it...if I just stop. I'm seeing it. I'm just recognizing it, just tasting it. I guess you learn to stop by learning to recognize when you're starting. I don't have to be popular with everyone anymore. It's okay.

Joan is beginning to be directly aware of the initiation of that thought pattern <u>before</u> it leads to tension, gut pain or a headache. She says she is learning "to taste it" and is thereby becoming increasingly able to "stop" and choose more accurate and appropriate responses.

Her choice of language is telling; "Learning to taste it" seems to suggests a directness, an embodiment of experience more palpable than simply thinking about something.

When asked the question: "If your life at present was the title of a book, what would the book be entitled?" Joan responds, " Something like, Learning to See or Learning to Live because I feel like it's a learning process."

Interview 3: "The Mind Meets the Body"

This is the last week of the SR&RP (week 8) and I began this interview by asking Joan if she had made any more discoveries about being in control and being at ease:

> First of all, somebody who is a controlling person has never been in my estimation a good quality, nothing I've ever strived towards. As a matter of fact, as I grew up I was around controlling people and I always wanted to not be that way and now it's like a light turning on. I am that way. I want to control things. I want to control people and it was a rude awakening when found out. I don't know why I never knew it but all of a sudden I became aware of it. It's not exactly a pleasant revelation.

As she continues to speak about this, she describes working with this "revelation":

> As I progressed in the course I became more aware of situations and how I felt about them. I found it less important to control what other people are going to think of how I feel...Now I want to be more in control of myself and before I wanted to know the whole outcome of a situation before I'd get into it.

She says that this discovery "hurts," but says: "I'm feeling more at ease and free..because I'm more in touch with how I'm feeling and what's going on in my head.

I'm able to stop making a mountain out of a mole hill." She says that this self-understanding is helping her become a better parent:

> Before I felt it was what's expected of me.I had to control not only what they did but what they thought. I had really seen it as my duty, as my job as a good parent to be in control of them. Now I don't feel I need to be in control of them I just feel I need to guide them.

Joan reports her G.I. condition as "very, very well" and says she has taken her regular medication only three times during the last nine weeks. I asked her what she attributed this to:

> It's just consciously realizing when something is getting to me and just relaxing. It's amazing to me how you can feel yourself tense up if you're really aware of your body.

On several occasions during the study, Joan described her experience of mindfulness in daily life:

I. " What kinds of things might you notice?"

J. " My jaw. That's one of the first things that happens a lot."

I. " Your jaw?"

J. " It will clench."

I. " Then what happens?"

J. " Gets tight."

I. " Okay, then what?"

J. " My breathing gets shallow."

I. " You're sensitive to that?"

J. " Definitely. Now I catch it right away. Remember, when we started I had headaches everyday. Now it's rare. I don't even remember the last one."

She says that the ability to be mindful in daily life has continued to deepen and once again relates some of these changes to yoga practice. While initially practicing a series of balancing postures, she portrays herself as "wobbling" and says that finding a focal point (in this case, visual) to attend to helped her to become "stable and steady":

> It made me realize that you can find just about anything to meditate on (pay attention to, on purpose) if you're in a stressful situation and you'll be more stable. Sometimes it won't be something I see, it'll be something I think of."

She characterizes how she typically handling difficult or stressful situations in the past:

> If it was a person that did something that made me nervous, I would say (internally), 'Well now I'm going to be sick, tomorrow I'm going to be sick', and I was. Sometimes I wonder if I said, 'I'm going to be sick' because that would hurt them, and you know it does. 'Because of you, I'm going to be sick tomorrow.' And he (her husband) would see me sick and say, 'Gosh, look what I did to her.' So I wonder if I was doing it even more consciously than subconsciously...I did it to get back at people, to play the martyr...So it was like a self-fulfilling prophecy.

Joan is now much more aware of this long-standing pattern. She says: "I wasn't in control anyway and that one of the reasons I was so upset was because I was not in control." She feels she now has the tools to put this awareness "into practice."

As we continue to discuss her capacity to practice "informally" she says that the key element for her is " pausing long enough to appreciate the moments." She is purposeful and deliberate in conveying that, "I don't stop and say, 'okay appreciate this.' It just comes with the territory." She describes it as an "added dimension to life..like taking a break, a happy break."

During the second interview (week 5), Joan spoke about a gradual change in her sense of self that she described as, "It's okay to be me."

She now reports that this changing sense of self is becoming more internalized:

> It's becoming more a part of me. It's easier with certain people than with others but I've noticed one person that I have found myself feeling intimidated by. I've stopped. I've noticed that all of a sudden I'm totally free to say what I want to say and be what I want to be. It's about being free to really be myself and not just say 'you're right.'

She describes this as being "honest" and says it reduces "the feeling of anxiety that arises when I'm really not being honest."

She continues to practice five times per week for forty-five minutes at a time and says that she likes the Body Scan and Yoga equally. Her most frequent form of "formal" practice is the sitting meditation. She prefers to practice <u>without</u> the taped instructions.

While discussed her changing sense of self, Joan says that the changes she experienced in the first-half of the

course "may have gone deeper" as she has a growing sense of "not having to fit into a certain mold anymore." She says that these changes are both "wonderful and sad":

> The sadness is I've missed out..that many years. It's like people have missed out on the real me and I have missed out on the real relationships I could have been having with these people instead of whoever I made myself out to be.

As Joan shared her feelings of sadness she stated that the gradual changes she is experiencing in her usual way of "being in control" has allowed her to actually be "less passive" and more comfortable with herself. She then spoke about this in terms of changes in her way of coping with difficult situations:

> It's the same thing again, checking myself and realizing I'm doing damage to myself because I never really coped I just tensed up and went through it. I just put on my armor and then I walked through whatever it was. Now it's more of a flowing with it. Allowing myself to be relaxed...it's like a whole change in being aware that you can function while you're relaxed better then when you're tense and it never occurred to me that you could do that.

She responds to the question, "Why take your armor off?"

> Because it doesn't do me any good. It's not the protective coat I thought it was. It's just tensing my body up...it does feel like armor..it feels like it should protect you but it doesn't. It just hurts you and to take it off makes you freer..it makes you healthier.

In closing, Joan expressed the value of being in a learning situation with twenty-five other people. She says that being with other people who shared their difficulties and who are attempting to change their lives helped her to

become motivated in order to "deal with what's been bothering me."

Post-Program Outcome Measures

Joan had a perfect attendance record during the SR&RP. She reports a "90% reduction" in her irritable bowel symptoms, describes this as "incredible" and has used little prescribed medication during the last nine weeks.

She reports significant progress in each of her self-set goals as well as feeling "great improvement" in her sense of health and her capacity to cope with stress now, as compared to before entering the clinic. In addition, she reports "much less frequent" visits to her doctor's office, the emergency room or hospital now as compared to before entering the SR&RP.

She checks off 2 symptoms as problematic during the last month on the Medical Symptom Check List (MSCL) down from 16 symptoms checked off during the pre-program evaluation. Her SCL-90R, indicative of psychological symptomology is now 0.3 down from a pre-program .44, thus indicating further reductions in symptoms of psychological distress. The reductions in post-program measures appear to be consistent with Joan Kitteredge's self-reported experience during the SR&RP.

Interview 4: "I Can Handle It"

Two months after the completion of the SR&RP Joan reports "not practicing as formally as I had been." Nonetheless, she says that, "I had definitely used the tools that I've learned to get back into a more peaceful state." She reports reducing her practice time four weeks after the conclusion of the course (the week before Christmas) and "picking up the Body Scan [again] after the New Year." At the time of this interview (late January), she reports having practiced on a regular basis during the last four weeks. She now continues to practice the Body Scan five times per week for 20-30 minutes at bedtime and has only done the yoga "once or twice." She continues to "sit" for brief periods of time throughout the day.

This is her response to the question, "What motivated you to <u>re-initiate</u> regular practice:

> Well it wasn't because I fell apart. As a matter of fact, my husband commented on how I handled the holidays. he said, "I really can notice a difference in you, you're not nervous." I said, " There's nothing to be nervous about." He said, "Yeah, that wasn't you at one point." So I realized how much it had changed me and it was too valuable to leave it alone.

Joan spoke at length about "informal" practice and has continued cultivating mindfulness in daily life even during the period of no "formal" practice. During a week long visit to extended family members she says, "almost every time we got in the car to go somewhere I became more aware

of my breathing." She remarked that it was a particularly valuable way to "get myself back during transitions."

She reports applying the meditation in everyday situations "on pretty much a daily basis" and says, "it's almost second nature." She is becoming increasingly sensitive to bodily signs of stress reactivity and says that even in the midst of demanding situations she is usually able to "slow my breathing down and talk to myself."

She continues to be asymptomatic in terms of G.I. distress but says that when her husband was out of town (just before Christmas), "I had headaches almost everyday." She reports being free of headaches during the last four weeks: " Then I realized I didn't need to have those headaches every day, and I was more conscious of being always tense and nervous and when I realized it I was able to get out of it."

Since Joan had spoken about how hard she has been on herself, I wondered if she had been learning any more about that during the last two months:

> It used to be if somebody was coming over everything would be perfect, because I have to look perfect to them. I'm no longer like that...I was putting pressure on myself expecting them to expect me to be perfect. [Now] it's really believing it...it's not just a thought anymore.

She speaks about what she feels may have helped her begin to internalize this sense of self:

> This is the first time (SR&RP) that I ever took a look at myself...really seeing who I am and I think it's okay. It was just as simple as that..if I met somebody

> who was like me I would be her friend...Just really standing back and seeing what kind of person I am...and probably one of the biggest changes is that I feel comfortable saying that.

I'm struck by the manner in which Joan said this. She was calm, poised and "comfortable". She wasn't haughty and I didn't detect her trying to please me.

Joan has developed a number of strategies for handling change more fluidly. In addition to her usual style of planning the overall picture of the day, she now reports taking the day "piece by piece." She describes her changing approach as living more of her life "in the present" and says that this approach is " easier on myself, my brain, and my health." She reports feeling no less organized or productive.

Outcome Measures at Follow-up

Joan Kitteredge now checks off 5 symptoms on the MSCL, up from 2 at the completion of the course (week 8) and down from 16 symptoms at the time of the pre-program evaluation (week 0). Her SCl-90R is .11, up from the post-program 0.3 and down from the pre-program score of.44.

Ann Lindsey

Ann Lindsey is a 50 year old woman who has been referred to the Stress Reduction Clinic for chronic, severe neck, head and back pain. These symptoms have persisted for 3-4 years; currently she is taking non-prescription pain

medication and is in an on-going physical therapy program. She also entered individual psychotherapy eighteen months ago.

She describes herself as a "perfectionist." She has been married for thirty years and has three grown children. Ann has completed the 11th grade and sometimes wishes that she had more formal education. Currently, she is employed on a part time basis as a receptionist and anticipates leaving her job in the near future as she is financially stabile and says, "I would like to better my life as I go along on a day-to-day basis and nothing excites me, nothing!"

During the pre-program interview Ann spoke at length about "learning about myself for the first time in my life" and has considerable insight into what she perceives to be the relationship of physical pain eg. head,neck and back and psychological and emotional stress. She terms mental and emotional stress "inner stress" and states "everything was major to me, everything was stressful."

Ann characterizes her marriage as "healthier than ever" and ascribes this to fact that she and her husband have been actively engaged in individual and couples psychotherapy. She states that fear has played a large part in her life as she has been fearful of her children's safety, and of her own premature death. Finally she says that although her sleep quality has improved she reports having suffered for

years with "disturbed" sleep that she feels was the result of "a racing mind."

She is 5'3"'tall and weighs 127 pounds. She exercised regularly until one year ago and says it kept her "sane."

Her self-set goals for the Stress Reduction Program are:

1) To get my life in order, and I'll do whatever it takes;
2) To have more peacefulness and to understand the physics of what makes me who I am; and
3) To be more positive in my outlook.

Pre-Program Measures

She checks off 11 symptoms as problematic during the past month on the MSCL and her SCL-90 R score is a clinically-elevated .66. Indicative of increased symptomology in the areas of anxiety, depression and somatization.

Current Developmental Task

Ann is 50 years old, her children are grown and her youngest child has left for college and is living several hundred miles from home. Her mothering role has changed and Ann is actively struggling with exploring and redefining who she is and what she wants to do with the rest of her life. Although she now describes her marriage as "healthier then

ever," she and her husband have been in couples therapy for eighteen months.

Interview 1: "Hopeful"

Ann has been in individual and couples psychotherapy for eighteen months. She feels that this has been an important part of her life as an individual as well as being important in terms of the health of her marriage. She has elected to discontinue psychotherapy during her participation in the SR&RP.

She does not identify herself as a "patient" in the SR&RP and shares an aspect of her experience in the first class:

> Being so afraid to even say my name was horrifying to me. I never realized what a lack of confidence I had. Once I got through introducing myself I felt more comfortable and my next thoughts were, 'You don't belong here. You're not sick, you're not as sick as these people...All those terrible physical problems they're having. You should be ashamed of yourself. You should go home. Life should be wonderful.' I sat there and thought, 'well, it's not wonderful. I probably hurt as much as they do. I'm not going to be ashamed and I'm going to be here and make myself the best I can.'

Although she has had chronic neck, back and stomach pain, she makes no mention of relieving these symptoms as a part of her self-set goals. Instead she wants to learn to cope with what she describes as "inner stress." She describes her experience of "inner stress":

> I have this feeling of just being like someone put me in a box and buried it, and I keep wanting to get out so I feel feelings of suffocation so I guess my insides

> feel that way, like some days I can't take a deep breath. So although it's not a physical illness in the sense that I don't have diabetes or cancer or whatever, I still feel like sometimes like I can't breathe or sometimes like I might have a brain tumor because my neck and head hurt and sometimes I feel like I may have an ulcer because my stomach feels lousy.

Ann implies that the feelings of "suffocation...of being buried...and in a box" are somehow linked to her physical condition. She expresses her desire to be more "rational, assertive and less emotionally controlled" and feels that she has been actively developing these qualities through psychotherapy. As a consequence, she says "I'm finally becoming in control of myself." She views the SR&RP as "another step in my being in control of my life" and says she wants "so bad to be independent, to be independent enough to make choices for myself."

Using the metaphor of a "journey" as a way of viewing her participation in the clinic, I ask Ann where she thinks she is "heading?"

> I guess I could go as far as to say, to get out of that box I've been in. I think I'd like to find a way out of that box and journey into a much lighter, brighter world. I feel like I've been in the darkness. I would like to journey into something that's light, bright, positive, and I feel like I've been very negative. I feel that [lately] my world hasn't been as dark. I'd have to say it's only begun to get light and bright in the past six months but I do feel like it is another stopping point or another going point maybe I could say whereas I'm not sure that this stress reduction class is going to just change my world totally but I'd like to use it as a tool to be at least a point of getting me closer to it.

Following the first week in the SR&RP Ann talked at length about her struggle to incorporate daily meditation

practice into her schedule and reports definite changes in her relationship to her body:

> I have never given my body much thought, never so in touch with how your body is structured, how it works. I look at myself in the mirror and I say, 'My God I never realized this', like seeing the nails I've been clipping for fifty years and never having seen them before. I'm less critical of myself, I feel like this has been a gift you've sort of ignored. I can breathe, chew my food, swallow my food. I can walk on my feet and use my hands and it's like a whole new...I mean I just never noticed it, realized it, understood and thought about it.

Ann describes a growing "appreciation" for her body. She speaks of the sense of freshness or newness that she now associates with her fifty year old body. She isn't talking about being more physically relaxed but instead is <u>relating</u> to her bodily existence in a new way that is <u>not</u> confined to formal periods of meditation practice.

This sense of appreciation and wonder does not end at the level of the body. She describes herself this week as "a lot more peaceful." She reports being less hard on herself and says that as a consequence she has become aware that she is "not as hard on other people around me." She says that as she begins to treat herself a little bit kinder: "I look at people and wonder does anyone escape this? I think I began to have more feelings or more understanding for other people as I become a little more aware of myself."

She has been practicing the "formal" meditation for one week and reports that it has helped her slow down "a little

bit." She reports an experience of slowing down in her daily life: "It probably has made me calmer to a point that there's time to make a simple decision, there's time to do what needs to be done...I'm not going quite as fast."

Ann hopes to be "more rational and less emotional controlled." She reflects on what it means to her to be "less emotionally controlled":

> To be able to make better judgments. To be able to sit and rationalize a situation rather than just be stressed out that someone else might not like this decision. I don't ever want to stop caring about other people but I want so bad to be independent, to some degree make the choices; to be independent enough to make the choices for myself.

Ann characterizes her life at present as "hopeful" and explains that "for a long time I didn't feel there was any hope. Today I see changes, I feel hopeful that there is still plenty of life, plenty of time for me to become stronger."

Ann says that being "hopeful" is directly related to her growing feeling of being in control. She describes being in control as recognizing, acknowledging and trusting her needs and feelings within the context of interpersonal relationships.

Interview 2: "Awareness"

Ann experiences "formal" meditation as both "very relaxing" and "very, very difficult." She practices 5 times

per week, for forty-five minutes at a time, alternating the body scan and yoga and continues to "sit" 5-10 minutes per day.

"Tough" is how she describes the period of time between weeks 2 and 3: " That was the week that I began to be aware that I will do anything but spend time or do anything for myself." Although difficult, she says she has come to realize through practice that "I'm the only one that can really control how I feel, both emotionally and physically."

"Awareness" is how she describes her life at week 5 of the SR&RP. She says that, "my awareness has been almost broadened to the point of - it sometimes scares me..so many things come up and that I see and I thought maybe that was another reason why I stayed away from the meditation because I didn't especially like all the stuff I was seeing and becoming aware of."

She prefers the yoga because it is more active and says that "sitting (meditation) is incredibly hard." As we explore what it is about the sitting meditation that is "incredibly hard", Ann has a powerful insight:

A. "What makes sitting meditation difficult is having to keep myself quiet."

I. "Are there any instructions that say you have to be quiet?"

A. "No, I guess I tell myself that."

I. "What else should you be?"

A. "I should be obeying."

I. "Obeying what?"

A. "Just anyone who tells me to do anything. It's making me realize that I guess a lot of my life those feelings I had of obeying were just my own feelings. I don't remember anyone telling me you have to be perfect...good and right, do everything right and really try hard as you could to be perfect."

Ann is beginning to realize that her internal dialogue is overriding the actual meditation instruction. She says that the meditation practice has helped her recognize just how much she's expected from herself. She is becoming increasingly aware of a tension between her usual behavior and sense of self and the possibility of being "gentler" and less self-demanding. She now recognizes that: "I would like to blame someone for how miserable I feel. I don't want to believe that it's me...That I would have that much control over my life."

As a self-described perfectionist, Ann wishes "desperately" to feel more in control of her life and the meditation practice is acting like a mirror availing her the opportunity to accurately and non-judgmentally become aware of her assumptions and beliefs about herself. She experiences this directly in her body:

> All of a sudden, I can feel instead of being relaxed that my shoulders might be tight and than I'll just think to myself, 'just relax.' Before, I went around,

> just never knew it, never knew my body was rigid and my neck was stiff. I'm definitely more aware."

In describing her experience of meditation during weeks two and three she says:

> I had pushed myself with meditation because I had committed myself to it...my neck and back are stiff at times (when practicing) and I want to move and I'll just sit there and continue to be uncomfortable and that's when the thoughts come up, 'Don't be so hard on yourself' but I haven't broken through it to say, 'Stand up if you need to.'

Ann is beginning to recognize how pervasive this internalized sense of control/perfection actually is in her life:

> I think I've lived my entire life in such a way that I never allowed myself to feel anything...and now, all of a sudden I feel more. It's scary because I want to be real mad at myself for not having known how to feel before..and then I have to be gentle with myself...I'm scared that I'd ever go back to being unfeeling.

While speaking about her developing capacity to feel, Ann says:

> Almost everything has brightened up for me. I mean there are times when voices are even louder than I thought they were or, either problems aren't as big as, or they're bigger, but it seems like when the shade goes up, it goes up all around you - I mean it's not limited to just any one thing - it's just everything, everything seems to be - I feel like I'm more in touch with everything.

While participating in the SR&RP, Ann's father was hospitalized and he is dying. She talked at length about allowing herself to feel sad or melancholy. In describing the difference between the way she copes with these feelings now as compared to before entering the clinic she says:

> Before I wouldn't allow myself to have a feeling of sadness...I would have been down and not known why. Now, just being in touch with your feelings allows you to - it just makes me aware - I mean, if I now feel it I then deal with it.

Ann is learning to be more open and accepting of her emotions. Her fears about "feeling" are being slowly unraveled as she discovers that "if I now feel it, I then deal with it." She describes herself as "connected" to her emotions and reports that her new found ability to attend to her emotions has also made for a significant change in her sleeping patterns:

> Rather than lying there for hours I might think about them (situations and emotions) and then I'll find myself saying, 'Be gentle on yourself' and I'll role over and go back to sleep. Whereas, there were times when I would lay there for hours.

She credits this to "just learning to relax, just being able to focus on breathing."

Twice during the first interview Ann spoke about getting ready to go out somewhere and looking at herself in the mirror. I asked her how she viewed that person in the mirror these days:

> "I guess I always looked in the mirror and thought I should have seen something smarter and more beautiful, and more of everything, Now I look in the mirror and I think I see a woman instead of wanting to see a girl. It's probably the first time in my life that I see positive things."

Reflecting on this, she says, "It's great, wonderful and sometimes I'm sad at the way I treated that person in the mirror but then I think it's not too late to treat her better and I'm happy for that."

She reflects on her first four weeks in the SR&RP as "hard, as a lot of work and commitment," and as helping her to realize that she hasn't spent much time with herself. Consequently, she says she intends to put a greater commitment into the second half of the program.

In closing she talks about feeling "excited" about life again and says, "So, I really do feel like I'm coming out of that box and I'm not gonna rush it. I'm just going to let it slowly, slowly happen."

Interview 3: "Coming Home"

During her last week in the SR&RP (week 8) Ann speaks about: "slipping back into my old habits of not making time for myself":

> I was really shocked at how stressful I became, how tense I was. I was having trouble with my stomach which I rarely do...tense through my neck and shoulders.I was only allowing myself 10-15 minutes of staying quiet and breathing.

She describes this experience "as really bad because I was neglecting myself" and as "a kind of learning experience." She reports that she didn't notice how positive her physical changes were until she stopped practicing and "resorted back to my old self which is too many things too do, too many places to go and too much of, this has to be perfect."

During the first few weeks of the course Ann was practicing because she "had to" and reports a marked change

in her attitude towards daily practice around the third week: "I began to want to do it because I was feeling better and enjoying the time I was spending there." As she became more personally motivated she reports beginning to feel an increased sense of "clarity that has allowed her to be more "rational" in various situations. She experiences the qualities of "clarity and rationality" as knowing how she feels in different situations and says that these qualities have expressed themselves in her growing ability to hold two points of view simultaneously. She described being in a very intense conversation with a friend where their points-of-view were at odds:

> I don't feel like her, she doesn't have to feel like me...It was a whole thing of being able to look at the whole thing, feel that she has a right to her feelings but I have a right to mine...I finally said to myself it's perfectly fine if she has her feelings and I can still have mine and they may not be the same.

Ann attributes this growing capacity to meditation training:

> The formal practice made me very aware of my feelings...when you begin to feel yourself breathing and you can feel your body changing, I think it really puts you in touch with your feelings.

During the fourth week of the SR&RP she describes a growing "ability to look at things, situations that had been frightening to me or to look at why I was doing things, why I was obeying." She then clarifies how she experiences this: "With the awareness I began to understand. It's almost like I can think about a situation but until I become really

aware of it..really feel it...the pain of it maybe; feel the depth of it; can I really let go."

Amidst her growing sense of awareness and self-confidence, Ann expresses fear about possible changes in her relationship to her family and friends. She reports "wanting to slip back a little bit..to go back to my old passive self" for fear that people won't like her as she begins to embody these changes. Sometimes she allows herself to "slip back" and says that she is only comfortable there "for a short period of time because it's not a very nice place."

Aside from the first session, Ann has not spoken during the SR&RP. When she did speak, her voice cracked and she was shaking. I had become increasingly interested in this and asked her "if she ever felt like she wanted to say something in class:

> Somewhere about the third, fourth or fifth week I began to have these feelings..this whole new awareness, these wonderful things happened to me and I really wanted to share. On my way to class I'd say, 'Today is going to be the day,'and 'Why can't I do it?'...it was like a flash.

Ann described her "flash" in vivid detail. During the 5th week of the SR&RP the memory of a childhood school experience had erupted into her awareness. She wove two distinct school experiences into a single story that for her, accounted for her feelings of "panic" and self-consciousness in group situations:

> Every year I put less interest in schoolwork and more interest in being popular. I was always being the class clown. One day in class my English teacher called on me to read and I didn't know where we were in the book. He was stern and called me, "Miss Lindsey you may continue to read." I was embarrassed. I was afraid of him. I went to read and there was nothing. The words just wouldn't come out of my mouth. And of course he proceeded to embarrass me. I was frightened. I was ashamed.

I asked Ann if this was something she had remembered before entering the SR&RP? She said that she had a memory of the details but the "flash" that she felt on the way to class was the force of the emotional content of that experience:

> I never became so aware of how I felt. I've never been able to speak in a group since then. It made me realize how frightened of men I was. How afraid of my father I was.

She used words like "embarrassed," "frightened" and "ashamed", to describe her experience. For Ann it was a powerful insight that seemed to somehow explain many of her feelings and much of her behavior. She describes the "flash" of memory and insight as having "just absolutely popped up three weeks ago."

Following her description of this account, Ann said that six weeks ago she was asked to do a reading at her niece's wedding. "I thought there's no way I can do it..No way I can get up in front of 200 hundred people in church and do a reading and today I say there's no reason I can't. I'm going to and I'll do a fine job."

The emotional "numbness" she described earlier is now less prevalent. She speaks about this: "Any place you've been for 50 years is a pretty safe place to be." In contrast, she describes her growing sense of aliveness as "uncomfortable and a much healthier place to be." She reports becoming familiar with the felt-sensation of "numbness" and feels a definite capacity to both sense this state and to intentionally work with it:

> I'm not afraid of having feelings. I'm not afraid if the feeling is of sadness that it's a wrong feeling and that I shouldn't have it or even happiness. I think I was just as guilty of not showing happiness. I wasn't allowing myself to feel anything- sadness, tiredness, anger, frustration. Instead of letting it be numb, let it be anything. Whatever it is. It's wonderful, it's scary at times..I feel like for the first time in my life that I trust myself.

Ann says it's the first time in her life that "I feel at home with myself. I feel like somebody actually dug this box up, it's out of the ground, the cover is off and this person is finally home...this person is finally somewhere that they can be happy."

Ann ends the interview with the following comment: "I realize how much pressure and how tough I've been on me just to please everybody else and to be everything for everyone else at my expense. So I don't need to do that anymore. When I get tired I go take a nap."

Post-Program Outcome Measures

Ann Lindsey completed the SR&RP with a perfect attendance record. She reports "great" improvement in terms of reduction in the frequency of neck pain problems and "some" progress in the severity of neck and back pain. She is using less prescribed drugs and her activity level has increased greatly now compared to before entering the SR&RP. Additionally, she reports a marked increase in energy and stamina levels, reports coping much better with the stresses in her life and has reduced her visits to medical facilities now compared to before taking the SR&RP.

She feels much more in control of her life and says that this is the healthiest she has ever felt in her life. She attributes the reductions in neck, back and rib pain to having practiced the yoga although it was initially painful for her.

She now checks off 4 symptoms as problematic on the Medical Symptom Check List (MSCL), down from a previous 11 and she shows marked reductions in her SCL-90R profile. Her post-program score is .22, down from the pre-program .66. These outcomes measures appear consistent with Ann's self-reported experience during the SR&RP.

Interview 4: "Peaceful"

Two months after the conclusion of the SR&RP Ann reports positive changes in her neck and back pain.

She describes herself as "much healthier emotionally and even physically" [emphasis hers]. The clinic ended just before Thanksgiving and like everyone else in the study, Ann left the course having to face the holiday season:

> I spent most of the month of December in tears. Sad, sorry, feeling really sorry for that person I thought I had to be. A passive type person, never complaining, never having needs. It was probably the first time that I was crying for this person that was inside me that didn't understand or didn't know. I reflected back..it started a long time ago. It wasn't just when I got married or when I was a teenager. I could reflect back to four and five years old, I mean I could easily cry for other people, but I could never cry for myself. I always thought I was weak and yet as I look at it now I can see a strong person being weak to be accepted, to be loved, to be whatever.

Ann says that these memories are "absolutely new" and that they recently "surfaced." When asked her how she might account for this and she posits that the awareness of these memories is linked to the awareness of her body and breath that began in the early weeks of the program while practicing the Body Scan meditation.

Recall that Ann had a difficult time speaking in group situations, and that three months ago she was asked to give a reading at her niece's wedding. I asked her about the wedding experience: "I did it. I used meditation. I sat in the pew, closed my eyes...I could feel my heart slowing down...I walked calmly, read slowly...I didn't make one mistake."

Ann discussed in detail, her growing ability to apply mindfulness in daily life. She says that she uses the

awareness of breathing frequently, as a means of coping with potentially stressful situations. I then asked what her kinds of cues she uses to remind her to "breathe":

> It can be a fear; a thought; my heart beating too fast; but I'm not telling myself to do it. I'm not saying, 'Okay now stop, do your breathing.' If I become fearful or feel my heart beating too fast, I just take a few breaths and I can get it to the point where if I need to speak now, I can speak.

She says that her capacity to apply mindfulness in daily life expresses itself in her ability to respond with increased confidence and assertiveness in a range of situations. When describing her experience of "informal" practice, Ann speaks of a generalized internal awareness rather than as a set of actions that she mechanically applies in various circumstances.

Ann portrays herself as more self-confident and says that she feels "the most peaceful in myself that I've ever felt." She defines this sense of peace in very personal terms:

> I can sit with myself, be with myself. I find that I enjoy being with me. I feel calm. I feel much less judgmental of other people. I can feel happiness and forgiveness. I'm less critical of myself. It's quiet; I mean my father is dying and I feel peaceful.

She differentiates this sense of peace in the face of her father's impending death and her experience of withdrawing or being "numb":

> I can't control his dying but I can control how I feel about it in a sense of being able to accept it. I guess I've come to realize that there are some things you can't change and the things that you can change you do.

She describes the last two months as "tough" but feels that instead of "having to do everything alone" she has been increasingly able to reach out and ask others for support.

She reports "slipping-back" into not practicing on a formal basis for about two weeks following the conclusion of the course. Her neck and back pain began to worsen during the lapse in "formal" practice and she describes "resorting back to my old insecurities as I was afraid of this new person that was emerging."

She has now resumed formal practice on a regular basis and says that she re-initiated regular formal practice because she had begun to reexperience "some of that darkness." She likened her experience during the SR&RP to "walking up a set of stairs" and says that although she likes it better at the top "it's a little scary." For Ann, "scary" means: "being responsible for myself..because all of a sudden I untied myself from my mother, my father, my husband, and I felt like I became me."

When asked if she felt there was a "price" she had to pay for her deepening sense of awareness, she responded that perhaps this sense of self-responsibility was the price to be paid:

> There is absolutely a price to pay. I'm not quite sure even yet whether all my children are happy with this person that has thoughts and ideas and expresses them. I like me better the way I am. I'm more honest with myself, I'll be a lot more honest with them and I like me a lot better that way.

Two months after the conclusion of the course Ann says that she is experiencing "much less" physical pain and that she is coping with stress in significantly different ways then before entering the SR&RP. She elaborates on these changes in terms of developing new coping skills:

> I feel it has a lot to do with understanding, just understanding myself and understanding my fears. I feel if I could never understand about me..my fears, why I lived my life the way I did there would be no way that I could look at and bring forth an understanding of others and why they live the way they do.

Although Ann has spoken about her capacity to relax and be calmer, she posits that her growing ability to <u>understand herself</u> and in turn others, has been the critical factor in her increasing capacity to cope with stress and pain.

Ann's journey has been one of directing attention to her everyday experience, it has been neither smooth nor easy yet her willingness to observe and be mindful has encouraged the gradual dawning of understanding that she describes as having made a critical difference in the quality of her life.

<u>Outcome Measures at Follow-up</u>

Ann now checks off 9 symptoms as problematic during the last month on the MSCL, up from the post-program 4 symptoms and down from the pre-program 11 symptoms. Her SCL-90R score is now .43, up from the post-program .22 and down from the pre-program .66.

Harry Ogden

Harry Ogden is a 61 year old man referred to the SR&RP because of a recurrent history of chest pain and anxiety. He is a self-described "Type A" personality and is surprised that he hasn't had "a coronary." He is very articulate in describing the ways he reacts to stress. Harry is well read and has had previous experience with yoga and meditation, stating that he and his wife were introduced to and briefly practiced Transcendental Meditation (TM) during the early 1970's. Currently, he reports practicing yoga and meditation on an irregular basis. He was also a participant in the SR&RP three years ago and felt it was "helpful" but missed more than half of the sessions because of business travel. He is an Engineering scientist engaged in both research and teaching.

He speaks about having difficulty with emotional reactions all of his life and says his father died when he was eight years old. He characterizes himself as "sizzling" when he feels stressed and says he becomes "aggressive." Harry has been married for 28 years. He describes his marriage relationship as "devoted but argumentative." His wife is also enrolled in the SR&RP.

He is 5 '11''and weighs 170 pounds. He reports sleeping well. He takes a diuretic and walks 1-2 miles, three times a week. His self-set goals for the SR&RP include:

1) To develop a better understanding of control;

2) An appreciation of facing the environment with more internal control to "change my reactivity";

3) An awareness of what I have control of and what I do not.

Pre-Program Measures

Harry checks off 8 symptoms as problematic during the past month on the MSCL and his SCL90-R profile of psychological symptomology is a non-clinically elevated .22.

Current Developmental Task

Harry has been a scientist, engineer and teacher most most of his adult life. He characterizes himself as "aggressive" and as an "energy machine." He is now facing the prospect of retirement. He is ambivalent about this and is struggling with the desire to reduce and eventually relinquish his usual work load and his long-standing view of himself as being "productive." The desire for more personal time and reduced work are in direct conflict with his internalized ideal of being productive. He is wondering who he will be if he stops producing in his usual fashion.

Interview 1: "I Didn't Get Everything Done I Wanted To"

Today when I greeted Harry he was reading a scientific journal. We walked down the corridor to my office and I invited him to sit down. He was cordial, somewhat stiff and

as he sat he placed his finger between the pages of the journal he had been reading. Although it is rare for me to have telephone calls during meetings with patients, the phone did ring. I had a brief two minute conversation and noticed that as I spoke, Harry plunged back into his reading. When the phone conversation ended, he closed the journal, made a comment about the difficulty of parking at the medical center, said he had too much to read and placed the journal on his lap. He spoke rapidly, his brow furrowed, and his skin stretched taut across his face.

His entire demeanor seemed to reflect his present view of life:

> I come home, I have duties to do and I'm finding that I feel very harassed. I'm tired of it. I'm really sick of it. I've been a list person all of my life you know with these huge lists and so forth. Gee, my whole existence has been really one of very hard and fast deadlines and really a lot of huffing and puffing.

He characterizes himself:

> I'm sort of a high-drive, high-stress individual. I have real trouble getting that under control. When things are working smoothly, everything is just dandy but as soon as something happens I must say I don't react well to it. I'll hyper-react, I have dozens of instances of this and it throws me, it'll ruin my whole day. Intellectually I know that that's really crazy.

Harry has been referred to the Stress Clinic for chest pain and anxiety. He repeatedly comments about how "amazing" it is that he hasn't had "a coronary," given his lifestyle. He does not feel like a patient in the clinic because: "I'm doing something for myself and taking advantage of a system that helps people." Harry is quite

relieved that the SR&RP is "more open, not so structured and that I don't have to set it like I do with so many other things as hard and fast goals."

Using the metaphor of a "journey," I asked Harry, "If you thought of your participation in the SR&RP as a journey, where would you say you're heading?"

> To a tranquil port. The word tranquility enters into my thinking about this a great deal because I feel that I've huffed and puffed and fumed enough and I think you spend all your time huffing and puffing and I don't think it's necessarily produced any really desired results or got anything done any more rapidly. It's a new experience for me. I am having a hard time dealing with it right now. I'm coming to the conclusion that things that I really thought were important and had to be done on an absolute precise decision-type deadline really don't have to be done that way. It's no longer productive and I don't like to do it. This is what I'm trying to do and I'm ambivalent about doing it because I think that's part of my stress right now this year is that I'm in a transition phase and transitions are difficult.

Harry is in the midst of a major transition. He has devoted thirty years to engineering science. He is actively teaching, conducting research, and writing and is now beginning to struggle with both the desire and reluctance to cut-back on his work. The "stress" he speaks about in the previous passage is the uncertainty and insecurity of the unknown as well as a certain discontent about the meaning of his career:

> As you get a little older you come to the conclusion that all this running and hustling, all the papers and meetings - you still put it in a little thimble. Like I see obituaries of colleagues and it adds up to one paragraph, it really isn't much. Unfortunately we're all going to come to some little paragraph in the newspaper.

He is articulate and candid about the tension between his career and his desire to have more unstructured time in his life. He speaks about his participation in the clinic and expresses his hope about "tapping resources" that might help him to move through this "big change" more gracefully. In expressing his hopes for the future he feels that:

> It would be a shame not to have maybe a few years to do something you wanted to do before you get so old that you really are not functioning.

Following his first week of participation in the clinic Harry reports a change in relationship to his body:

> There is more of an awareness of it's components, you don't think about these things normally, and I think half the time you're living out of your body, you know. It's there but you don't think of it until it's injured. Now there's mainly an awareness of it, not so much that any part was deranged but more like you have toes, and you have fingers and you have things but you don't think about them, you don't feel them but if you suddenly concentrate your mind on them, then you feel different things, you're more connected.

"Living out of your body" and becoming "more connected" are the ways Harry characterizes his relationship to his body. Just as he reports being more "connected" to his body this week, he describes a similar experience in relationship to his breath and to food. "I'm more aware of it "(breath) and remarks that this awareness has also spilled over into eating. He says that he and his wife <u>deliberately</u> ate two meals mindfully (mindfulness of eating) and that he became more aware of "all the shapes and the tastes of food." He describes this as "remarkable."

He reports no changes in his relationship to his thoughts but says that he is beginning to see "more and more clearly that I really want to have a little more time to enjoy things." He says that he's been thinking about this for "a few months" and describes these feelings as "very new for me":

> I've come around to the view over a period of a few months and I've been thinking that the routine is not the most important thing in the world. Really what I want to do is have a little more time to enjoy things. That's very new for me because I'm one of these that always thought well I'll die with my boots on and just be hauled out of the office some day, like a lot of my colleagues but if you can quit and walk out you know you might be better off.

He says that the meditation has helped him "deal a little bit better with feeling harassed" and he reports attempting to apply mindfulness in daily life:

> Yesterday we stopped at a red light. I'm usually saying to myself, 'When's is it going to turn. I can't wait.' I'll look at the watch three times and I just said, 'Well, I'm here at the light. I'm going to just sit here and enjoy the scenery'...that is novel for me.

Harry describes himself as "in a transition." He experiences himself as having "a foot in both camps" while "trying to decide how to move slowly into the other camp." He says that, "I don't want to go back to the other process" [his usual job intensity] and as he speaks about this transition he expresses a sense of wisdom and enthusiasm. I asked him about this and he says that he is feeling "hope" about his ability to negotiate this transition.

Interview 2: "I See Some Light at the End of the Tunnel"

Even before sitting down, Harry began to share his experience of the various meditation practices. He says,"I find them very, very helpful" and reports alternately practiced the Body Scan and Hatha Yoga everyday for 45 minutes at a time. He also reports "sitting" on a fairly regular basis having only missed "one or two of those." He adds," I've taken it extraordinarily seriously because I really have a stress problem and don't react well to stress."

Immediately following this statement, he describes, in detail, his behavior following two separate incidents which seemed to sharply focus and amplify his perceived "stress problem." The first incident involved a minor accident that occurred when his wife parked their car in the driveway. He describes himself as having "hyperreacted" and says it took a day and a half "to start to tone myself down." His sleep was disturbed and he says, "It really ruined me."

He describes the second incident as "my fault" and relates having forgotten to withdraw his bank card from the A.T.M. He portrays himself as "ranting and raving" and says that he "paced around furiously for several hours trying to figure out how to solve the problem that night":

> That was totally emotional, my rational mind is still mad (one week later) but it is not going to do me any good. I was running on my emotional juices. I really wasn't working properly at all. Now I'm calm. I don't have any emotional juices flowing but I'm thinking I

> have to find time...I just don't have enough time to do all the things I'm committed to and I'm trying to uncommit as fast as I can.

At week 5 of the SR&RP, Harry's predominant experience of the Body Scan meditation is, "that my mind runs all over the place." Nonetheless, he reports that "I'm able to pull myself back a lot and concentrate a lot better."

He prefers the yoga and this surprises me. During my participation in the third session I observed him being somewhat stiff and uncomfortable and he made a comment in class about "not liking the yoga very much." I made a field note to ask him about this during the second interview:

> At one time I did not. [Now] I'm finding the yoga is very relaxing, very helpful. I feel a lot better after I do it. I sleep better and I've really come to appreciate the yoga a lot.

His predominant experience during the yoga is "muscle relaxation." He says that "the rush of relaxation that comes over you is a very nice feeling." He describes this as, " very powerful" and reports feeling, "a long period of relaxation after practicing."

He also reports changes in his clarity of perception during the last three weeks: "I'm seeing a lot of things a little more clearly than I have in the past few years because I've led a very rushed life. I find that now I'm able to focus in a little more."

Harry's intention to lead a less hectic life began well before entering the SR&RP. He has attempted to reduce his

work-related commitments and says that the meditation practice has helped with these changes:

> "I find that I'm more relaxed about a hell of a lot of things. I leave here relaxed. I leave the classes relaxed and we're doing meditation or yoga everyday. I find that it helps my day a lot and I've been able to function a lot better. I seem to be handling the little ones [stressors] better.

He discusses changes in his self-perception:

> I'm beginning to see myself a little more like I think I've come across to others. I didn't see my faults so clearly and now I'm seeing them a lot more clearly. I'm not the perfect person I thought I was and that therefore everybody else should have thought,too. I'm waking up to reality a little bit, I'm waking up! You feel like Rip Van Winkle, like you've been asleep for twenty-five years, maybe more. I think this time I'm getting a better grasp on the thing.

It seems clear from the above statements that Harry's growing ability "to focus in a little more" is not limited to "formal" meditation practice and that his "waking up" to the reality of his everyday life and behavior are aspects of the same process.

Harry paused after talking about "waking up." He then said that the notion of "navigating" used by his instructor to describe the meditative approach to working with thoughts and feelings had been very useful. As a consequence, he says he's becoming much more aware of "how I've taken on the negative aspect of things too long and that I've found in the last few weeks that I'm doing more concentrating on the good things." He describes this as, "A real load off my shoulders" and says that he is still able to think about all

the things that need to get done "but I'm not so stressed out by them now."

Harry has not spoken during any of the large group discussions and speaks minimally during small group interactions. However, on two separate occasions I observed him becoming poised and keenly alert when the instructor spoke about "only having moments-to-live." I ask him about this:

> I've spent all my life living in the past and living in the future, and none of the present, see...and now I'm grasping for this.

He says that he's slowly changing as, "I'm permitting myself, or allowing myself to look at things differently than I used to and I never did that before." In trying to articulate what these changes are about, he says that he has "stored" a lot of feelings. As we continued to speak he said, "I can talk about science but not about feelings. Feelings are something I've never talked about in my life."

As we sat together, Harry seemed to be attempting to relate something that was both very difficult and increasingly important to him. The notions of "waking up"; "navigating"; "living in the present"; and of trusting his "feelings" all seemed to be converging around something that he was struggling to express:

> I never resolved in any decent way my father's death when I was eight years old. It was like a book closed and you never had resolution of this. I think that messed me up for many years and made me unsympathetic to other people.

He reports the reemergence of memories associated with his father's death and says that although he has been reading books about resolving grief for years they have been of limited value:

> A significant part of my problems are somewhat related to that [his father's death] and I never had time to think about these things. Now I'm just starting to gather them in a little bit more, to try some kind of resolution of them in some way.

Harry says his wife has also been encouraging him to look more closely at the feelings he has about his childhood. He characterizes his childhood was like following the death of his father: "It was at times dark and grim and pretty lonesome."

He explains that after he grew up and became established in his profession that he sent his mother some money with the explicit intention of having a stone made for his father's grave. Two years ago he went to a professional meeting in the vicinity of where he was raised as a young child, visited his father's grave and found it unmarked:

> It's a grave that's been unmarked for fifty years. I thought that the message there is, 'Gee, there was such a tendency to want to forget that.' I think it's a symbol of something.

He then he talked about his needs:

> This is what I really need...you need to be thrown open and have some light come in to this thing that's been closed. That's a different way of thinking of it. I mean it's been lurking around but it's been amorphous..very hard to describe what's going on and how it's affected one's life.

Harry finished this interview by saying: "Gee, I don't think I've ever told anyone that story before. He "entitles" his life: "I See Some Light at the End of the Tunnel."

Interview 3: "I'm Seeing the Same Things But I'm Seeing Them Differently"

During the eight weeks of the SR&RP Harry has firmly established a regular schedule of meditation and yoga practice. He tends to schedule "formal" practice when he returns home after work and describes it as: " very relaxing in helping me let down from the day. Almost like an alcoholic beverage but maybe a little different."

He also reports attempting to continue practicing "informally" and says that he has become acutely aware that: "I'm always in a hurry and I have a time urgency built in." Although this is not a new discovery for him, what is new is his growing realization about how much this time orientation shapes his behavior and perceptions:

> I'm trying to get more in control of the time urgency thing because I think it's an underlying factor and a lot of this rushing around I'm looking at now. Before I didn't really do that. I was thinking of the urgency itself...not that I <u>should</u> be here at a certain time but that I <u>must</u> be there [emphasis his].

He says that he has begun to recognize that it is, "the root of a lot of behaviors and says: I'm examining it now. I don't know where I've been for many years but I seem to be examining things I've never examined before."

Harry's willingness "to examine things I've never examined before" is mindfulness in daily life. In the latter part of the second interview he spoke about learning to use the awareness of breathing during isolated events, eg. at a traffic lights, while waiting in lines. He now reports that "informal" practice is beginning to express itself in terms of how he lives his daily life:

> I'm beginning to feel my mental side is not so dissociated and I'm not walking outside of my body, separate from it. I'm looking at the whole rather than a lot of parts functioning separately. I think the cohesiveness of it is important because it makes you feel that you're able to function better because you're operating as a whole rather than dissociated.

He says that his experience of "looking at the whole" is similar to his experience of the meditation and yoga. He reports feeling "elevated" when he practices the yoga and likens the felt-sensation of being "elevated" to his experience of watching birds at his feeders:

> I'm seeing it not as just an isolated incident but something very important. I see it as the whole of nature I see the birds migrating, I see them feeding...the whole animal life is connected to us and we humans don't seem to think that enough. I think it's a certain tranquilness rather than being excited and ready to jump to the next thing. It's something that's quite blissful and I haven't had many of those in my life so when I experience something like that I feel pretty good about it. It's not projecting, it's not going back in the past either, it's really staying where you are. I feel a oneness with these creatures and with the flowers. It's hard to express. It's personal.

"It's not projecting, it's not going back in the past either, it's really staying where you are." These statements are in sharp contrast to his feeling "that I'm in

a hurry always. I don't think the world's going to cave in if I don't meet a certain deadline but to me it seems that it will." These statements neither represent Harry's now defunct past way of being nor some new found, ever-present way of living his life. That is, in fact, what makes them so pertinent. Harry is struggling, stretching and attempting to incorporate into his life, two different ways of experiencing and living.

This is reflected in his "life title": "I'm Seeing the Same Things but I'm Seeing Them Differently." He describes himself as having "a new vision"; of "seeing things I was totally blind to before" and of it feeling like "a new life."

Somehow Harry's "realizations" are converging with, and informing his life cycle transition. He says that "the only sorrow I have is that it's too bad it happened so late, but you can't retrieve time, you can make the best of what you have left but you can't seize it back."

Post-Program Outcome Measures

Harry Ogden now reports progress in each of his self-set goals. He continues to meditate 3 times per week or more for between 15-30 minutes and continues to practice yoga 3 times per week or more for 45 minutes. He checks off 17 symptoms as problematic during the last month on the MSCL, up from 8 symptoms checked off at pre-program assessment.

He also reports increased psychological symptomology. His post-program SCL-90R score is .38, up from the pre-program score of .22. Although Harry reports positive changes in his capacity to cope with stress the reported increases in physical and psychological symptomology may corroborate his growing capacity to be "less dissociated" and more "connected" to his mind/body experience.

Interview 4: "I'm Swimming With the Stream"

Eight weeks ago Harry completed the SR&RP. He continues to practice on a regular basis but says "it's not enough and there is a little back-sliding going on." He now practices "formal" meditation 3 times per week for forty-five minutes at a time. He continues to alter the body scan and yoga, using the taped instructions for guidance and "sits" without the tape for 10-15 minutes at a time.

He rarely practices without his wife and says that they tend to "motivate and nudge" one another. He has had two separate lapses in practice that lasted for 3-4 days and finds that his vigilance about slipping back into old habits, coupled with his wife's insistence that they practice on a regular basis, have helped him sustain his momentum.

Harry continues to cultivate mindfulness in daily life. He shared several examples of "informal" practice that are both spontaneous and deliberate. He describes himself as

"just accepting and not wasting my energy fighting something I can't change" and says that these feelings of "acceptance" and "of not being so time conscious while driving" are spontaneous rather than as something he is trying to make happen.

On the other hand, he is also developing deliberate strategies for handling everyday stressful events. These include: leaving earlier than usual for appointments as a means of minimizing his internal sense of time pressure; making agreements with his wife about preparing for potentially difficult situations; "sitting down and breathing" in a variety of situations; as well as beginning to schedule and take regular lunch breaks. As a consequence, he reports feeling no loss in productivity and an increasing capacity to flexibly handle change.

Harry says that although "I've known all of it [strategies] with my mind I haven't been able to follow it exactly." He describes how he has attempted to make these strategies functional in daily life:

> It's really very difficult for me to say what's happened. I've just begun to come to the realization that many things were not doing me any good. I've just dug down and tried to realize I've made a goodly number of mistakes carrying on the way I have over the years. It's really counterproductive at this stage of the game to keep those up. They've been stressful not only to me but to the people around me. I think I would rather have a more tranquil even-keeled existence rather than the roller-coaster I've been on most of my life.

Harry acknowledges that he has made "a serious attempt" to alter some of his habits. He describes these gains as a

"thin veneer of control with a very shallow edge" but says he is more "confident that I can do it because the meditation practice has given me some kind of mechanism for approaching this now."

He describes his experience of meditation as: " putting you in a relaxed state where you're thinking more about yourself and your body. It slows you down but it makes you more thoughtful about the way you're going to approach things and problems." As a result, he says he is now able to see a "broader picture":

> I was concentrating on life around my work, primarily. I think now I would put it into a bit of a second gear and I am looking at it as only a small part of my whole existence. Before I spent most of my time going up hill and I didn't see much around me. I've branched out and I see that there are some other worlds that I have missed for thirty years.

He says that beginning to live in this manner, "Allows me to conserve energy because you expend so much energy in the time you're fighting." His "life-title" at follow-up is reflective of his changing experience: "I'm Swimming With the Stream."

As he shared his "life-title," I recalled his finding the notion of "navigation" very helpful in developing a

means of working with thoughts and feelings. I reminded him of this:

> In reality we do have to navigate through some very treacherous waters in our existence. The good navigator doesn't spend all of his time fighting the currents. I

> think I'm a little late in this but I feel like I'm doing better.

He is now feeling less dissociated from his body and says that he is experiencing an increased sense of "connectedness" that he describes as "a feeling of a more relaxed attitude." As a result, he says that he is "looking harder at things." He explains what he means by this:

> I think if you get yourself in a frame of mind, you can look at something and see its inherent beauty and you really see what you missed. Not in the sense of trying to extract something but looking without a lot of inhibitions that block your view. I mean it's there right in front of you but you don't see it. That's one of the things I find that's happening. It's a new perspective on things.

He says this ability to "see" is connected with his growing "experience of really living in the present." He is explicit about the relationship between meditation practice and this present-centered awareness and reports that this is not limited to formal periods of practice:

> You can bring yourself back to the moment. It's much easier than before because I never had an experience of really living in the present, always in the past and future. Now this goes on most of the time. I'm able to concentrate more on the present.

Harry did not speak during large group discussions and spoke sparsely in the small group interactions. Despite that, he found that it was helpful being in a community of learners:

> You see on a flesh and blood level and it's different from reading about it and thinking about it. I mean you actually see it. I thought of myself in all their positions. It's easier when you see that, rather than when you read it an abstract, obscure manner.

Harry's comments about his experience of membership and joining with others in both a collective and individual process seem to sum up and reflect his own journey out of "the abstract and obscure." Like his allegorical allusion to Rip Van Winkle, Harry is "waking up," "living more in my body" and "seeing things I never saw before."

Outcome Measures at Follow-up

Harry now checks off 10 symptoms as problematic during the last month on the MSCL. This is down from the post-program 17 symptoms and remains up from the pre-program 8 symptoms. His SCL-90R score is now .14, down from the post-program .38 and down from the pre-program .22.

Conclusion

The individual case studies presented in Part 1 of this chapter described the reported experience of three participants engaged in mindfulness meditation training (MMT) within the context of a hospital-based, group format, out-patient behavioral medicine clinic. As can be seen from these descriptive cases, each of the participants experienced mindfulness meditation in similar and different ways and tended to utilize MMT in terms of their specific life issues.

In Part 2 of this chapter, the experience of all eight participants will be examined cross-sectionally as a means

of differentiating and describing in greater detail, the range, common patterns, and changing nature of experience of the study participants.

Part 2: The Cross-Sectional Case Analysis

Building upon the individual case studies presented in Part 1, Part 2 represents a cross-sectional case analysis of the changing nature of experience of participants engaged in MMT within the context of a hospital-based, out-patient behavioral medicine clinic. The primary source of data is derived from the experiences of Joan, Ann, and Harry while the responses of the remaining five participants will be used to supplement the analysis.

This phase of analysis (Part 2) does not focus on individual experience. Instead, the categories and patterns of experience described by participants during the four interview cycles (16 weeks), will be analyzed in detail.

There are three basic categories of experience: Learning Meditation [LM]; Application of Meditation [APM] (informal meditation); and Perception of Self [SP]. These basic categories have been further divided into sub-categories.

It is important to note that these reported experiences were neither encouraged, discouraged or mentioned in advance as either "signs" or "goals" of meditation training during

the intervention. Instead, the meditation instructions and the SR&RP instructor consistently directed participants toward a careful and continual awareness of <u>their</u> moment-to-moment experience in both "formal" and "informal" practice.

This instructional set was itself at times quite disconcerting to the participants, particularly during the early phases of the intervention. It oriented participant's away from relating to the instructor as the author of their experience, placed the onus of responsibility squarely upon themselves, and tended to liberate participants from the pressure to "perform" the meditation practices according to a pre-conceived formula.

In the latter phases of the program, this way of relating to participants appeared to encourage a deepening experience of self-trust unencumbered from prior or present assumptions and beliefs about what one is "supposed to" experience in meditation or how one is to apply the skills being learned.

In order to maintain a consistent format of analysis between parts one and two, the four interview phases will once again be used as a means of examining the participant's experience over time. These demarcations are not meant to suggest a rigid structure into which every participant's experience neatly fits. There is variance in their individual experience over time. However, common trends in

people's experience tend to emerge as they progress through the intervention.

Prior to the presentation of each interview there will be a summary of daily homework assignments as well as a table listing the meditation(s) and awareness exercises practiced by participants during the individual classes and at home (Tables 4, 7, and 10). Following the presentation of each interview cycle, there will be a table reviewing the categories and sub-categories of experience discussed during the preceding interview (Tables 5, 8, 11 and 13). These table will also include key descriptors that consolidate and epitomize the experience of participants during each of the individual interview cycles.

In addition, another set of tables will list the self-described "life-titles" used by each participant in response to the question: "If your life at present was the title of a book, what would the book be entitled?" The information in each of these tables will serve as both a summation of the previously presented interviews and as an aspect of the data analysis and discussion (Tables 6, 9, 12, 14 and 15).

Interview 1: Following Week 1 of SR&RP

During the first week in the SR&RP participants were introduced to and began to practice awareness of breathing. In the first class participants were invited to lie on their backs and to simply become attentive to the rhythm of

inhalation and exhalation. There were no instructions about becoming "relaxed" nor any suggestion to "visualize" or manipulate their breathing. Awareness of the bodily sensations associated with breathing, eg. the rise and fall of the abdomen or the movement of the rib cage, became the primary object(s) of attention. Having established an initial awareness of the breath, participants were then introduced to the Body Scan meditation. While remaining supine, participants were guided, step-by-step, through an awareness of the entire body. The intention was to sharpen the capacity to attend through the development of concentration and awareness of the various regions of the body via proprioception, rather than to learn a relaxation technique. At the time of this interview participants had been practicing awareness of breathing and mindfulness of the body via the Body Scan meditation forty-five minutes per day, six days per week, using taped instructions.

Table 4. Skills Practiced During Week 1 of SR&RP

* Awareness of Breathing
* Body Scan Meditation
* Mindfulness of Eating

Sub-Categories of Learning Meditation

- Making Time to Practice

Participation in the SR&RP requires an immediate change in lifestyle. Participants agree to come to each of the

eight regular sessions, attend a silent, eight-hour Saturday session and practice meditation forty-five to sixty-minutes per day, six days a week for two months. As was reported in the individual case studies, Joan, Ann and Harry each made deliberate adjustments in their daily routines in order to practice on a daily basis. Kathy made no changes in her daily routines but willingly agreed to alter her usual meditation practice while participating in the clinic. Jim, a 53 year old ex-truck driver, disabled with chronic pain in his right arm, and Denise, a 63 year old, retired elementary school teacher with diabetes and heart disease, found that making the time to practice was not difficult. Nicole, a 42 year old homemaker and self-employed business woman also reports little difficulty in finding time to practice.

- Awareness of the Body

After one week in the SR&RP all eight participants reported changes in awareness of the body. These included such experiences as "more awareness of the components" and a more direct sense of "living out of your body much of the time" (Harry); "a deepening experience of muscular relaxation"; "feeling more at ease physically" (Nicole). In general, all participants reported feeling a sense of relaxation or tension release. Jim reported a decrease in chronic hand pain during formal practice of the body scan meditation. Ann felt a sense of relaxation, but also

reports a growing "sense of appreciation" for her body that she describes as "relating differently" to a body she has had for fifty years.

Denise has diabetes and severe neuropathy and identified herself as, "a sexless victim" when speaking about the recent effect of the diabetes in her life and her sexual frustration resulting from neuropathy. She has suffered with a variety of chronic medical conditions, including heart disease, that have worsened during the last six months. During the pre-program interview she said that a primary goal for her was to prepare "to die peaceably."

She reports feeling "nourished" during the body scan meditation. Despite severe neuropathy which inhibits her kinesthetic sensitivity she says that she was able to "feel" her body and over the course of the week and reported that this led to "feeling I'm a female. I'd forgotten." As a consequence, she says although "sex was not very rewarding during the last six months", that she made love with her husband and felt, "no anxiety, a lot more feeling and much more of an awareness of his body next to mine."

- Sensitivity to Breathing

The Anapanasati Sutta or Sutra on the Full Awareness of Breathing is an essential aspect of classical mindfulness meditation training (Hanh, 1988). Likewise, in the SR&RP, awareness of breathing is introduced during the first

session of the program. The entire course is directed toward the development of a refined capacity to be aware, and the awareness of breathing is both a central feature of, and primary vehicle for this developing capacity. Unlike, many cognitive-behavioral therapies, mindfulness of breathing is not taught as a relaxation technique nor as something to be manipulated or controlled. Instead, the focus is best described as a non-interfering attention to the on-going, felt-sensation of breathing during both "formal" and "informal" practice.

All participants reported an increased sensitivity to the on-going activity of breathing. Jim describes it as something "new." Kathy reports being able to "find my breath more easily" and says she is "not trying so hard to do it." Nicole noted a qualitative difference in her breathing. She says that although "it's hard to describe", she feels the breath as "deeper, more relaxing and less quick."

- Awareness of Thoughts and Emotions

Harry and Ann report no changes in relationship to thoughts and emotions following the first week of practice. Jim says "my mind went blank" while practicing the body scan. As we explored this further he reports that he "didn't think as much" and wonders if he "went to never-never land." Joan reports little change "except that I was

a little disturbed that my mind goes in several directions at once." Kathy says that it was easier to "catch my mind accelerating."

Nicole reports her general state of mind as "more relaxed and not so jumpy and tense." Nicole's description of her state of mind is similar to her experience of the breath this week, eg. "relaxed and less quick." For Nicole, this appears to be an initial awareness of a relationship between a bodily state and a state of mind. This relationship has been described in detail contemporary meditation texts (Hanh, 1988; Hanh, 1990), and meditation research (Deathridge, 1975; Kabat-Zinn, 1990). It suggests the importance of what Ikemi (Ikemi & Ikemi, 1983) refers to as a "somatopsychic" approach in self-regulatory training whereby the patient becomes <u>directly</u> aware of a "mind-body non-dualism" that leads to a greater sensitivity to and ability to maintain a mind-body homeostasis.

Denise reports feeling "less judgmental" of herself and similarly, Ginger says that self-judgmental thoughts were not as dominant this week and as a result, "I didn't beat myself up so much this week." As has been discussed in Chapters 1 and 2, "bare attention" (Thera, 1962) is a hallmark of MMT. Denise and Ginger's comments appear to be the first signs of the capacity "to observe without judgement" while Kathy's capacity to "catch my mind

accelerating" seems to be pointing to her ability to utilize "bare attention" in everyday life.

- Perception of Stressful Events

Up to this point, participant's are reporting their initial experiences of learning to observe and directly experience various aspects of bodily existence such as breathing, bodily movements, stillness, or proprioception during formal practice. In addition, four participants now report an ability to observe themselves during stressful situations. They describe this experience as: "taking a breath" (Nicole); "being a little more detached and not losing myself" (Kathy); feeling "not so controlling with my kids" (Joan); and "less-reactive" and more able to "step back and listen" (Ann).

This is their first reported attempts to apply meditation in daily life ("informal" practice). It seems to have emerged out of the daily meditation practice.

<u>Sub-Categories of Application of Meditation</u>

- Body-Based Awareness in Daily Life

During the first week in the SR&RP Joan spoke of walking her dog and "feeling tense all over." She explains that she recognized these uncomfortable feelings, "took a deep breath and enjoyed the air" and says of this, "I did it

on purpose." Harry characterizes himself as in a constant state of "time urgency" and repeatedly experiencing "difficulty at red lights" and other situations where he is forced to wait. He now reports deliberately "paying attention to the scenery" when he is stopped at a traffic light and reports feeling "less huffing and puffing." Ginger reports utilizing the awareness of breathing while driving as a means of "slowing down and being more conscious." She relates an initial attempt to using the awareness of breathing as a strategy during the early stages of asthma attacks and reports "less wheezing and less spraying of medication."

In addition to practicing the body scan meditation on a daily basis, participants were also asked to "eat one meal with mindfulness" (mindfulness of eating). As a result, several participant's reported an initial ability to make choices about eating. They were more able to observe their tendency either to overeat or to eat as a way of coping with anxiety or stress (Joan and Nicole). Harry reports an increased awareness of " all the shapes and tastes of foods" and described this as "remarkable."

- Awareness of Mind-States In Daily Life

During daily situations, Jim reports feeling "less cranky" and says he is "not flying off the handle so much." Ginger reports feeling "calmer while driving" and Nicole

says that she became acutely aware of bodily tension during a difficult encounter with a family member. Nicole also reports feeling "less rushed."

Denise is noting a subtle change in her "perfectionism" and as a result says that she is relating to tasks "less anxiously." Finally, Kathy reports an increasing ability to notice both the physical feelings and mental states associated with critical self-judgments and is beginning to treat herself and others "more gently."

Both classical meditation texts (Goleman, 1972) and contemporary meditation research (Tart, 1969; Walsh, 1983; Kabat-Zinn, 1990) suggest that meditation may have a profound effect on the way one perceives oneself, others and the world. Given this possibility, perhaps Denise and Kathy's experiences of being less self-critical are the initial signs of changes in self-perception. We will now explore the category of experience termed Perception of Self [SP] in order to further examine this domain.

Sub-Categories of Perception of Self

- Perception of Self as a Patient

Although all participants were referred to the SR&RP with medical diagnoses, Jim is the only person who perceived himself as "a patient." The remaining seven people do not describe themselves as patients. They portray " being a patient" as feeling "isolated," "passive" or "dependent" and

the critical distinction they make between patienthood and membership in the SR&RP is the degree of active and sustained participation required. For the most part they view the training as the treatment, recognizing that ultimately it is up to them, as individuals within a collective process, to actually engage in the process if treatment is to be "successful." More importantly, they view their active participation in the program as a positive factor saying such things as: "I'm doing more for myself" (Harry); "I have to do more on my own" (Nicole); "It's collaborative, the people in the group contribute as much to the teaching as the teacher" (Kathy).

- Recognition of Mind/Body Relationship

Their recognition and articulation of the "mind/body" relationship is striking. Harry, who was referred for chest pain and anxiety characterizes himself as a "high-drive, high-stress individual and describes his experience of stress as being "very harassed...of being a list person...an existence of hard and fast deadlines, lots of huffing and puffing." Ann describes herself as "buried in a box and feeling suffocated" and says "my insides feel that way. I can't take a deep breath. " To me stressful means feeling tense, tight, scared and my inside would be real tight." Nicole who has chronic headaches says that, "I'm the type

that has trouble expressing myself and if someone puts me down I shut up quick. I always had this lack of confidence."

- Sense of "Self" and Experience of Illness

Despite the chronic nature of their medical conditions only Jim, who has chronic arm and hand pain, spoke about the alleviation of medical symptoms or conditions as the primary reason for entering the SR&RP. Instead, most participants, although wishing to reduce their medical symptoms, seemed to make a distinction between physical pain and psychological pain (177). Furthermore, they describe a relationship between their perception of self and their experience of illness.

Recall that Ann described her "self" as "in a box, in the dark, and suffocating." Joan says "that it's second nature for me to worry"; while Harry characterizes himself as "a high-drive, high-stress individual who is really sick of it." Kathy describes herself as "doubting herself and getting in her own way" and Ginger relates that "I've never followed through on things and I've always felt like nothing."

Based on these self-reports, they appear to perceive a definite mind/body relationship that is intimately linked to, but not the same as what they perceive to be their "self."

- Orienting Towards a "Healthier Self"

Their ability to recognize and describe a mind/body/self relationship is striking, as is their capacity to intuit, articulate and orient towards a "healthier self."

Using the idea of a "journey" as a metaphor for their participation in the SR&RP, I asked each participant "where they thought they were heading?" Given the opportunity to view their participation in the SR&RP as a "journey", they speak of the desire to become "lighter" (Ann), "more content" (Joan), and "tranquil" (Harry).

Their hopes and aspirations for "self" are in direct contrast to the ways they described themselves previously. Recall that Ann depicted her "self" as "in a box, in the dark, suffocating," and what she hopes for is "something light, bright and positive." Joan says "that it's second nature for me to worry" and states that she hopes to "just be content" and "in a peaceful place"; while Harry hopes to find "a tranquil port."

Denise's primary self-set goal is "to prepare to die calmly." She responded to the "journey" question as follows: "I'm grappling with that one. I don't know, it's a sad journey, because it's really, I guess I'm kind of planning the end of my life, at the end of the journey and I really don't want to talk about it...I'm not making any plans...I can't. The instructors don't even know if I'll be alive at Christmas...I wish you hadn't asked me that. Now I

feel guilty because I don't know how to answer that...I didn't know I'd react this way, I'm usually pretty verbal. It's one thing to consciously plan with my husband about funerals and money, I can sit down and almost unemotionally...but when it comes to emotion, I guess it's not the same and nobody wants to be on a fragile journey..I mean I like life. But see, I had a week of living (first week in SR&RP) I've had a week of saying I could talk about that [preparing to die] but today because I've had some good experiences, I've been calmer, life has been more meaningful, I'm more in tune with me, I couldn't handle it [talking about preparing to die] I didn't want to talk about that today because I've lived. I've learned to live a little bit... I've had six months of in and out of hospitals, a chain through my world. My world got exciting again. So I want to postpone that world..This is the first time I've wanted to live a little bit longer...I haven't felt that way for a long time."

In the face of multiple medical conditions that are severe and prolonged, Denise, like her most of her cohorts, makes no reference to changing her medical condition but instead speaks about living and about a "self" that's been "calmer...more in tune" and that "wants to live a little bit longer."

Interview 1

Table 5: Summary of Basic & Sub-Categories of Experience

Learning Meditation [LM]

- Making time to practice
- Awareness of the body
- Sensitivity to breathing
- Awareness of thoughts and emotions
- Perception of stressful events

Application of Meditation [APM]

- Body-based awareness in daily life
- Awareness of mind states in daily life

Perception of Self [SP]

- Perception of self as a patient
- Recognition of mind-body relationship
- Sense of "self" and experience of illness
- Orienting towards a "healthier self"

Key Descriptors: **Sensitivity** and **Re-connection**

Interview 1

Table 6: Participants' Self-Described "Life-Titles"

Joan:	" So Many Things Go on at One Time"
Ann:	"Hopeful"
Harry:	"I Didn't Get Everything Done I Wanted To"
Kathy:	"Chaos into Calming Down"
Jim:	" Without Bad Luck, No Luck At All"
Nicole:	"Many Curious Faces: The Many Parts of My Life"
Ginger:	"Life, Strife and Other Calamities"
Denise:	" Forty Years as a Diabetic"

Interview 2: Following Week 4 of SR&RP

Table 7. Skills Practiced During Weeks 2,3 and 4 of the SR&RP

* Week 2: Body Scan Meditation, Sitting Meditation, Awareness of Pleasant Events

* Week 3: Body Scan Meditation, Hatha Yoga, Sitting meditation, Awareness of Unpleasant Events

* Week 4: Body Scan meditation, Hatha Yoga, Sitting Meditation, Awareness of Daily Routines

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During week 2 of the SR&RP all study participant's were introduced to and began practicing formal "sitting" meditation. In week 3 they began the practice of Hatha Yoga and practiced all three of these formal techniques as a part of their in-class and home assignments. During week 2 they began to practice "sitting" for a minimum of 10 minutes, one time per day in addition to continual practice of the body scan meditation. During week 3 they began to alternate yoga with the body scan, practicing these on alternate days for forty-five minutes at a time using taped instructions for guidance at home. In addition, they continued practicing the sitting meditation. At this point in the intervention were "sitting" at least 20 minutes, one time per day without the use of taped instructions.

* Note that Denise was hospitalized during week 4 and died during week 6.

Sub-Categories of Learning Meditation

- Frequency of Practice

All participants report consistent practice of the body scan, sitting meditation and yoga. There is variance in their favored form of practice. Ann and Harry prefer the yoga, Joan and Ginger the body scan, while Kathy, Nicole and Jim prefer the sitting practice. Ann did not practice the sitting meditation on a daily basis during week 2 because she says that, "all the awareness was almost scary."

During week 2, Joan was forced to choose between the body scan (45 min.) and sitting (10-min.) because of time constraints, and chose to practice the body scan. Nicole is a dancer and prefers the body scan and sitting as she feels that the yoga is already a regular part of her exercise routine. Although there are personal preferences, by week 5 all participants reported regular practice of all of the methods during the course of each week.

- Internal Sense of Tension and Ease

All participants now report a deepening bodily sensitivity to their personal cartography of "tension and ease." They speak about "knowing" the internal feeling of tenseness and relaxation which now allows them to "relax on purpose." Most participants reported that the yoga in combination with the body scan has been increasingly helpful in this regard. All participant's now report gradual, and

in several cases, marked reductions in their medical symptoms. Joan as had no headaches in three weeks and very little G.I. distress. Ann reports gradual and consistent reductions in neck and shoulder pain and a marked improvement in her sleep. Jim continues to report diminishment of arm and hand pain that is limited to periods of formal practice. He also reports reductions in his general level of body tension throughout the day and states that he is becoming acutely aware of the relationship between psychological and emotional stress and acute episodes of hand pain. Harry, who initially did not like the yoga, is experiencing increased "muscle relaxation" and improved sleep. He is now enjoying the yoga and says that the feeling of relaxation is being maintained for longer periods of time beyond formal practice.

Nicole has been referred to the SR&RP for headaches and for a non-life-threatening heart arrythmia condition that appears to be exacerbated by stress. She says that for many years she was fearful of driving because of this condition and relates a recent experience of driving in her car where she felt the first signs of this condition occurring. " My heart will do a couple of running extra beats and I'll feel like I can't breathe. So I'm driving and I'm thinking, 'Okay Nicole, you just get settled here' and it worked, I just was aware of my breathing all the way over."

- Concentration

At week 5 participants report specific changes in their capacity to concentrate. Kathy says she has noticed "much more ability to stay with something" and reports that "there is a spillover (into daily life) and it's over everything." Nicole says that, "I did have a problem with that (concentration) and says she thought it was the result of her medication. Now she questions that assumption saying, "I think a lot of it (inability to concentrate) was because my mind was completely boggled and I never relaxed my body." She posits a definite relationship between her inability to concentrate and her usual degree of bodily tension. Ginger also reports changes in her concentration and feels this is directly related to "trusting myself and my emotions more." She says that she is experiencing less self-consciousness, is less afraid of doing something wrong and as a result is less nervous and therefore more able to stay with specific tasks more easily.

Just as Nicole noted a relationship between concentration and body tension, Ginger suggests a relationship between trusting herself and gradual changes in her ability to concentrate. Joan says that although her mind wanders a lot during formal periods of meditation she reports that it is now much easier to bring attention back to the primary object of observation. She reports that this ability to be increasingly concentrated or single-

minded is expressing itself in daily life in her ability to "capture more moments." She describes this more fully: " I definitely have seen a lot more times when I have opened up to the moment and they're not always just the pleasant moments and it brings everything back into perspective."

Jim also reports an increasing capacity to concentrate and tends to utilize a focused awareness of breathing as a method of relaxation and tension release. In all cases, participant's link the development of concentration with the cultivation of awareness of breathing while reporting an increased frequency of awareness of breathing in both formal and informal practice.

Although there is consensus among participants concerning the development of concentration via awareness of the breath and the body, how they experience and utilize concentration varies. For some of them, concentration or the capacity to attend, seems to express itself most often as a heightened awareness of physical sensations, eg. muscular tension, pain, relaxation, slow and rhythmic breathing. For others, concentration appears to primarily function as a pathway for accessing mental/emotional states. In either case, the increasing ability to concentrate appears to be facilitating a more direct, present-moment awareness.

Nicole's bodily tension, Ginger's self-consciousness and Joan's loss of perspective are long-standing patterns.

Yet, as reported, these habits or patterns seem to exerting less of a negative effect in their lives. Participants appear to be learning to relate to these habits differently. They report becoming increasingly aware of external and internal habits and patterns via the development of focused attention (concentration). As concentration develops, participants report an increased ability to "observe" external situations and internal percepts.

- Non-Judgmental Observation

In mindfulness meditation training the development of concentration is as an essential "skill" that leads to the capacity to observe. At the half-way point in the SR&RP participants report marked changes in their ability to observe. However, in all cases, they link this capacity to observe with the development of a non-judgmental attitude toward themselves. Ann says, "I need to be gentle with myself, it's beginning to feel better because I'm beginning to realize what I was trying to do and it was astronomical. So, now I just say (internally), 'Stop punishing yourself.' "I'm doing better because I've become aware that I've done it (pushed herself) in every aspect of my life. Then I began to realize I was pushing myself in the meditation. I had discomfort in neck and my back is stiff (Ann has chronic neck and back pain) and I want to move and I'll just sit

there and continue to be uncomfortable and that's when the thought comes up, 'Don't be so hard on yourself.'"

Joan speaks of beginning to become acutely aware of feelings of "defensiveness" during interpersonal encounters. As a result of her willingness to <u>see</u>, acknowledge, and directly experience this pattern, she reports the gradual development of a "less-defensive and more assertive" position in these situations.

Kathy describes herself as "less-punitive and self-critical" and reports a deepening capacity to "forgive myself." Harry says, "I'm beginning to see myself as others see me." He describes this as "waking up to reality a little bit." Nicole, who spoke previously about a lack of self-confidence, has come to recognize the powerful effects of an internalized, self-critical dialogue: " You know, I used to say I'm just plain stupid." She now reports that "it's not operating as much and I'm not criticizing myself lately." She also reports that when she observes this self-critical dialogue she is able to, "relax myself without getting all uptight and I say (to myself) 'This is the best I can do.'" She says that this changing attitude is neither one of indifference nor a lessening of her standards of quality but one of "more order of my mind."

All participants report that the growing capacity to <u>observe</u> is directly related to the development of <u>concentration</u> which is being cultivated via the awareness of

the breath and body. Their descriptions about this relationship are explicit. Furthermore, as the ability to observe develops, it appears to be accompanied by the arousal of past trauma or memories and at times, feelings of deep sadness.

- Arousal of Past Trauma or Early Memories

Mindfulness meditation has sometimes been referred to as "observation" meditation (Hanh, 1988). However, as discussed in Chapter 1 and described in the case studies presented, the capacity to "observe" is <u>non-dual</u>. Unlike a scientist who might attempt to stand apart from the object of observation, the meditator is not standing outside the object of meditation but instead removes the barriers between subject and object. The intention of the meditator is one of entasis (standing inside) (Eliade, 1969) or penetration whereby the subject and object of meditation become unified.

As has been suggested in the case studies, the capacity to be aware of the body, feelings and mind-states is a systematic process. The arousal of past trauma, as depicted by participants, appears to be expressive of their growing capacity to open up to and begin to come to terms with deeper layers of intrapsychic material while simultaneously learning to maintain a sense of stability in the face of highly charged mental content.

This phenomenon, referred to as adaptive regression has been documented in contemporary meditation studies and reports (Maupin, 1969; Shafii, 1975; Wilbur, 1977) suggesting that meditation stimulates regression to fixation points that can then be consciously understood and integrated, resulting in a greater freedom from unconscious patterns of behavior.

Nicole has felt self-conscious, and intellectually unsure of herself most of her life. During the fourth week of the SR&RP she reported the emergence of early memories associated with very difficult experiences in elementary school. She described remembering a series of incidents of being compared to her mother in terms of academic achievement: " How could I have any confidence after having that shot at me. 'You're not like your mother, what's wrong with you?' I can just hear them saying it to me." She reports that these emerging memories are helping her to understand her long-standing feelings of intellectual insecurity and this has encouraged her to begin discussing these experiences with her mother as a means of beginning to resolve these feelings.

Jim, who has had a very difficult time in the last six years reports having a series of memories about his work-related accident, the break-up of his marriage, the loss of home and income and the frustration he has experienced in his dealings with the social service and legal systems. He

feels both humiliation and rage about these life-changing events and spoke at length about feeling "bitter and hateful." He now says that when he is experiencing these feelings and decides to practice yoga or sitting meditation that, "the hatred on your mind seems to dissipate." During the first interview he depicted himself as "Hitting a wall" and now says that, "I've taken a few blocks out of the wall." When asked if he could name these blocks, he terms them: "stress, hatred and anger." He acknowledges that he is still angry at his company but characterizes himself as, "Freer, not bottled up as much as I used to be" and says that he is now feeling "hopeful and less depressed."

Likewise, Ginger reports being recently flooded with memories and much grief over the break-up of a long-standing love relationship one year ago. She says, "I've been walking around hating this man and thinking about him constantly" and describes being able to utilize the skills she has been learning as a means of focusing on feelings of "self-pity and hatred eating away at me and making me feel terrible." As a result, she says that she is now facing these feelings and is beginning to engage in the process of, "releasing the resentment."

As chronicled in the case study, Harry has begun to experience the forceful emergence of early memories associated with his father's death. Although these are not new memories, the freshness of the emotional content and the

resulting impact in his life are quite unexpected and are motivating him, "to throw open this thing that's been closed for many years."

Kathy, who was raised in an alcoholic family, relates that "I see a little girl, the little girl that felt responsible for everybody, and wanted to please everybody." She now reports that the capacity to observe this internal pattern has allowed her to "take the one step back I need to understand" and that this has allowed her to begin to "let go of self-abuse." She describes "self-abuse" as the tendency to "internalize whatever badness was going on as my fault." She says that although these memories and feelings are sometimes painful, she is, "feeling a deep level of compassion for myself and not wanting to inflict that on myself." She is explicit about the difference between "self-pity" and "compassion" and reports the spontaneous arising of an internal question, "Who am I trying to please?" when she begins to internalize a situation that she is not responsible for. In addition, she reports "a real vulnerability" that she characterizes as a mixture of "sadness and gratitude" and says that "sometimes I feel I could cry at the drop of a hat about things."

- Non-Attachment to Mental Content

Although participant's are experiencing highly charged emotional content they are simultaneously reporting changes

in their ability to process this information. Paradoxically, as they experience more emotionally-laden content, they speak about being increasingly fluid in their ability to work with this material. They appear to be less captivated and conditioned by these intrapsychic events.

Repression and denial do not seem to comprise their primary mechanism for handling these events. Instead, participants appear to be 1) utilizing concentration, the ability to remain focused on a single object or a changing field of objects (internal or external), and 2) observation, the ability to see clearly and nonjudgmentally, as a pathway to insight or understanding.

In their descriptions of the emergence of early memories and/or trauma, they seem to be, at times, less-personally identified with or overwhelmed by the content. This is not to suggest that they aren't feeling depression, hatred, grief etc.. However, in the midst of these experiences they describe a developing capacity to be less dominated or captivated by these mind states. If they were "watching" thoughts and feelings as a non-attached observer they reported being more capable of experiencing these as discrete events. If, on the other hand, they began to identify more closely with the content as "I", they report becoming more easily overwhelmed by a cascade of reinforcing thoughts and feelings.

This is by no means a smooth or linear process. There appears to be cycles of skill development that includes degrees of attachment and non-attachment to various states of mind, in the course of both formal and informal practice. Additionally, participants report the repetition of these learning cycles as they repeatedly move into the deeper layers of content.

It is clear from their descriptions that concentration and observation are being utilized in the service of self-understanding in <u>different ways.</u> Participants have differing tolerances for emotionally charged material as well as differing degrees of competency in learning this "skill." For instance, Jim, Ginger, and Joan tend to move toward difficult emotional events via awareness of the breath and the body. They notice access to, an increased intensity, or the diminishment of an emotional charge as they become more physically relaxed and stable. Whereas, Kathy and Ann tend to initially experience a more immediate contact with their current affective state.

In all cases participants report an increasing sense of self-trust. They seem to be allowing feelings such as sadness or anxiety to simply "be" without attempting to modify, manipulate or change them as quickly as they might have in the recent past. Paradoxically, their growing willingness to neither cling to or avoid these percepts appears to diminish their impact while introducing an

economy of emotion and energy into the lives of participants. Participants also report an initial transfer of this attitude into everyday situations.

As reported earlier, Kathy is feeling "less-punitive." She tends to "get into perfectionism" and says now "I observe it, or I catch myself doing it." She portrays herself as being more compassionate towards herself when this occurs and describes this sense of caring for herself as "becoming much more internalized and behind the belly-button rather than in my head that I feel more compassion for myself."

Joan speaks of "not waiting anxiously for the fallout" and is learning "to appreciate the moments directly." As discussed in the Joan's case study, this willingness "to be" is beginning to alter her previous assumptions about what it means "to be in control." As a result, she reports that she is finding it easier to adapt more fluidly to change and says that the meditation skills, coupled with attitudinal changes have directly contributed to a major diminishment in headaches and G.I. symptoms that she associates with her previous assumptions and behaviors about what it means "to be in control."

Jim describes himself as less "tensed up about things" and says he is "taking things more as they come." As a result he doesn't "sit and brood over things" and is experiencing a reduction in anticipatory anxiety.

While speaking about her usual response to a difficult marital relationship her son is involved in, Ginger describes herself as being less emotionally upset and tense. She is explicit in explaining that, "although I've calmed down, I'm not minimizing it [the situation] but I'm just letting it flow rather than running about helter-skelter, trying to change things that can't be changed."

Ginger made it clear that she wasn't denying or "minimizing" the situation. Likewise, the other participant's were explicit in the descriptions about the differences between the experience of non-attached awareness and coping strategies such as avoidance behavior or positive thinking. Although Jim described substituting pleasant thoughts for unpleasant thoughts in some instances, he, like the other participant's also spoke about a growing willingness to open up to and accept difficult percepts or situations.

Participant's tended to describe themselves as functioning at a deeper level of personal honesty that was, at times, painful. Although painful, their willingness and growing capacity to be less-personally identified with the content of experience has had the effect of beginning to free them from much of the struggle associated with clinging to, resisting or rejecting internal percepts or external situations.

- Lapses in Formal Practice

Prior to the intervention, participants agreed to practice "formal" meditation, six times per week or more, for forty-five minutes at a time. At the half-way point of the program three participants report consistently practicing six times per week (Nicole, Kathy and Jim). Harry and Joan report consistently practicing at least five times per week. Ann reports a lapse in formal practice during week two.

Ann describes week two as "horrendous" and explains her experience: " The first week I went in feeling I'm going to do this, I've made this commitment and it's going to help me feel better. The second week was coming to the realization, 'This isn't easy for you.' The second week was like, 'This is real.' It was more reality. That was the week that I became aware that I will do anything but spend time or do something for myself." At the half-way point of the SR&RP, Ann now reports practicing "formally" at least five times per week. She describes her first four weeks of practice as "a lot of work" and says, "I am hoping to make an even greater commitment" in the second-half of the program.

Ginger reports practicing "everyday" for the first three weeks. She depicts week four as "hectic and crazy", did no formal practice and says, " I felt like I really messed up. I felt guilty and really sad that I missed that week."

She attended class five, reported that she was again practicing on a more consistent basis but was only able to practice the Sitting meditation because of asthma and a respiratory illness that has severely inhibited her breathing, particularly when lying down. As discussed in the Chapter 4, Ginger was later hospitalized and had a surgical procedure in order to remedy her respiratory blockage. During the period of recuperation following surgery, she was unable to attend the remaining sessions of the SR&RP.

- Internal Competencies

All participants were asked the following question:

> In part, schools are concerned with the learning of skills and competencies like penmanship, math or thinking about things in a certain way. Are there any <u>internal</u> skills or competencies that you think you are learning in the SR&RP?

Nicole:
- Now I can tell if I'm becoming tense. I'm aware of it.
- I can relax right away by concentrating on my breathing.
- I'm not as self-critical.

Kathy:
- Compassion and clarity

Joan:
- Appreciating the actual process of life as a moment-by-moment experience and being able to appreciate each detail.
- Being present and not waiting for or expecting something bad to happen.

Ann:
- Being in touch with my feelings. If I feel it I can then deal with it.

Jim:
- I'm doing two things when I sit. I get rid of tension and when I get rid of tension I get rid of a lot of the pain.
- I feel good about myself.

Ginger:
- I'm able to relax and I'm not so tense.
- I'm trusting myself more.

Harry:
- I'm not competing as much.
- I'm seeing a lot of things more clearly.
- I'm more relaxed about a hell of a lot of things.
- I'm handling the little ones (stressors) better. I'm less reactive.

Although all of the participants are learning and practicing the same methods, the way that they utilize meditation training and describe the development of internal competencies is quite varied and unique to their particular needs.

At the half-way point in the intervention, Harry, who described himself as, "a hard-driven Type A", reports being "less competitive and less reactive." Nicole, who describes herself as quite "self-conscious and unsure of myself" is becoming "less self-critical." Ginger who "always felt like nothing", is more "trusting" of herself while Jim is developing an internal means of working with, and at times, alleviating his chronic hand pain.

Joan, who experiences a direct connection between anticipatory anxiety and stomach pain and headaches, now

reports learning the "skill" of being more present-centered and "not waiting for or expecting something bad to happen." Kathy has described herself as "self-abusive and punitive", and now reports the development of "compassion and clarity." She is explicit that she is learning to direct these qualities towards herself.

Sub-Categories of Application of Meditation

- **Learning to Stop**

The development of concentration of mind that participant's report occurring during "formal" meditation practice is beginning to "spillover" and become operationalized in everyday situations. They describe this as the capacity to "stop." The link between concentration and the ability to "stop" is the quality of attention. Thus, they report an increasing ability to recognize, and if need be, to alter or modify their responses in stressful situations based on a growing attentiveness to bodily sensations, to the flow of the breath in daily life, and to thoughts and feelings.

Joan says, "I guess you learn to stop by learning to recognize when you're starting" and reports, "being able to catch myself" when feeling "a rush of anxiety sweep over my body" during a difficult situation. She goes on to say that although she knew it was "stupid" to feel this way, "thinking that it was stupid" was not sufficient to alter

her usual reaction. She now reports becoming increasingly sensitive to physical and emotional sensations and is using this sensitivity to develop more apppropriate coping strategies: "I was able to, when I felt that anxiety, to relax. My jaw was set, I was able to feel that, and relax it. I was doing the white-knuckle bit on the steering wheel and I was able to calm myself down." She finishes by remarking, "probably in the past, (following a similar situation) I would have had a bad time with my stomach and everything, and I'm okay" (no symptoms).

Harry, who characterizes himself as "always in a hurry", finds it very difficult to "wait" in lines whether at a store or while driving. He reports having "solved the line problem a little bit by sitting and concentrating on my breathing." In addition, he now reports taking time when he gets into his car to "sit there and wait a minute and look outside and relax my teeth." As a result of using these new strategies he says that "I feel much better about things, more relaxed, calm and peaceful."

- Initial Patterns of Informal Practice

Based on the participants descriptions, the application of mindfulness in daily life (informal meditation) appears to <u>initially</u> occur in three distinct patterns. These are: 1) deliberate strategies; 2) spontaneous moments; and 3) trends of mindfulness in daily life.

Deliberate experiences of mindfulness are planned strategies utilized in a particular situation. They are typically utilized in acute situations, or planned in advance. Examples include: utilizing awareness of breathing at traffic lights (Harry); deciding in advance to eat a meal mindfully (Nicole); or to purposely attend to the sensation of breathing prior to a difficult interpersonal encounter (Kathy). The descriptions of Joan and Harry in the previous category are typical examples of this aspect of "informal" practice.

Spontaneous moments of mindfulness in daily life are random and unplanned. They seem to arise as if on their own. Participant's speak of responding uncharacteristically in potentially stressful situations; of being aware of bodily sensations; or the flow of the breath without having thought in advance about doing so. Here are some examples.

As previously reported, Joan experiences anticipatory anxiety and is "always waiting for the big things to have to get through." She now characterizes herself as "more present, more often" and relates a recent trip to the doctor's office: "All of a sudden I wasn't waiting to get to the doctor's office, I was in the car. It sounds so simple, like everybody should know this stuff. I'm not cured. I feel like it's part of my personality to worry, to get nervous about things that aren't really there but now I

feel like I'm learning to handle that. I can calm myself down" [underline her emphasis].

Nicole has a long-standing, non-life threatening heart condition that requires her to go to the emergency room for treatment. For most of her adult life, the occurrence of these episodes has been quite frightening. She describes her response during a recent episode of tachycardia while driving in her car: "it just popped into my head that it's time for some meditation" (awareness of her breathing). She describes this experience as "spontaneous" and says that it was based on "a bodily awareness of how you feel in the moment."

Trends of mindfulness refer to changes in coping responses that participants describe as becoming more generalized in everyday life. Ann reports a distinct change in her ability to cope with difficult situations: "Almost everyday has been brighter. But even if the day isn't bright, if there is a problem, I don't feel overwhelmed by it - I don't feel like I can't handle it. [Now] I feel that I can lift myself up from them. That's a hugh difference. [Before} I could just get up in the morning and really feel low and just feel like there's nothing that would make it fine. Now, when I know it's happening I can then act on it."

Harry says, "I've taken a negative aspect on things too long, most of the time I see the problems, I spend my time

concentrating on the problems. I've found in the last few weeks that I'm doing more concentrating on the good things." He explains these changes in attitude and behavior: " It's been a load off my shoulders, I feel better, I think things are still getting done, but I'm not so stressed out about them now. Before I would run around yelling, screaming, now I'm much more relaxed. I've been like an energy machine without a rudder, driving off in all directions but not controlled. Gee, it's a shame that we spend so much of our life in an inefficient way."

Sub-Categories of Perception of Self

- A Sense of Having Been "Asleep"

In discussing themselves, participants tended to draw comparisons between their present and past sense of "self." Harry describes himself as "waking-up" and says he feels "like Rip Van Winkle, you feel like you've been asleep for twenty-five years, maybe more." As a result, he says he's beginning to "see my faults a lot more clearly and waking-up to reality a little bit."

Similarly, Ann describes feeling a sense of "clarity" and explains: "It's like there's been a film in front of my eyes and I feel like I broke the film away and I'm actually seeing things for real." Joan, in speaking about her changing view of "control", has begun to recognize the power

of conditioning in terms of shaping her behavior and says that she is beginning "to recognize the habits I had formed over these years and realized that they are just going to make me worse."

Kathy has become increasingly aware of the way that fear has inhibited her much of her life, particularly, her fear of failure. As a result of this awareness she reports an increased ability to work with fearful feelings and is "not as afraid and more willing to push the limits a little more." Likewise, Ginger related a "profound" (her word) and previously unseen insight about herself. She described herself as feeling for a long time "like I was walking around with a big cloud of gloom and rain over my head and it boils out into everything you touch." As a result of this insight she feels, "like a weight is lifted." She reports feeling freer and "released."

- "Friendliness" With Self

Both Jim and Ginger report an increased sense of self-esteem that they describe as feeling better about themselves. Jim says that "It's hard to put into words, I just feel different about myself. I feel more at ease, more free." Similarly Ginger explains that "I'm getting to like myself, I feel better about myself, like I'm coming out of a cocoon. I beat up on myself too much. I'm normal and I'm not just thinking these things, I'm realizing them.

Other participants describe a reduction in internalized self-criticism. Nicole notices that, "I haven't been criticizing myself lately, it's not operating as much." Kathy feels, "more compassion" for herself and as a result is feeling less "self-abusive." She reports being more able to, "observe and catch myself becoming perfectionistic while not wanting to inflict that on myself." She describes the tendency to be self-abusive as a diminishment of her self-esteem and likens it to, "taking out a crowbar and bashing myself over the head." When asked how she might account for these insights, and subsequent changes in her behavior she explains that in the midst of everyday life she is learning, "to see my reaction for what they are and to recognize them as arbitrary and therefore subject to choice." She explains that "seeing my reactions for what they are" is "helping me to feel a very deep level of compassion for myself." She concludes her description by explaining that the meditation "gives me that one step back that I need to understand and to stop internalizing whatever badness is going on as my fault. I have a better ability to forgive myself and move on instead of going over and over it. Somehow I'm not quite as terrible or stupid as I used to be."

Ann describes herself as "needing to be gentle with myself." She describes a life long habit of constantly pushing herself "to do more and more" and is now beginning

to recognize the impact that this behavior has had in her life. As a result, she has begun to refuse certain tasks or projects, and at other times to ask for help. She describes the deepening of the experience of gentleness and self-care from "needing to be gentle" to a more internalized sense of friendliness: " I always looked in the mirror and thought I should see something much smarter, and more beautiful, more of everything. Now I look in the mirror and I think I see a woman instead of wanting to see a girl- it's probably the first time in my life that I see positive things. It's great but sometimes I feel sad at the way I've treated that person in the mirror but it's not to late to treat her better and I'm happy for that."

- Rapport and Connectedness

The sense of "being asleep," as described by participants, was accompanied by reported feelings of isolation or disconnection; of having been alienated from themselves, from others or the world around them. Conversely, as participants reported the experience of "waking-up" or "seeing things for real", they describe a heightened sense of connectedness with themselves, others and the world.

As reported, participants are experiencing a changes in their relationship to "self" that expresses itself in a more

direct, experiential sense of self-knowing. Likewise, they report changes in their relationships with <u>others</u>.

Jim spoke about feeling less socially isolated, walking more and no longer avoiding old friends and acquaintances: "I guess before I was in my own little world, by myself. [Now] I'm getting out more, I'm starting to get into conversations. I want to get involved more."

Kathy characterizes herself as, "feeling like a Martian" and finding it difficult to feel a sense of belonging in her work setting, particularly because she fearful of being judged or perceived as "weird or strange" because of differences in the lifestyles of she and her colleagues. She now reports: "feeling more comfortable in being myself" and being a little more willing "to reveal some of my vulnerability" in the work place. She describes this as "a little uncomfortable" but says that the tension about "whether to talk or not to talk has eased up quite bit" and has resulted in her "joking" and sharing some of her vulnerabilities with her boss during her yearly job review.

The experience of rapport and connectedness is not limited to psychological insights or interpersonal encounters but also includes an increased perceptual sensitivity to and affinity with the natural world. Thus, Ann describes seeing trees, "as if for the first time." Harry reports feelings of, "appreciation and wonder" while

watching flocks of migrating birds and says: "if you concentrate on nature there's an awful lot to be learned out there and it's very pleasing if you just watch but people are so busy they never see it."

Joan relates being "uncomfortable, crowded and hot while taking a hayride. She says that her usual pattern of behavior would have insured her feeling "miserable and upset." Instead, she describes deliberately, "stopping, relaxing and enjoying the moment - the colors were gorgeous, the air, it smelled good and I was able to come away feeling fine."

Interview 2

Table 8: Summary of Basic & Sub-Categories of Experience

Learning Meditation [LM]

- Frequency of practicé
- Internal sense of tension and ease
- Concentration
- Non-judgmental observation
- Arousal of past trauma and early memories
- Non-attachment to mental content
- Lapses in formal practice
- Internal competencies

Application of Meditation [APM]

- Learning to "stop"
- Initial patterns of informal practice

Perception of Self [SP]

- A sense of having been "asleep"
- "Friendliness" with self
- Rapport and connectedness

Key Descriptors: **Calmness** and **Observation**

Interview 2

Table 9: Participants' Self-Described "Life-Titles"

Joan: "Learning to Live, Learning to See"

Ann: "Awareness"

Harry: "I See Some Light at the End of the Tunnel"

Kathy: "Still Waters"

Jim: "The Light is Getting Brighter"

Nicole: "Life's Many Changes"

Ginger: "I'm Not So Bad and I'm All I've Got"

Interview 3: Following Conclusion of SR&RP

Table 10. Skills Practiced During Weeks 5, 6, and 7 of the SR&RP

* Week 5: Daily Choice of Body Scan Meditation and/or Hatha Yoga, Daily Sitting Meditation, Awareness of Stress Reaction and Stress Response, Deliberate Cultivation of Mindfulness in Daily Life

* Week 6: Daily Choice of Body Scan Meditation and/or Hatha Yoga, Daily Sitting Meditation, Awareness of Difficult Interpersonal Communications, Attend All-Day Silent Retreat

* Week 7: Choice of Daily Practice, Awareness of Diet and Nutrition

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During week 5 of the SR&RP all remaining study participants began practicing a more lengthy form of the Sitting meditation. Since week 2 participants had been practicing the Sitting meditation for increasingly longer periods of time (20-25 min./1 time per day) without taped instructions. During the week 5 session, participants were introduced to a 45 minute Sitting meditation and continued to practice this with a guided instructional tape for the duration of the intervention. The Guided Sitting Meditation included all previous "sitting" instruction and added detailed instruction on the "awareness of thoughts and emotions." This added dimension of the meditation practice encouraged an increasingly expanded field of awareness coupled with longer periods of silence. These increased periods of silence differed considerably from previous guided instructional tapes, therefore leaving participants

much more room to be with their own experience. This proved to be challenging, revealing and empowering to participants and is reflected in the following categories of experience.

Week 6 home assignments included continued meditation and yoga practice for forty-five minutes at a time, maintaining a daily log of episodes involving difficult interpersonal commmunications, and attendance at a full-day silent retreat.

During week 7 participants continued regular meditation and yoga practice and were asked to review a series of articles concerning the role of diet and nutrition in positive health maintenance.

Sub-Categories of Learning Meditation

- Fluid Adaptation to Change

During the third interview all participants reported an increased capacity to respond in new ways to repetitive internal percepts and external situations. This capacity, referred to as de-automization or as de-habituation, was defined by Deikman (1966) as "an increased flexibility of perceptual and emotional responses to the environment." Nicole's description of her changing behavior characterizes this category of experience: "It seemed like I was like a robot operating, everything had to be done this way or that way." [Now] I'm more relaxed, I just see things differently. I mean I'm not driven" [underline mine].

Likewise, Harry, who describes himself as a "hyper-aggressive driver" says that he is now "examining" that behavior, as well as his intense and long-standing sense of time urgency. As a result, he reports: " I've noticed at traffic lights, where I'm in a big hurry that in the past my big thing was to beat them out there and get around the corner before they came across which is probably pretty dangerous in some instances, and now I don't seem to take those kinds of risks anymore. I began to have some kind of realization and I'm a little bit less time urgent."

Joan, in discussing her usual behavior when she perceives the need to be in control, says: " As soon as I'm faced with something, my mind just blows it totally out of proportion. My mind will race ahead to the point where everything has gone wrong because of this one particular instance." She characterizes this repetitive behavior as "running in", and contrasts it to the development of a new set of responses that she terms, "backing out." "Now I say to myself, 'This is ridiculous,' I take a breath..It [breath] focuses me. It brings me back to where I am, right now. I'm realizing that I'm just doing damage to myself because I just used to tense up, put on my armor and walked through whatever it was. Now, it's more of a flow. Allowing myself to be relaxed and being aware that I can function while relaxed. It just never occurred to me that I could do that."

Although it was not fully captured in the preceding text, Joan, Nicole and Harry, along with all remaining participants reported 1) a deepening tranquility of mind and body; and 2) having had to face a difficult series of insights about themselves prior to the operationalization of a more fluid adaptation to internal percepts and/or environmental challenges. In each case there appeared to be a willingness to face and accept the actuality of the situation before change occurred. For Nicole it was realizing that she was acting like a "robot." Harry had to "examine" his long-standing time urgency and the "riskiness" of his driving habits. Joan came to realize that despite her "controlling" behavior she, "wasn't really in control at all." These are not easily assimilated realizations. Yet, they are characteristic of a growing experience of equanimity and calmness that expresses itself as an increasing sense of stability in the face of fluctuating, habitual and/or highly charged bodily and intrapsychic triggers.

Kathy makes it clear that this is not a state od dissociation or a "bliss trip": " I've been dealing with some heavy duty stuff, personal stuff, but it's different. I can step back a little bit from it and still see it and still be part of it but I'm just not getting gobbled up by these issues that used to drag me over the coals every time. The place I'm in now is just a different viewpoint on life,

a different agenda, calmness, moments of happiness and just appreciating very simple things."

- Insight into Behavior Patterns

The participant's deepening capacity to observe bodily sensations, thoughts, feelings and the environment with increased calmness and stability has led to further insight into their behavior. This experience initially documented during Interview 2 (arousal of past trauma or early memories), now includes an added dimension. When participants <u>initially</u> described the emergence of early memories or traumatic experiences, they reported a growing ability to maintain a degree of calmness and stability in the midst of highly charged internal percepts. Now, however, they report an increasing ability <u>to take action</u> in order <u>to modify</u> these internal patterns.

Ann details this process as it relates to her fear of speaking in class during the SR&RP: " On my way to class I'd be saying 'Today is going to be the day. I'm going to do it. I'm going to say something today.' I'd get into class and I just couldn't." She describes awakening on the morning of the fifth class, "wanting so badly to express what I feel" and having a series of insights about her fear of speaking that were rooted in an embarrassing situation in high school where she felt fear and shame when humiliated by one of her teachers. She characterized this as a "flash" of insight

and says she realized that since that incident she has "never" been able to speak in front of a group.

Ann says that this and other insights reflect her long-standing sense of, "suffocation, darkness and tightness," and although painful, this self-understanding is beginning to allow her to feel freer, more confident and capable of exploring new horizons in her life. Since having that insight she has been more acutely aware of and willing to risk speaking freely in front of her Sunday school classes and has recently accepted an invitation to speak in front of a church full of people at her niece's wedding.

Joan has been experiencing a series of insights concerning her "controlling" behavior: "I grew up around controlling people and I always wanted to not be that way. In my estimation that's never been a good quality and now it's like a light turning on. I am that way. I want to control things, I want to control people and it was a rude awakening when I found out." She goes on to say that she doesn't know why she never knew this before and that "all of a sudden I became aware of it although this wasn't a pleasant revelation." Like Ann, she reports a willingness to work with these insights and says she is now finding that it is "less important to control what other people think of how I feel. Before I wanted to know the whole outcome of a situation before I'd get into it. Now I want to be more in control of myself."

For most of his adult life, Harry has defined himself as, "I am what I do" and has likened himself to, "a predator in the jungle." He describes the law of the jungle as having "no middle roads" and says that you are either "an aggressive predator or you get eaten." He is now the midst of a major life-transition. He is moving towards a "half-retirement" and is beginning to have insights into some of his behavior and their implications as he struggles with the idea of retirement.

He is an engineering scientist who describes himself as having been in, " a production field" where production is defined by, "producing papers one after the other." He characterizes this as, "a never-ending thing, as a treadmill that seems to be getting faster and faster and faster and you're producing knowledge and information." He says he is now wondering, "What am I going to be, just totally useless when I stop doing that?" He feels an, "element of fear" since he wonders, "If I don't produce, why am I around?"

He muses: " Maybe I'm starting to work with my unconscious a little bit" and feels that he is learning to "navigate." He defines navigating as, "not just going full speed ahead but instead trying to choose the channels I want to go in." He reports a greater willingness to look at the deeper roots of his behavior and as a result is now feeling "that my mental side is not dissociated, not walking outside of my body, separate from it and that I'm looking more at

the whole than a lot of separate parts." As a consequence, he feels a greater sense of "regulation" and is beginning to, "see things that I was totally blind to before, so it's a new life. I'm seeing the same things but I'm seeing them differently."

Jim has resumed walking on a regular basis and now walks almost one mile a day and is feeling good about this. He says that the walking tends to, "reduce your tension and you get to see what people are doing instead of just sitting there looking out your window." He realizes that before entering the SR&RP that, "I didn't want nobody to be around me and sometimes I wouldn't even say hi to my best friends." He relates that when he did see friends that "I'd just keep walking, make believe I didn't see them and after I felt bad about it." He characterizes himself as having been "depressed and negative and feeling like nobody cares about you."

He now reports becoming more aware of and willing to accept his feelings of anger towards his former employer, his ex-wife, as well as the courts and welfare systems. He explains that his willingness to recognize his anger has helped him to feel less tense and depressed and as a result he has begun to reengage in social activities and to be in contact with people. His increased walking is one expression of the desire to reconnect with people and he says that recently, while walking, he apologized to some of

his friends for his past behavior. His friends reassured him that they, "could understand what I was going through and said that maybe they would have done the same thing." When asked how he felt about the exchange with his friends, he said, "It brought tears to my eyes because there are people out there who care."

- Relaxed Attitude Towards Life

As previously discussed, all participants reported an increased sense of physical relaxation during the course of the SR&RP. The initial accounts of this experience were associated with formal meditation practice and were then followed with the reported experience of increased physical relaxation in daily life. The quality of relaxation was initially described as body-centered and during Interview Two (week 5) participants reported the initial experience of mental/emotional stability in the midst of difficult environmental events or internal percepts. However, by Interview Three (week 8) the experience of physical and mental relaxation appears to have matured into a more relaxed attitude toward life.

In all cases, the experience of insight into habitual behavior appears to have led to an increased sense of personal ease. Ann's understanding of the origins of her previous inability and long-standing desire to express herself in public; Harry's willingness to face his current

transition and to attempt to "navigate" and proceed as other than an "aggressive predator"; Joan's "rude awakening" and acceptance of her controlling behavior; and Jim's recognition of anger, depression, avoidance behavior and social isolation have led to a greater willingness to "work with" these habits and behaviors rather than to feel hopelessly victimized and controlled by them. This appears to express itself most clearly as an attitudinal change towards life.

Nicole portrays this attitude as, "looking at life differently. I'm able to cope with problems differently than before. I'm more relaxed, more in touch, more content." She goes on to say that she doesn't worry as much as before and in place of worry she is, "more relaxed and organized." She reports "internalizing things less" and says, "I used to feel that everything had to go smoothly and it doesn't. Life does not go smooth. You have ups and downs and you have to learn to deal with them without getting yourself all upset. [Before] I was driving myself crazy if things didn't get done. It was almost like a rule that if I didn't have it done something was wrong. Now I don't rush myself and I'm not getting exhausted."

During the third interview, Kathy entitled her life: "Riding the Rapids." She says that this now characterizes her attitude towards life: " I'm not as afraid as I was. I'm not as afraid that people don't like me, that I may do the

wrong thing. It's a give it your best shot kind of feeling. I feel more open to whatever's going to happen. I feel more open with people, more confident and some of the things that used to cause me extreme distress are fun. I can deal with them."

On two separate occasions, Joan depicted her way of coping with everyday problems as, "tensing up, putting on my armor and walking through whatever it was." She now characterizes her method of coping as, "more of a flow, allowing myself to be relaxed. It's like the whole change is being aware that you can function while you're relaxed better than when you're tense. It never was me, it never occurred to me that you could do that."

Sub-Categories of Application of Meditation

- **Decreasing Distinction Between Formal and Informal Practice**

As the capacity to apply mindfulness develops, participants report a more consistent continuity of awareness (mindfulness) in daily life. They depict, in detail, their experience of this phenomena and express a relationship between this competency and reductions in their medical and psychological symptoms.

Joan says she has become increasingly aware of and capable of modifying her behavior through the utilization of mindfulness in daily life: "I'll clench my jaw and my

breathing will get shallow, now I'll catch it right away. Remember when we started I had headaches every day and that's not an infrequent thing for me but now I rarely have headaches. Now I make a conscious effort to watch my breathing. I guess I say something to myself like, 'take a deep breath, sit back for a minute.' It's consciously realizing when something's getting to me and just relaxing. It's amazing to me how you can feel yourself tense up if you're really aware of your body and how you can take control of that. I'm more in touch with how I'm feeling and what's going on in my head."

Kathy portrays this phenomena vividly: " Sometimes in a life situation outside of [formal] meditation, when I'm dealing with a difficult person my breath comes and finds me." She describes her breath as "caressing and warm" and says that the ongoing awareness of breathing is, "more available to me in my day-to-day life than it's ever been before." As discussed previously, she has had a regular meditation practice for eighteen months, yet she characterizes this increased continuity of awareness of the breath as different: " I've struggled to get my breath in the past and that is not the case now, it's there. It's like having a companion or a mother or something that's very secure, right there inside of you." She characterizes her capacity to bring a quality of awareness that she has been cultivating in formal meditation into everyday life as,

"almost in a state of constancy, whereas before it was sporadic."

She was smoking an average of 2-3 cigarettes per day, and at times more, as a coping strategy, upon entry into the SR&RP. She has not smoked in seven weeks and more importantly, in her estimation, is no longer "feeling addicted" (recall that Kathy is a recovering alcoholic and is extremely "vigilant" of any addictive behavior). In addition, she reports being increasingly capable of recovering more quickly from stress-related situations. She describes this as "incredible" and says that this is related to, "practicing being in the present."

Likewise, Jim describes feeling "the need to meditate" when he feels tense and anxious in difficult situations. He explains what he means by this: " Well, it depends, if someone cuts me off in my car, I pull over to the side of the road and I'll sit there and meditate, I'll pay attention to my breathing and I'll feel much better." He then describes being more mindful of his tendency to eat when he is feeling stressed: " Every time something went wrong I'd pick (eat) but now I'm deciding not to. I ask myself, 'Should I be doing this?' I won't open the refrigerator door." He describes <u>how</u> he remembers to practice informally: "It just comes, you do it nonchalantly. It just falls into place."

Jim continues to maintain normal blood pressure based on weekly physician monitoring without the use of prescribed hypertension medication, reports a diminishment in the "sharpness" of hand and arm pain associated with his work-related injury, as well as a more consistent experience of physical relaxation.

Ann characterizes her experience of "informal" meditation as knowing herself more in different situations and says: "I actually feel like I know myself for the first time in my life." She describes herself as, "feeling clearer and more rational in situations" and says that she's begun "to have the ability to look at situations that had been frightening to me, or to look at why I was doing things, why I was obeying and I can feel the depth and pain of it." Recall, that Ann had described herself as "emotionally numb." She now says that one of the ways that mindfulness is being expressed in her daily life is in her ability to feel that sense of numbness and to work with it. As a result, she characterizes herself as "more confident" and feels she has more of a "sense of control." She describes this sense of control as, "allowing myself to feel anything - sadness, happiness, anger, frustration, loneliness, instead of being numb. It's wonderful and it's scary at times. I feel for the first time in my life I'm in control - being able to make decisions, judgments and feeling confident."

She describes confidence as, "an internal sense" that allows her to feel less worried and self-conscious and says, "I don't have a stiff neck all the time. I don't have fears inside of me all the time, I don't feel that every time I make a decision it's going to be wrong."

Sub-Categories of Perception of Self

- **Self-Trust**

While describing the decreasing distinction between formal and informal meditation, participants referred to, on numerous occasions, a greater feeling of self-confidence or self-trust. From their descriptions, the quality of self-trust is most often expressed as a feeling of being more comfortable with and confident in "self."

Nicole describes herself as feeling more self-contained, and confident "that I'll be able to get through things and I'll be able to handle it." She attributes this to being "more in-touch with my mind and body." Despite her long-standing sense of self-doubt about her intellectual ability she is contemplating enrolling in college and has begun to speak more assertively and rationally with her husband about their marital difficulties. She says that this is the first time that she has felt confident enough to acknowledge her feelings and to speak honestly and rationally with her husband about her dissatisfaction about their relationship.

Joan describes self-trust as, "not feeling the need to put up some kind of front, just really being me. I feel freer to be who I am, if there's something that bothers me, now I'm more apt to say it."

Ann depicts this sense of self-trust while reflecting on her past behavior: "I feel like I trust myself. I always thought I did. If you were to ask me 10-15 years ago do you trust yourself, I would have said, 'Absolutely!' I didn't realize I had so many doubts and fears." She goes on to say that she was always asking other people for their opinions about what she should do. When asked <u>how</u> she knows that she trusts herself, she responds, "Because I know what it is to <u>feel</u> that I trust myself" [emphasis hers]. She explains that this is an internalized feeling "of confidence in myself" and says that, "it's a pretty good feeling to start to feel pretty decent about yourself."

These specific references to "self-trust" although illustrative of this category of experience, do not capture the spirit or depth of self-trust as expressed by participants. Their experience of trust seems to include three interactive elements: First, all participants express a sense of trust in the <u>process</u> of meditation practice. They report being more able to face difficult situations and to either be less thrown by adversity or to recover more quickly following the loss of equilibrium during a stressful situation. As has already been discussed, they report an

increasing sense of confidence in their ability to consciously observe objects and experiences outside of formal meditation in a manner similar to when practicing formally. Thus, they report utilizing the skill of conscious attention in daily life and have begun to have trust in this developing competency.

Second, this maturing sense of self-trust seems to be expressed in their attitude towards life. Again, as previously discussed, they report feeling less worried, less tense and more capable of "being" with a variety of situations in a more relaxed manner.

Third, as the intervention proceeded, participants seemed to progress from the position of wanting to change or manipulate situations either internally or externally in order to make them less painful or unpleasant, towards developing a greater tolerance for and capacity to feel, acknowledge and be open to a wider range of thoughts, feelings, situations and bodily sensations just as they existed without the need to immediately change or modify them. This developing attitude is reflective of Herrigel's description of Zen meditation:

> As though sprung from nowhere, moods, feelings, desires, worries, and even thoughts incontinently rise up in a meaningless jumble...The only way of rendering the disturbances inoperative is to...enter into friendly relations with whatever appears on the scene, to accustom oneself to it, to look at it equitably, and at last grow weary of looking [Herrigel, 1953, pg. 57].

Herrigel's statement is instructive and is expressive of the attitude of "bare attention" (Thera, 1962) as cultivated in <u>formal</u> mindfulness practice. However, the study participants reports of increasing self-trust are <u>not</u> limited to formal practice and point to the interactive relationship of formal meditation practice, with informal practice (the application of meditation in daily life), and reported changes in self-perception. This interactive cycle is one of the primary pieces of data to emerge from this dissertation and will be discussed in detail in Chapter Six.

Interview 3

<u>Table 11: Summary of Basic & Sub-Categories of Experience</u>

Learning Meditation [LM]

- Fluid adaptation to change
- Insight into behavior patterns
- Relaxed attitude toward life

Application of Meditation [APM]

- Decreasing distinction between formal and informal practice

Perception of Self [SP]

- Self-trust

<u>Key Descriptors</u>: **Insight and Understanding**

Interview 3

Table 12. Participants' Self-Described Life-Titles

Joan: "The Mind Meets The Body"

Ann: "Coming Home"

Harry: "I'm Seeing the Same Things But I'm Seeing Them Differently"

Kathy: "Riding The Rapids"

Jim: "There's A Light Out There, I Know There Is"

Nicole: "My Peaceful Mind"

Interview 4: Follow-Up

Following the conclusion of the SR&RP all participants were seen by SR&RP staff members for an exit interview (post). These occurred during the week following the completion of the intervention and since that time participants have had no formal meditation instruction from SR&RP staff (8 weeks). At the conclusion of the intervention, participants were encouraged to practice on a regular basis, the methods and skills they had learned during the SR&RP, and further, to base the choice of method on their personal needs and penchants.

Sub-Categories of Learning Meditation

- Personalizing Formal Practice

During the last two months, participants have been free of the structured format of the SR&RP. At follow-up, all participants report practicing formal meditation at least three times per week. There is variance in their choice of practice as it becomes more personalized.

Nicole, favors the Sitting meditation and is currently practicing a minimum of five times a week for 45 minutes at a time. She does little yoga because she does multiple forms of physical exercise on a regular basis. Ann is now practicing Hatha Yoga, 2-3 times per week for 45 minutes at a time and "sits" a minimum of 4 days per week for 10

minutes at a time. She says that it is not unusual for her to practice the sitting meditation more than 1 time per day.

Harry practices 3 times per week for 45 minutes at a time. He systematically alternates the Body Scan, Sitting meditation and Hatha Yoga and "sits" for 10-15 minutes at a time without the instructional tapes, on an irregular basis. Jim reports practicing the Sitting meditation daily and the Body Scan 2 times per week. He practices between 45-60 minutes a time. He does little yoga because of his pain condition.

Kathy's practice includes both sitting meditation and yoga. She reports practicing each method 5-6 times per week for 1 hour. Joan practices 5 times per week for 20-30 minutes per session. Her primary choice of practice is the Body Scan.

- Lapses in Formal Practice

In all cases, participants report a period of regression in terms of the frequency, duration and/or quality of meditation practice following the conclusion of the intervention. Harry characterizes this as "a little backsliding" and reports that during the last two months he has had "a couple of periods of 3-4 days" when he did not practice any of the formal methods.

Joan reports a two-week period of time when she did no formal practice, and Ann says that she practiced sporadically during the entire month of December.

Like Joan, Jim reports "dropping-down" approximately one month after the conclusion of the intervention. During that time, he practiced 3-4 times per week. Nicole experienced a similar lapse in practice for approximately ten days.

Unlike the other participants, Kathy did not reduce the frequency or duration of formal practice but nonetheless reported a regression in the quality of practice following the conclusion of the SR&RP: "There were a couple of weeks where I felt I had lost it, I figured it's probably something that happens to a lot of people. I lost touch with my breath, like some of the magic left, I felt a little discouraged, a little angry and I thought 'I wonder if it really helped.'"

Kathy's description of regression is similar to Kornfield's [1979] observations of practitioners of mindfulness meditation. He documented distinct periods of regression that were associated with cycles of personal growth and suggested that phases of regression appeared to be a part of a larger "non-linear" learning cycle that includes phases of regression, restructuring and reintegration.

In this study, the participants' reported reasons for reducing or ceasing formal practice also appear to be related to the phenomena of regression as it exists within a larger cycle of personal growth and learning.

- The Felt-Sensation of Regression

Kathy describes her regression as "disappointing." She recalls the experience and how she felt: "I had my breath during the course and now I'm not in the course and I wonder if I'm back in the same old crap again of not being able to be in my body and be in touch with my breath and it didn't feel good. I turned to self-deprecation, 'Oh, Kathy, you blew it again.' I was unhappy. I felt like a failure." She says that the period of regression was marked by changes in her formal practice as well as in how she coped with everyday stress: "I smoked more, I felt like eating more and a little out of control of eating but I felt in my dealings with people that I was doing okay and the holidays were fairly sane for me, usually they're more stressful."

As it became closer to Christmas, Joan began to practice with less frequency. This culminated the week before Christmas when she stopped all <u>formal</u> practice: "I had a lack of time and it just fell by the wayside and I was really disgusted with me for not doing the formal meditation." Despite the lapse in formal practice, Joan, like Kathy, found that she had no difficulty continuing

informal practice, particularly awareness of the breath and body, and she says that this kept her in good stead in terms of handling the holidays.

Nicole also stopped all formal practice for approximately 10 days: "I just couldn't find the time. I'd think of it every day, 'Gee, I've got to do this' and I wouldn't and I'd get mad at myself. I didn't feel too good, I was tired and I got anxious." Like Kathy and Ann, despite the lapse in formal practice, Nicole practiced informally throughout the period of regression.

Jim describes his experience: " I slacked-off around Christmas. I got depressed [then]. I start thinking negatively, I just start to sit around and do nothing."

In discussing her lapse in formal practice, Ann seems to capture, quite powerfully, another element of regression: "I think I resorted back, I think I was afraid of this new person emerging. I think I wanted to slip back, you feel surer of yourself the way you were. It's more familiar."

Although participants experienced lapses in formal practice that were accompanied by fear, discouragement and disappointment, they all reported reengaging in formal practice. The following category examines their reasons and strategies for re-engagement.

- Re-engagement in Formal Practice

As already suggested, lapses in formal practice appeared to function as a part of a larger pattern of growth. The reasons cited by participants for re-engagement appear to be directly related to the personal learning that took place during these periods of regression.

Ann reported marked reductions in back, neck, and shoulder pain at the conclusion of the SR&RP. During the phase of regression she noted a distinct increase in body pain: "I was beginning to feel tight again, tense again, I was beginning to feel lousy." Metaphorically, she described her experience during the intervention as "walking up [a flight of] stairs, getting to see things; there was light at the top of the stairs." She continued to develop this metaphor while speaking of her experience of regression: "I was feeling my old insecurity, going back down those stairs, I was going back into that darkness again and I don't want to go back to that old place." She says that she began to practice again because: "I don't want to go back to that old place. I liked it better at the top of the stairs but it was scary." For Ann, "scary" has to do with the realization that, "I can be in control of myself, that I can be responsible for myself. It's a lot easier to blame other people for all the things you wished you could or should have been. Now I'm making these decisions for myself and if things go wrong then I only have myself to blame for them."

For Nicole, "going back to the tapes" was an important strategy for returning to the frequency and duration of practice that she had developed at the conclusion of the SR&RP. During the lapse in practice she reports feeling: "more tired, anxious and things just didn't roll as smoothly as they did when I was meditating. I wanted to get back to it because I felt much better."

Like Ann and Nicole, Joan experienced a brief return of physical symptoms during her lapse in formal practice prior to Christmas. She had daily headaches for several days while her husband was away on business, but reports being able to stop the headaches, "as soon as I realized that I was tense and nervous and didn't need those headaches every day." Despite the return of headaches, she is emphatic that she did <u>not</u> re-initiate formal practice because of this: "It wasn't because I fell apart. I realized I was more relaxed at Christmas, I realized how it [meditation] had changed me and it was just too valuable to leave it alone.

Jim says, " When I was doing it [regular practice] I was more active. When I stopped doing it I saw myself going into a slouch. I didn't want to do nothing, I just wanted to look out the window." He returned to more regular practice because he says, "I think it motivates your mind. It seems to put me in a positive mood. I seem to want to get up and out at least go for a walk or do something."

Harry hopes to, but has found it difficult to sustain formal practice for more than three times per week. He is somewhat discouraged about this. However, unlike many of the participants, he has not sustained an extended period of time without formal practice. He explains his motivation to practice as follows: " Well, we know deep down, that we've invested a lot of time and energy into this thing [SR&RP], and so it is constantly on our mind. Therefore, we'll frequently nudge each other that we've got to find the time."

Harry makes continual reference to "we," and is referring to he and his wife, who was also enrolled in the program but not in this study. He speaks at length about "practicing together" and says, " I know how things go, my habits and all, I'm very well aware that it would be very easy to say, 'I won't do it this week or this day, I'll wait until next week' and it never is better next week." He describes himself as vigilant and feels that without the support of his spouse, it would be more difficult for him to sustain regular meditation practice.

As already discussed, Kathy did not reduce formal practice during the phase of regression. When asked, what motivated her to continue practicing on a regular basis, she replied, " It would probably take years of failure before I ever gave up sitting, because once I tasted some of the goodness that comes, I didn't want to lose that progression.

I felt that somehow in the back of my mind the practice is really important to me."

Sub-Categories of Application of Meditation

- Sustained "Informal" Practice

During the period of time that participants reported lapses in formal practice and/or regressions in personal growth and post-program symptom reductions, they simultaneously reported a sustained capacity to utilize mindfulness in daily life (informal meditation).

Two months after the completion of the SR&RP, Harry portrays himself as, "being much more deliberate." He elaborates on this: "I'm trying to become less concerned with time and clocks, they're less dominating in my life. I've been more relaxed, I don't get where I'm going all huffing and puffing and in a high drive mode. I'm less reactive but I've been making an effort to be that way." He reports an increasing experience of flexibility as "some of the rigidity is passed off" and says he has developed a series of strategies to help him remember to apply mindfulness in everyday situations. These include leaving for meetings and appointments earlier; greater reliance on the awareness of breathing and bodily tension at traffic lights, meetings and in lines; taking a deliberate lunch break; and "worrying a little less about what other people think."

For Harry, mindfulness seems to express itself in two distinct yet interconnected ways. First, in developing the capacity to deliberately use mindfulness-based strategies in specific situations as described above; and secondly, in terms of a perceptual and attitudinal change that has had the effect of altering the way that he lives his daily life. He describes this: "I'm seeing things differently, in a more holistic sense, a broader view and it makes me feel that I'm going to be able to handle things maybe better than in the past because I'm branching out and I see that there are other worlds I've missed for thirty years." He spoke of feeling as if he now has more choices and of being a less "secretive person."

Joan uses "transitional times" as a cue for deliberate moments of mindfulness in daily life, in order "to get myself back." "Getting herself back" means purposely becoming aware of her breath and bodily sensations while driving, while running errands and during interpersonal situations. She says, "It's so much a part of me now, it's almost like second nature." She feels "gratitude" for knowing how to use this skill in specific situations but says that for her, mindfulness in daily life expresses itself much more in a change of attitude that is gradually becoming internalized. She characterizes these changes as, "not taking things so personally and easing-up on myself."

She goes on to say, " My view is changing, it was always very negative, I always didn't think I measured up and now I'm learning that I'm okay. I'm believing it, it's not just a thought. This is the first time I ever really took a look at myself, just actually really seeing who I am and if I met somebody like me, I would be her friend. It's as simple as that."

Ann says, "I go back to my breathing a lot more than I realize during the course of the day." She describes this activity as "spontaneous" and says that her awareness of the breath "just happens." She clarifies what she means by "it just happens": "I'm aware that I'm doing it, but I'm not telling myself to do it (awareness of breathing). If I become fearful or I feel my heart beating to fast, I breathe, I can actually control my heart beating. I'm much more confident."

Like Harry and Joan, Ann speaks about a deeper dimension of mindfulness in daily life: " I thought my whole life had to be passive. I feel like every day I get to know myself a little better. I feel like I can make good decisions, I can be rational and I can speak up when I see things. For the first time in my life I've really gotten to like this person and to feel like I have a lot to offer and I kind of like me."

Nicole describes herself as "thinking before I act and being more in the moment." She speaks of distinct changes

in her behavior: " I concentrate on what I'm doing. I'm not worrying about what I have to do later on. I do just one thing at a time and I seem to get more accomplished because I'm not running in ten million different directions." These changes of behavior seem to be accompanied by an attitudinal change: " I've been more in touch with myself, I feel more relaxed and in control of how I react to things and I feel better about myself."

Kathy and Jim also report a similar phenomena, suggesting that the informal dimension of mindfulness meditation practice may be an important "skill" for developing and maintaining positive, long term changes in health status and behavior beyond the time constraints of a treatment program. Similar findings have been observed in other mindfulness meditation-based clinical studies [Kabat-Zinn & Chapman-Waldrop, 1988] and in a follow-up study of retreatants, who had participated in intensive mindfulness meditation training [Kornfield, 1977].

As reported, the participants' experience of informal meditation is not limited to the learning and implementation of a new set of "techniques." Instead, participants report distinct changes in how they conduct their lives on daily basis. The latter changes reflect alterations in their perception of self and appear to be directly related to the process of learning and applying mindfulness in daily life.

The changes in self-perception reported during the Follow-up phase of this study (interview 4) will now be examined.

Sub-Categories of Perception of Self

- Self-Acceptance and Self-Worth

As participants continue to learn and strengthen formal meditation, and began to experience more success in applying mindfulness in daily life (informal meditation), they continue to report changes in self-perception. In their accounts, the qualities of self-acceptance and self-worth seem to be intimately related and, at times, synonymous. They report an increasingly internalized experience of these qualities. Joan discusses this: "I've learned you can definitely be yourself and still be liked. I guess self-worth is the biggest thing. I'm definitely finding myself to be more assertive than I ever had been. I always felt like I should do anything anyone would ask me to do, just to keep peace. [Now] I feel more free to say I can't do that but I can do this."

Jim perceives direct a relationship between increased feelings of self-worth and the reductions in physical and emotional tension. He explains it this way: " If you're tensed up, at least me, you don't want to do nothing, talk to nobody but if you can get rid of the tension it unlocks you. I get rid of the tension and I'm back to being a normal person again and I feel better about myself again."

Kathy describes a distinct change in her internalized sense of self-acceptance as it relates to her tendency to set unrealistic expectations for herself at work. She compares her past and present experiences: " [Before] I still found myself feeling less than acceptable, less than adequate if I didn't get those things done. Now I believe that I don't have to get all those things done. I experience less physical discomfort. Before I'd be miserable and less effective. I still have that story going on in the background. I don't want to give the implication that I've changed completely but I'm looking at it. I can see the story better, like, 'Oh, I'm into the story again' and I'm not as inclined to say, 'Oh, you bad girl, you're stupid.' Instead of working myself up into an emotional frenzy I find myself relaxing my grip, approaching it more calmly. It's acceptance, and forgiveness and a growing sense of competence comes with that. My self-esteem gets better. I'm less-furious with myself."

When asked about her predominant experience of meditation, Ann says: It's calming, it makes me feel sure of myself, that you have the ability to be who you are, say what I need to say. I mean it gives me a sense of confidence in myself."

As discussed during previous interviews, Harry has made some significant disclosures about himself and has had a series of insights that have led him to experience a deeper

level of self-acceptance. He now describes himself as "swimming with the stream" and explains that he is more confident as he becomes capable of seeing the "broader picture" and of "navigating" through the rest of his life: " The good navigator doesn't spend all of his time fighting the currents because there are different ways to handle situations." He links his increasing ability "to navigate" with a growing sense of sense of acceptance: "I think that connectedness is something I'm stressing in my thinking and in my way of operating. I felt frequently in the past that my mind was doing one thing and my body another. Now I'm seeing the broader picture and I'm relating myself to that picture a little better than I used to. It's a feeling of a more relaxed attitude and less urgency. I've been more accepting, it's a new freedom.

- Authenticity

The experience of self-acceptance and self-worth seem to be related to a willingness to be more personally honest and authentic. Kathy describes this in terms of her relationships with co-workers. She speaks of feelings of "isolation" from co-workers, and of attempts to dissolve some of these barriers by being more honest and open about her interests outside of the work place: "I find myself less quick to hold back and edit."

Ann says: "I began to look at all the needs I did have that I just never acknowledged for myself. I was fearful if I spoke up that people wouldn't accept me or wouldn't love me. Now I see I was a strong person being weak in order to be accepted. I find a big change in myself, I don't mind speaking up. I like me better the way I am. I'm much happier with me, being more honest. I realized I was probably as dishonest as the next guy because I wasn't saying what I felt or thought. Now, I say 'no', I'm more honest with myself, I'll be more honest with people and I like me a lot better that way."

Harry characterizes himself: "I've been a secretive person all my life", I don't pass out much information. I'm not interested in anybody knowing anything, just like the Russian KGB. [Now] I'm using a little less energy worrying about what people think. You spend to much of your life in secrecy and it's not particularly good - not that you have any major secrets to keep anyway, right? Who in the hell does? We're not running an intelligence agency here." He relates his increasing sense of authenticity with the experience of aging and retirement: " My tendency in the past was not to think about it [aging]. Now, I think about it a little bit more but I'm not letting it really worry me. I have a realization that it's a reality. It's going to happen. Whereas before, I pretended it wasn't going to happen. That's the difference."

- A Sense of Peace

All participants report an increasing experience of peace that is not limited to formal practice. They speak about it differently and use a variety of descriptors in an attempt to convey this experience. Jim repeatedly describes himself as, "feeling more at ease and relaxed." Nicole says that: "my mind would be running ahead of what I was doing all the time. Now the mind just stays, it doesn't run away. Now I stay with what I'm doing and I'm more in the moment." She points to another aspect of the experience of peace when speaking about turning off her car radio while driving: " I turn off the radio, I would never think of doing that in the past and just sit there and take in everything around me. I just feel I don't need the radio on. Before I needed to keep my mind going and occupied because I couldn't sit by myself. Now I like that, now I enjoy just the peace."

Ann now characterizes her life as "peaceful." She explains: "I probably feel the most peaceful in myself that I've ever felt. It means that I can sit with myself, be with myself. I find that I enjoy being with me. I feel calm. I feel less judgmental of other people. I can feel happiness and forgiveness. I'm less critical of myself. It's quiet and it's peaceful."

Like Nicole, Ann reports being more able "to sit with myself." Each of them speaks about feeling more peaceful in everyday life and describe a growing sense of comfort with

"self" that is functioning <u>across</u> a variety of situations and circumstances.

Harry underscores the increasing capacity to experience peace in everyday situations: " Most things I've done are under a tight plan and change therefore used to throw me for a loop. Now I find it bothers me a lot less. I'm not letting it control me like before and it feels a lot more tranquil and relaxed." For Harry, acceptance and choice are linked to an increasing experience of peace: I'm being more accepting of situations. The ones I think I can do something about I try to do something about and change them, but I have a realization of those that I've been spinning wheels on for years, so in a sense it's a more tranquil attitude and I don't feel so jarred by things as I used to."

Like Nicole, Harry says that, "not being so jarred by things" is directly related to a more <u>present-centered awareness</u>: " You spend your whole life in a turbulent environment and miss a hell of a lot that goes on around you. Now I'm looking harder at the snow, the birds and things that are important and enjoying and having an appreciation of them. I think if you get yourself in the right frame of mind you can look at something and see its inherent beauty, you really see what you missed." He defines "looking harder" as, "looking without a lot of inhibitions going on that block you seeing what's right in front of you." He explains that this new found capacity is,

"much easier now because I never had an experience of living in the present, always in the past or future."

For Joan, the experience of peace is intimately linked to a growing sense of self-acceptance. She has always imagined herself as having "to be perfect" and as she slowly disabuses herself of this imagined self, she reports feeling a deepening sense of peace: "It used to be that when people were coming over, everything had to be perfect. I'm no longer like that. I guess I was putting pressure on myself expecting them to expect me to be perfect. I'm learning I'm okay the way I am. I'm living more of my life in the present, it's easier that way, just knowing how to do it was the tough part. It's easier on my brain and on my health. I'm more secure because I'm being me."

Interview 4

Table 13: Summary of Basic & Sub-Categories of Experience

Learning Meditation [LM]
- Personalizing formal practice
- Lapses in formal practice
- The felt-sensation of regression
- Re-engagement in formal practice

Application of Meditation [APM]
- Sustained informal practice

Perception of Self [SP]
- Self-acceptance and self-worth
- Authenticity
- A sense of peace

Key Descriptors:

Consolidation and Individualization of Practice

Interview 4

Table 14: Participants' Self-Described "Life-Titles"

Joan: "I Can Handle It, It's Going to Be Alright"

Ann: "Peaceful"

Harry: "I'm Swimming With the Stream"

Kathy: "Docking the Boat"

Jim: (no title given)

Nicole: "In Touch With My Feelings"

Interview 4

Table 14: Participants Self-Described "Life-Titles"

Joan: "I Can Handle It, It's Going to Be Alright"

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Jim: (no title given)

Nicole: "In Touch With My Feelings"

Interviews 1-4

Table 15: The Changing Nature of "Life-Titles"

Joan Interview:	Ann	Harry
1. "So Many Things Go On At One Time"	"Hopeful"	"I Didn't Get Everything Done I Wanted To"
2. "Learning to Live, Learning to See"	"Awareness"	"I See Some Light at the End of the Tunnel"
3. "The Mind Meets the Body"	"Coming Home"	"I'm Seeing the Same Things but I'm Seeing Them Differently"
4. "I Can Handle It"	"Peaceful"	"I'm Swimming With the Stream"

Nicole Interview:	Kathy	Jim
1. "Many Curious Faces: The Many Parts of My Life"	"Chaos into Calming Down"	"Without Bad Luck, No Luck At All"
2. "Life's Many Changes"	"Still Waters"	"The Light is Getting Brighter"
3. "My Peaceful Mind"	"Riding the Rapids"	"There's a Light Out There, I Know There Is"
4. "In Touch With My Feelings"	"Docking the Boat"	(no title given)

Table 14: Outcome Measures

MSCL = total number of medical symptoms
** SCL90-R = % of psychological distress (see Appendix)

(NAME)	PRE	POST	% Reduct.	FOLLOW-UP	% Reduct pre-fol.up
JOAN					
MSCL	16	2	87%	5	68%
SCL90-R	.43	.03	93%	.011	97%
ANN					
MSCL	11	4	64%	9	18%
SCL90-R	.66	.22	66%	.43	35%
HARRY					
MSCL	8	17	- 125%	10	-25%
SCL90-R	.22	.38	- 27%	.14	36%
NICOLE					
MSCL	23	5	78%	4	82%
SCL-90R	.82	.21	74%	.066	69%
KATHY					
MSCL	18	5	72%	6	66%
SCL90-R	1.15	.50	57%	.35	30%
JIM					
MSCL	12	14	-16%	(did not complete follow-up data)	
SCL90-R	.42	.60	-42%		
*GINGER					
MSCL	37	-	-	-	-
SCL90-R	1.96	-	-	-	-
*DENISE					
MSCL	27	-	-	-	-
SCL90-R	0	-	-	-	-

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* Non-completer not included in data set.

** 5 of 6 completers showed clinically-elevated levels of psychological distress at PRE on the SCL-90R.

Conclusion

The data presented in Parts One and Two of this chapter represent the primary focus of this dissertation. That being: 1) an examination of the subjective experience of adults engaged in mindfulness meditation training (MMT) within the context of a group, out-patient, hospital based behavioral medicine clinic; 2) the recording of common patterns of their experience; and 3) an analysis of the consequences of this learning on such areas as the development of coping strategies, the redesign of lifestyle, as well as possible changes in attitude and perception of self.

The following section (Part 3) concludes the analysis by making an initial attempt to describe and understand the experience of participants engaged in mindfulness meditation training in terms of Self-Knowledge Development Theory.

Part 3: An Analysis of Participants in Terms of Self-Knowledge Development Theory

Part 3 makes an initial attempt to analyze the experience of participants engaged in MMT in terms of Self-Knowledge Development Theory (SKT). Prior to the intervention, participants were administered an updated and revised addition of The Experience Recall Test (ERT 2) [Sweitzer, 1985] as a means of ascertaining each person's stage of self-knowledge, as defined by SKT. These protocols were then given to an independent, expert coder who analyzed and determined each participant's stage of self-knowledge (SK). This researcher did not participate in the analysis and the results of coding were not revealed to him until after the individual and cross-sectional case analyses were completed.

Three of the participants will be featured in this aspect of the analysis. Each person represents a different sub-stage of SK development and their stages of SK are representative of all the remaining study participants.

The four interview cycles will once again be used as a means of examining longitudinally, the sample statements of individuals as they reflect some of the ways that people at differing stages of SK experienced MMT and utilized the intervention.

Background and Results of the ERT 2 Coding

As discussed in the Review of the Literature (Chapter 2), Self-Knowledge Development Theory is based on structural developmental theory and therefore posits an invariant sequence in the ways people reason about their internal experience. In the initial conceptualization of S-KT, four stages of SK were differentiated. The four stages were termed: Elemental; Situational; Pattern; and Transformational [Weinstein & Alschuler,1985].

Since the original conceptualization, researchers have further refined two of these stages into sub-stages [Weinstein, 1990]. Of the four original stages, the Situational and Pattern stages have been further differentiated into sub-stages. There are two sub-stages for each of these basic stages. These are: Situational 1 and 2 and Pattern 1 and 2. All participants in this study were assigned to one of the sub-stages of the Situational or Pattern stage (Table 17, pg.268).

The following is a description of the Situational stage of SK. Following this presentation, two study participants representing differing sub-stages of the Situational stage will be discussed. A similar description will precede the presentation of the individual case representing the Pattern stage of SK.

The "Situational" Stage

The Situational stage differs from the Elemental stage in two major ways. First, the person is no longer focused on the elements of experience. Instead, relationships between events are now understood, they are reported in sequence and all elements are now part of an inclusive whole: the situation. Second, internal experience is now included in the description of experience and the relationship of internal and external elements can be described.

In this stage, other people, objects and situational circumstances are the major stimulus for one's own responses. The originating sources for one's own responses remain external to oneself. The primary limitation of the Situational stage is that the person cannot see any consistency of internal response across classes of situations. They see themselves as different in every situation. When asked how they might react or feel in a particular situation, it is not uncommon for someone embedded in the Situational stage to say, "It depends"; meaning: "I depend" [on the situation to determine my reactions].

The "Situational" Sub-Stages

The defining characteristics of the Situational sub-stages are as follows.

Situational 1

Includes the capacity to link internal states with external situations and behaviors. Causation is used to make links between actions, and between actions and internal states but all of these components are not yet coordinated into a clear, singular coherent event. Descriptions of experience remain undifferentiated and scant in the representation of internal states.

* Example: "When that happened I felt upset."

Situational 2

Persons have the capacity to coordinate all the previously described components into a coherent event. An event is now viewed as a total system with consequences.

* Example: "When that happened I felt upset. I was angry and I finally stood-up to my boss."

Table 17: Participants' Purported Stages of Self-Knowledge

Participant	Stage of S-K
Jim Marshfield	Situational 1
Harry Ogden	Situational 2
Nicole Crosby	Situational 2
Ginger Deevers	Situational 2
Joan Kitteredge	Pattern 1
Ann Lindsey	Pattern 1
Denise Collins	Pattern 1
Kathy Treblehorn	Pattern 1

Analysis of Self-Knowledge Stage: "Situational 1"

Preceding the "Situational 1" stage of SK is the Elemental stage. In the Elemental stage, a person's descriptions are oriented around observable, overt aspects of experience that could be reported by anyone watching the event. Here is a typical example: " I went to the baseball game. It was exciting. I sat in the bleachers." Descriptions are fragmented, elements are not causally connected and internal or private aspects of the experience are absent. There is no sense of a situation as a whole and the elements are not described as comprising connected parts of a single event.

In the Situational stage, relationships between events are now understood and reported in sequence, and internal

experience is included in the description of experience. However, the primary with-in stage limitation is this: People at the Situational 1 stage are not yet able to coordinate external situations and internal events and behaviors into a unified, coherent event. The situational elements are available but descriptions of situations remain fragmented, eg. "I was depressed after the judge made me pay."

Jim Marshfield

Jim Marshfield is the only participant in the study who identifies himself as "a patient." During the first interview he says that being a patient means that you want to "get back to your old ways." He is in the SR&RP because:

> I want to reduce the stress that I have because it's doing a number on my body. It's causing me to have high blood pressure and I think it increases the pain in my left arm when I get stressed out.

He is able to articulate causal relations between external events and internal reactions and behaviors. He describes himself as "angry at the whole world at times" and says that he feels like he's been "tossed from hospital to hospital like a hot potato." His primary reason for entering the program is, "to look for relief."

Jim portrays his life as "having run into a wall" and after one week of meditation practice he describes feeling, "relief of a lot of my tension." He reports experiencing temporary relief from physical pain and tension and says,

"Then something happens [a situation occurs that leaves him feeling tense] and I go and do it again" [the meditation]. He says that being able to deliberately practice something to relieve his tension is "new."

He speaks at length about being depressed and "staring out of a window and wanting to be by yourself." On two separate occasions during his first week of practice he deliberately went out of the house and took a walk. He says that going for a walk was a very positive change for him as he usually sits in his room feeling increasingly depressed and isolated.

Jim continually speaks about "situations" and his frustration with the Welfare Department, medical clinics, his lawyer, the legal system, his previous employer and his ex-wife. He tends to feel overwhelmed, and at times, incapacitated by the impact that these situations have had in his life and because of his chronic pain condition he is disabled and therefore, unable to rely on work to counter his sense of being victimized by these situations. Consequently, he is feeling helpless and disempowered.

Although the attentional instructions utilized during the body scan meditation are explicit in terms of not attempting to block-out the environment, eg. sounds, smells, internal percepts etc., Jim describes, "trying to block everything out" [external situations] while meditating. He reports that this has not been a particularly useful

strategy and wonders if the attentional position of not attempting "to block everything out" might be more helpful to him:

> They were talking up there [in class] this morning about blocking noise out and maybe that's what I was trying to do. Maybe I was doing it wrong. I was trying to block everything out. I try to make believe that it's [pain] not there.

He describes becoming deliberately aware of his breathing as "something new" and reports no changes in his awareness of thoughts and feelings this week. Yet, he does say that he is, "not flying of the handle so much"; and is being "less cranky." He has also noticed a reduction in the sharpness of hand and arm pain while practicing the body scan meditation.

When asked the question, "If you think of your participation in the SR&RP as a journey, where would you say you're heading?" He responds, "I'd like to think I was going some place where there would be less or no pain."

He describes the people in his class as "a great bunch of people" and says:

> With all the problems they've got, I've noticed some people here like me, I'm not outspoken. I try to keep it all inside of me. I don't know why. It just happens. I don't really like to talk about it...but they've got problems,too, and I think they probably understand [me] more.

As the previously presented data suggests, Jim displays the ability to link external events and internal responses and behaviors. External situations such as "legal systems," "divorces" and the "Welfare Department" are seen as the

primary sources of stress. He causally links his internal reactions and behavior, eg. "depression," "anger," and "tension" to these external events but says almost nothing about a "self" that is in relationship to these events. It is as if the situations are who he is. There appears to be no internal vantage point from where he can view a "self" that exists independently of situations.

Seen from a structural developmental perspective, Jim is his situation. He is embedded in the coordinating structure of his stage of S-K and is therefore unable to take a perspective on the structure, eg. the situation. He does not yet conceive of himself as **having** situations that include a measure of consistency and predictability. Furthermore, in the sub-stage of "Situational 1," Jim's causal descriptions remain global and diffuse. He finds it difficult to describe with any detail, his experience of meditation during the first week in the SR&RP and there is a lack of cohesiveness and coordination in his descriptions of internal experience, eg. "I have released some of my tension, I guess."

He reports less of a desire to be isolated or alone this week and I asked him if he felt any different about himself:

> I suppose I did. I didn't think of it. I don't think I've been flying off the handle this week, I calmed down a little bit [underline mine].

Jim's remarks in the last statement are telling: "I didn't think of it" is his initial response to the question, "Have you felt any different about yourself this week?" Yet he responds affirmatively and describes some differences in his usual behavior, when asked to reflect on the previous week. Although the situations in his life have not changed in the last week, his behavior has. By participating in the intervention he now has the opportunity to assume a position of reflecting on his situation rather than assuming his usual position of being the situation.

The vantage point of self-reflection is simultaneously being encouraged by two factors. First, being interviewed on a regular basis affords Jim a measure of self-reflection not usually present in his daily life. Second, observation and self-reflection are inherent in mindfulness training, and Jim, within the situational context of his life, has elected to participate in the SR&RP, thereby choosing to assume an active role in the systematic cultivation of attentional skills.

After one week of meditation practice, Jim appears to be using and experiencing meditation as a "situational remedy." When a situational arises that "causes" him to feel tense or that increases his bodily pain, he uses the meditation practice as a means of relieving his discomfort.

At the half-way point of the SR&RP (Interview 2), Jim describes a change in his sense of self:

> When I first came here, I was in my own little world. I didn't want to associate. I don't know, I just feel different about myself, it's hard to put into words. I feel more at ease, more free. Like I'm not bottled-up as much as I used to be.

He describes his changing experience in terms of social relations:

> I've changed in the last three or four weeks. Before I say something I think twice...[Before] if anybody said something to me and I didn't like it I'd jump back at them. I don't do that as much now. I feel like I've got better control of my life. [Before] if I had seen somebody walking down the street I'd just wave to them, I wouldn't talk, but now it seems like I'm starting to get into conversations...I wanna get involved more.

He then relates these changes to his experience of meditation:

> After I "sit" for awhile I don't have as much tension...I can concentrate. I feel more relaxed. If you went in there [into meditation] with hatred in your mind it seems to dissipate. When I do the yoga a lot of times it relaxes my body.

It appears that Jim is beginning to have a direct experience of his ability to <u>deliberately</u> intervene in the everyday events of his life. He is feeling, "less bottled up...better control...more relaxed" and has a desire to "get involved more." The daily practice of meditation, mindfulness and yoga have begun to provide Jim a means to access a measure of self-control that is beginning to offset his feelings of being helpless in the face of a host of stressful situations. Jim is beginning to experience first hand the <u>transactional</u> nature of psychological and emotional stress - that one's personal experience of stress is always based on a relationship between the person and the

environment and therefore how one relates to a stressor is a crucial factor [Lazarus, 1982].

Jim's predominant experience of meditation is "relaxation." The following dialogue is instructive in terms of how Jim reasons about his experience of meditation:

I. If you met someone on the street and you had to explain the stress reduction program to them, what would you say?

J. People go there who have a lot of stress and it's a way of dealing with it.

I. And if they asked you, well, what kinds of things are you learning? What would you say?

J. The sitting, the yoga, the meditation.

I. And if they asked you if these things help you in your everyday life? What would you say?

J. It's hard to explain. You have to try it for yourself. I don't think it would work for everybody anyway. You have to do it for yourself.

I. And if someone asked you what is meditation? What would you say?

J. Meditation would be sitting and trying to think of good things in your life. Try to let the bad things out.

I. Have you ever heard that instruction in class?

J. I don't think so.

I. Is that what happens to you when you're meditating?

J. Basically. Yeah. It just comes automatically, for me anyway. I guess it relaxes me.

I. And when you feel relaxed?

J. I start feeling good about myself. I just feel good all over.

I. And if in the middle of feeling good all over, some potentially negative or disruptive thought comes into your mind. What do you do then?

J. I try not to think about it. Or I say, 'That's water over the dam.' You try to think of something good.

I. What might you think of?

J. There's gonna be a brighter road ahead. Someday, this is all gonna end.

Jim has reshaped and personalized the meditation to fit his needs and his current ways of reasoning. In his mind, he replaces "bad" situations with "good" situations. As he reports, these are not the meditation instructions that he has been receiving in class and listening to at home. He has developed, and internalized an instructional set that appears to be stage specific and appropriate.

Although Jim has developed a personalized form of meditation practice, he does report experiences that are typical of the other study participants. He is now more aware of his internal sense of tension and ease, reports improved concentration, the arousal of traumatic memories, increased mindfulness in daily life, and positive changes in self-perception. He also reports practicing meditation that is primarily focused on the awareness of breathing/bodily sensations and <u>devoid</u> of the deliberate generation of positive thoughts.

When asked about the development of internal competencies, Jim reports:

> I'm doing two things when I sit. I get rid of tension and when I get rid of tension I get rid of a lot of pain. I feel good about myself.

During the second-half of the SR&RP, participants practiced progressively longer periods of sitting meditation and also attended an all-day, silent retreat. For all participants, the intensification of practice has led to a deeper insight into behavior patterns. During Interview 3, Jim reports becoming increasingly more aware of and willing to accept his feelings of anger towards his ex-wife, his former employer and the legal system. He says that as a result, he is feeling less depressed and tense.

As discussed during Interview 2, he is beginning to reengage in social contact and has made a deliberate point of apologizing to friends for his past unwillingness to engage in conversations with them. He says that he is feeling a deepening sense of "self-trust" and is definitely less reactive. He explains, "I just don't do that anymore [react automatically]. It [situations] don't bother me as much as before."

He continues to use <u>diversion</u> as a coping strategy and says:

> I used to fly off the handle. It don't seem to bother me so much anymore. [Now] I just block it out. I pick up a book and start reading. That seems to do it.

Although Jim reports positive changes in his ability to be more self-regulating, he is unable to articulate those changes, "I don't know whether it's because I'm not so tensed up or I feel more relaxed, I don't think I can honestly tell you."

He spoke about feeling depressed at the approach of the Christmas season but feels confident that he will be able to cope with this. He shares some of his reasoning about this:

> I'm sure I'm going to get through it. I think more so now because of the meditation which you know I never did before. I guess I could almost say it was a second God. I guess that's the way I feel about it. It's like somebody sitting next to you giving you a little push once in a while. You've got to have faith in something.

He continues to meditate on a daily basis for between 30-45 minutes at a time and says that it is not unusual for him to practice twice a day. He prefers the sitting meditation and says, "I can sit quiet." His blood-pressure continues to be monitored by his physician on a weekly basis. It has steadily <u>decreased</u> since he began mindfulness practice and remains stable and normal despite the fact that he cannot afford to purchase prescribed hypertension medication.

Jim is a former tractor-trailer driver. He uses the metaphors of a trucker as he describes one of the most important things that he has learned in the SR&RP:

> When something happens and you don't know what direction to go in, you go around it, you take another road or avenue instead of trying to fight it.

He says that all of his life he has tended to proceed steadily along a particular road, "trying to fight it" and " Now I think I've learned that you have to take exits to see if you can get back on the road ahead of that [detour]."

The previous comments suggests that Jim may be beginning to experience a subtle change in his perception of situations, eg. that they are multidimensional and that he has options. He also seems to be experiencing an alteration in his sense of "self" in situations. He is able to reflect upon previous situationally determined behavior, eg. "trying to fight it" and is now beginning to express a distinctly different possibility: "I've learned you have to take exits...instead of trying to fight it."

Situations now appear to include a larger sense of wholeness and he is now including consequences in his situational descriptions, eg. "that you can take exits...and get back on the road at another place."

There appears to be a measure of self-reflection on Jim's part that is less situationally bound. Perhaps this is the initial movement in Jim's ability to see that he has situations but that he is not the situation. Importantly, the capacity to more fluidly adapt to change was reported by all participants during Interview 3.

He articulates what he perceives to be the relationship between meditation and his changes in self-perception:

> It [meditation] makes you feel good about yourself. It's gets the ball or the wheel rolling when you [feel] like a loser. But when you're stressed out you can't think that positive way. You just lose contact with everybody, you just don't care...until you start thinking positive again.

Two months after the conclusion of the intervention (Interview 4), Jim continues to meditate on a daily basis. Like the other study participants, he also experienced a period of regression and says, "I slacked-off around Christmas. I got depressed. I started thinking negatively. I just start to sit around and do nothing. He reports choosing to reengage in daily "formal" practice because:

> When I was doing it [meditation] I was more active. When I stopped doing it I saw myself going into a slouch. I think it motivates your mind. It seems to put me in a positive mood. I seem to want to get up and out at least go for a walk or do something.

He reports little change in the intensity of stress in his life but says, "I'm handling it differently." He attributes this to the meditation training since he feels that nothing else has changed in his life during the last several months. Once again, he describes meditation in terms of truck driving: "I guess it keeps the wheels turning."

He says that he misses the weekly SR&RP classes:

> I really miss it now. I'm gonna be honest with you, it had to do with the people that were there. They felt different things and their problems, how they coped with them. I guess, listening to some other people and how they coped with it, sometimes you might get an idea from it, too. It was very informative.

For Jim, being able to hear about <u>other people's situations</u> and how they coped with them appears to have been a crucial component of his experience. His comments suggest that being a part of a group was as important to him as the meditation training. The group format seems to have provided him a "situational richness" that was generally absent from

his life. Perhaps this milieu, in combination with the "observational" training inherent in mindfulness practice, encouraged a measure of self-reflection that was engendered and supported by a set of learned skills. For Jim, these skills included the capacity to deliberately relax, reduce mental tension, and cultivate calmness and concentration. As reported, he has begun to learn to apply these skills in a host of difficult environmental or internal percepts and circumstances. He concludes the interview with these comments:

> I can see a difference in my life, I'm doing it [meditation], that's all. I feel like I've accomplished something myself. I think it's made a difference in my life. I hope I just continue it, that's all. I guess all you can do is try...I don't foresee any real problems that I haven't already been through already, I guess you're just going to take it one day at a time.

Jim Marshfield is quite clear in his description of meditation. He experiences meditation as a "state" change, eg. "It puts me in a positive mood" [despite the generally unchanged situations in his life]. He makes a definite causal connection between this new internal response and his way of relating to the world. He reports becoming less self-absorbed and since his "self" tends to be contained within the structure of situations, the meditation training appears to be loosening his internal experience of being hopelessly encased internally and externally in "negative" or "depressing" situations or situational memories. This in turn, seems to result in the generation of more personally

fulfilling and generative situations, eg. taking a walk, having a conversation, relaxing, and cooking for the people he lives with, that spring from alterations in his usual internal responses.

Analysis of Self-Knowledge Stage: "Situational 2"

The sub-stage Situational 2 differs from Situational 1 in so far as there is a growing capacity to coordinate and link internal responses and external situations into a single coherent event while referring to the event as a total system with consequences. Although this is the case, the major triggers for ones own responses are still seen as originating outside of oneself.

Harry Ogden

During the first interview Harry described one of his predominant experiences:

> When things are working smoothly, everything is just dandy but as soon as something happens I don't react well to it. I'll hyper-react. I have dozens of instances of this and it throws me. It'll ruin my whole day. Intellectually I know that's really crazy [underline mine].

As evidenced by the above statement, he tends to assign the trigger's for his responses as outside of himself. He seems to view his own body as an externalized entity and portrays himself as, "living outside of your body half of the time." Harry has a strong tendency to assign causation outside of himself and although he understands

"intellectually" that there is a causal relationship between events, his internal experience and his reactions, he ascribes the primary source of his reactions to situations, objects and people.

For much of his professional life he has imagined that, "I'll die with my boots on and just be hauled out of the office some day, like a lot of my colleagues."

He speaks about his work situation as if it is a causal given for someone in his profession, 'to die...and be hauled out' and that he has very little choice in the matter. He reports being in the midst of a "difficult and uncomfortable" transition as he has begun to consider "half-retirement" and is beginning to entertain the possibility that, "if you quit and walk out you might be better off." He characterizes these latter feelings as, "very new for me."

After the first week of practice he says that the meditation practice has helped him "deal a little better with being harassed." He gives an example of this:

> Yesterday we stopped at a red light. I'm usually [thinking or saying], 'When's it gonna turn. I can't wait.' [Then] I just said, 'I'm here at the light. I'm going to just sit here and enjoy the scenery.' This is novel for me.

His initial strategy for change involves becoming aware of his breathing - an internal event and the recitation of an internalized "situational" script, "I'm going to sit here and enjoy the scenery." His primary experience of formal

meditation is "relaxation" and he reports no change in his awareness of intrapsychic events (thoughts and feelings) during the first week of practice. He relates feeling a little more "connected" to his body after practicing the Body Scan meditation for one week.

At the half-way point in the SR&RP (Interview 2), Harry describes a growing appreciation for each of the "formal" mindfulness practices but says that he especially enjoys the Hatha Yoga practice. His predominant experience is "muscle relaxation" and he reports deriving pleasure from "the rush of relaxation that comes over you." He reports sleeping better, has begun to alter his pace at work and says that he has a much more ongoing and present-centered awareness of his breath and his body. At week 5 he has begun to recognize, "that my mind runs all over the place" and "that I'm able to pull myself back a lot and concentrate a lot better."

He vividly portrays two particularly stressful events during the last three weeks. One involved a minor accident his wife had while parking their car and the other involved his leaving his bank card in the A.T.M.. While speaking about the former incident he talked feverishly about the event and about how victimized he felt since he had to make all the arrangements required to have the car repaired. He said he was furious with his wife, felt somewhat justified

in his reaction and says, "It ruining me" [the event] for several days.

The second incident came on the heels of the automobile accident and seemed to have a more radical impact on him. It was no one else's fault and there was no externalized object to blame. He placed his bank card in the automatic teller machine, the machine worked properly, he received his money and drove away in his car. He expressed a sense of shock and bewilderment about his behavior while describing this experience. This incident, in combination with his increasing capacity to recognize and pay closer attention to a variety of mind/body events, seemed to really shake him up:

> I'm beginning to see myself a little more like I think I come across to others. I didn't see my faults so clearly and now I'm seeing them a lot more clearly. I'm not the perfect person I thought I was. I'm waking up to reality a little bit. You feel like Rip Van Winkle, like you've been asleep twenty-five years, maybe more [underline mine].

He characterizes himself as:

> Having spent all of my life living in the past and living in the future, and none in the present, see. Now I'm grasping for this [underline mine].

He speaks repeatedly about feeling as if he was beginning to "wake up" for the first time. This appears to be his initial recognition that it might be he [his internalized sense of self], that acts in a patterned manner across a wide variety of situations rather than that situations are responsible for and determine his behavior.

This is the first times during our discussions that he ascribed experience to <u>himself</u> rather than to an <u>external situation</u>. He comments about this:

> I'm permitting myself, or allowing myself to look at things [situations,self] differently than I used to and <u>I never did that before.</u>

Notice the statements Harry in now making: "I'm beginning to see myself"; "Now I'm grasping for this"; and "I never did that before." Seen in the context of the above statements, Harry seems to be expressing a more congruent and orchestrated experience of himself and his reactions to external and internal situations. There appears to be a greater willingness on his part to assume a larger measure of personal responsibility for his typical reactions that cuts across a variety of situational triggers.

Harry appears to be moving toward a more internalized experience of himself and is beginning to recognize that his reactions are <u>not</u> necessarily triggered by external forces. Although he "knows intellectually" that his reactions are part of a larger system that includes external events and internal experience he now reports experiencing this more <u>directly</u>. He is also beginning to exercise a greater degree of control in daily life via the application of meditation-based strategies such as awareness of his breathing. He reports the deliberate use of mindfulness meditation in order to prepare for difficult situations.

Between weeks two and five he began to have powerful memories of his "dark, grim and pretty lonesome" childhood. He says that he has began to recognize and accept his long-standing need, "to resolve in a decent ways my father's death." Although these memories are not new for him, he states, "I never had time to think about these things, now I'm just starting to gather them in a little bit more...to try some kind of resolution of them in some way." He now says that the <u>emotional</u> content and impact of these childhood experiences is more accessible to him.

He reports that he's begun to recognize that this experience has had a profound and long-standing effect on him: "I think that messed me up for years and made me unsympathetic to others."

Although Harry reports feeling "pained inside", he also reports a deepening capacity "to be less thrown by situations." He describes being "more able to pull myself back" and says that he is feeling "less overwhelmed and fatigued." His practice remains consistent.

Mindfulness meditation training is intended to refine one's capacity to observe and to develop insight into the nature of cause and effect relationships and the interdependent nature of experience. For each person that process is somewhat different. For Harry, at the "Situational 2" stage of SK it appears to be allowing him to slowly move from an almost exclusive identification with

external events as triggers, to a more inclusive recognition and acceptance of internal events as a driving force in his experience of himself, others and the world around him.

This process seems to have been initiated by a body-based awareness of his breath and bodily sensations. Harry now expresses an increasing recognition of an internally derived sense of calmness and pleasure that has led to a growing trust in his internal ability to "be less thrown" by people or by situations. He links his developing ability to purposely slowdown and "stop" to his experience of personal insight:

> I'm seeing a lot of things a little more clearly than I have in the past few years because I've led a rushed life. I find that now I'm able to focus in a little more."

For Harry, mindfulness practice is functioning like a mirror. His ability to "stop" is allowing him access to insight into his internal responses. His statements and descriptions appear to substantiate this process as he begins to see himself more clearly. He now reports feeling: "more relaxed about a hell of a lot of things and not competing as much."

At the conclusion of the intervention (Interview 3), Harry says that he has discovered that his experience of time urgency is "the root of a lot of behaviors." He states: "I'm examining it now. I don't know where I've been for years but I seem to be examining things [situations, self] I've never examined before." He appears to be in the

early stages of recognizing an internally generated response pattern that cuts <u>across</u> a variety of situations:

> The time urgency thing, I'm trying to get more in control because I think it's an <u>underlying factor</u> and a lot of this rushing around I'm looking at now. Before I didn't really do that. I was thinking of the time urgency itself...not that I should be there but that I **must** be there [underline mine] [emphasis his].

Note the difference in perception between, "I must be there" and "I should be there." For Harry, this is a powerful revelation. He appears to be recognizing that the "must" is an <u>internally</u> derived pattern rather than a constituent of <u>all situations</u>. He describes a growing experience of self-control that is linked to feeling that he now has a <u>choice</u> of responses when he encounters situations and states, "Maybe I'm starting to work with my unconscious a little bit." He characterizes himself as learning to "navigate" and defines this as," Not just going full speed ahead but instead trying to choose the channels I want to go in." This description is in sharp contrast to his previously self-description: "I'm a predator in the jungle. There is no middle road, you're either an aggressive predator or you get eaten."

He reports a deepening sense of congruence and integration between his <u>body-based</u> sense of awareness and his awareness of intrapsychic events:

> I'm beginning to feel that my mental side is not so dissociated and I'm not walking <u>outside</u> of my body, <u>separate</u> from it. I'm looking at the whole rather than at a lot of parts functioning separately. I think the cohesiveness of it is important because it makes you

> feel you're able to function better because you're operating as a whole rather than dissociated.

Harry's experience of himself may be best described as broadened and he seems to be enriching his situational repertoire. Rather than viewing changes in SK in terms of verticality or movement into the next stage, Harry's experience seems reflective of with-in stage movement or what Jean Piaget [1968] referred to as "horizontal decalage."

Situations remain a central organizing feature for Harry. Yet his willingness to "examine things more closely" and his life-title: " I'm Seeing the Same Things [situations, self] but I'm Seeing Them Differently" appear to be the first signs of a gradual emergence out of the "embeddedness" of situational thinking.

Two months after the conclusion of the intervention (Interview 4), Harry continues to practice "formal" meditation 3 times per week for forty-five minutes at a time. He reports a little "back-sliding" but says he has made "a serious attempt" to alter his habits. He describes himself as having "a thin veneer of control with a very shallow edge" yet feels increasingly confident that he can makes behavioral and attitudinal changes because the meditation has given him "a mechanism for approaching this now."

He continues to report an increasing experience of "connectedness" to his body and with the natural world. He

says that this is the result of living more in the present:

> You can bring yourself back to the moment. It's much easier than before because I never had an experience of really living in the present, always in the past or future. Now this goes on most of the time. I'm able to concentrate on the present.

The directness of experience available to Harry when his awareness is more present-centered appears to be a direct result of the attentional training developed from mindfulness practice. His initial meditation experience yielded transient experiences of physical relaxation. These gradually deepened into a more differentiated experience of bodily relaxation and mental ease.

His preference for the yoga appears to have had a "grounding" effect that has allowed him to feel "less dissociated and more whole." He has described on several occasions, experiencing a more present-centered, body-based awareness that in turn, appears to have allowed him greater access to intrapsychic material.

In the face of increasingly conflictual intrapsychic material his experience of, and growing trust in maintaining bodily relaxation and stability or "recovering more quickly" and "being less thrown" seem to have encouraged a more personally honest appraisal of his reactions as having an <u>internal</u> origin. This appears to be his <u>initial recognition</u> of internal patterns that function <u>across</u> a variety of situations.

This is not to suggest that Harry Ogden moved into the

Pattern stage of SK, but as been already suggested, he may be experiencing <u>within stage</u> movement. With-in stage movement is generally the result of knowledge disturbances in one's usual way of perceiving. According to Piaget (1968), knowledge disturbances occur when multiple interactions with the environment cause an individual to <u>consciously focus attention</u> on the <u>way</u> they are organizing the environment because they begin to receive feedback that, at least momentarily, something is out of balance.

The sequence of Mr. Ogden's self-reported experiences over the course of this study suggest that his developing capacity to <u>systematically and repeatedly</u> focus conscious attention on himself and his reactions to the environment, through the daily practice of both formal and informal meditation, oriented his attention inwardly while simultaneously moving him away from a tightly embedded view of himself as simply subject to the situations around him. In his case, this movement seems to have been initiated by the turbulence associated with a life cycle transition towards retirement coupled with a gradually developing connection and comfort to his own bodily existence.

By his own account, he gradually became more comfortable with his body, eg."more connected" and "less dissociated." This seemed to allow him to experience a measure of internal stability that led to a gradual encounter with more conflictual psychic material. Although

he felt, "pained inside" it is plausible that the body-based stability he began to experience <u>across</u> a wide variety of situations began to take on the characteristics of a "pattern." That is, a <u>consciously repeated and reproducible</u> experience of physical calmness and stability that also serve as a navigational point towards which he can reorient himself when he loses his internal sense of equilibrium.

<u>The "Pattern" Stage</u>

The Pattern stage differs from the Situational stage in so far as people now see their internal responses as consistent <u>across</u> classes of situations. They can express commonality between situations, eg. "I get anxious whenever I'm late for an appointment" and situations are now seen as part of a more inclusive set - an internal pattern.
<u>Primary Limitation:</u> The person is centered on patterns and does not see that they can exert <u>internal</u> action on an internal pattern.

<u>The "Pattern" Sub-Stages</u>

There are two sub-stages of the "Pattern" stage of self-knowledge. Just as with the "Situational" sub-stages, the "Pattern" sub-stages represent distinctly diffeent ways of thinking about one's experience.

Pattern 1

Persons at the Pattern 1 stage of S-K have the ability to relate two or more situations or a class of situations to a consistent set of internal responses. Their reported responses are largely undifferentiated and global in nature. The stimuli for the pattern are still primarily external. The situations are also relatively global and undifferentiated, or singular to a particular relationship. There is scant reporting of internal intrapsychic tension or internal states as having importance for the origin of the pattern.

* Example: "Whenever I have to speak in public I get nervous."

Pattern 2

At the sub-stage Pattern 2, people exibit the capacity to relate two or more classes of situations to classes of definable internal responses. Pattern description is generated from multiple information originating from the interface of situations and internal response. Internal conflict and inner dialogue are seen as maintaining and perpetuating the pattern. There is reciprocity and recursiveness between the internal and external, therefore one's expectations can construct a situation which leads to one's expected response.

* Example: "Whenever I speak in public I get nervous. My

mind races and I worry about saying everything in the right way and it's hard to talk."

Analysis of Self-Knowledge Stage: "Pattern 1"

The Primary with-in stage limitation between Pattern 1 and 2 is as follows: People at the Pattern 1 stage of SK can relate two or more situation or classes of situations to a consistent set of internal response. However, their described responses remain somewhat global and the triggers for patterns remain primarily external. There is little reporting of internal intrapsychic conflict or of internal states as being the source of the pattern.

Joan Kitteredge

During Interview 1 Joan Kitteredge describes herself:

> I'm the kind of person that the more I know about myself and the way I work, the more I like it. I like to learn new things.

She is explicit that she has enrolled in the SR&RP because: "Of something I've really let get out of hands for years" [emphasis hers]. She is willing to assume a measure of responsibility for her current state of wellbeing rather than targeting external situations as being primarily responsible. She characterizes herself as "the last responsibility" in terms of caring for her family and her home, and says that "being in control" is very important to her.

After one week of meditation practice she describes feeling "really relaxed and really in control, too." She is perplexed by these seemingly contradictory experiences, eg. being relaxed and feeling in control:

> I guess when growing up, anybody who was in control seemed real tense. When I'm normally in control of a situation, in charge of a situation and have responsibility for it, it would tend to make me nervous. So being in control of any kind of situation, I put tension with it.

As evidenced by the above statement, Joan recognizes and can describe a pattern of internal behavior across a class of situations. Furthermore, as consistent in the Pattern 1 sub-stage, she tends to describe the trigger for this internal pattern as external, eg."It [the situation] would tend to make me nervous."

She describes herself as: "Having a tendency to always want things to be different than what they are" and portrays this pattern as, "a burden." She recognizes the internal origin of this pattern: "The burden isn't really imposed on me, I do it to myself."

Furthermore, she links the internal pattern of "needing to be in control" [and feeling tense], to her long standing medical problems. She relates the following story after one week of meditation practice:

> Yesterday I noticed that when my girls were fighting I could sit there and calmly tell them to work it out, rather than go crazy. I felt removed from the situation. I don't want to take everything so personally...I didn't take it as if it's all my fault...It wasn't my fault. I think that's what makes me so crazy and makes me ill. Because I have these

> expectations of my kids and when they don't live up to them it's a direct reflection on me [underline mine].

As described by Joan, "feeling removed from the situation" seems to mean being removed from the automicity of her usual internal reaction pattern. She is aware that the thought, "It is all my fault" is accompanied by a feeling state that is a trigger for an internal response, eg. "going crazy," yet she was able to recognize and use other response possibilities, eg. "I could sit there and calmly tell them to work it out."

She has practiced consistently and says that the awareness of her body and her breath have helped to "calm myself down" and handle difficult situations. She relates her use of the awareness of breath and the body while describing a typical situation:

> [While walking the dog] I realized I was tense over nothing. I couldn't leave for the appointment, I couldn't get my daughter to school any sooner. There were so many things racing through my mind and when I realized what I was doing to myself, because it's second nature for me to worry lately...All of a sudden I realized, 'I don't have to be like this.' I took a real deep breath and it felt wonderful...It was a major switch; I still had to do everything but I wasn't tense and when I'm tense I get sick.

Joan reports being "excited" about applying mindfulness-based strategies in daily life and has a measure of awareness of her internal patterns of response that is quite different from either Jim Marshfield or Harry Ogden.

At the halfway point in the intervention (Interview 2), Joan reports becoming increasingly sensitized to internal

experiences of tension and ease. She favors the body scan meditation, describes herself as feeling "much better fatigue wise and has noticed a definite decrease in both the severity and frequency of gastrointestinal symptoms.

Although she is able to recognize and describe troublesome internal patterns, her strong desire "to be in control" is an underlying pattern that cuts across classes of situations. This itself is a major trigger that she is beginning to recognize:

> I definitely feel like a stronger person...I can weather things if something goes wrong. I'm more than just going with the flow, [I'm] actually directing the flow.

When asked if she had been in any situations during the last three weeks where she couldn't "direct the flow," she responds:

> I was only three or four blocks away from where I should be and I felt this rush of anxiety just sweep over my body. The same exact feeling I used to get if I was riding home on my bike and the street lights were going on, which meant I was late. I knew it was going to be okay but I still felt that stupid anxiety in there and although I couldn't control what was going on around me, I was able to, when I felt that anxiety, to just relax, my jaw was set, I was able to feel that and relax it. I was doing the white-knuckle bit on the steering wheel, I was able to calm myself down, whereas in the past I would have had a bad time with my stomach and everything [headaches] and I'm okay.

After relating the above incident, Joan reflected on what "being in control" now means to her: "I was not in control of the external circumstances. I was just relaxing. But I was strong because <u>I realized the habits that I've</u>

formed over the years but would not let go of and I did" [underline mine].

She describes herself as no longer, "anxiously waiting for the fall-out - something bad to happen." She says that mindfulness practice has helped her to "notice" thoughts such as "somebody is out to get me" without necessarily reacting to those thoughts as if they are true. As a result of her change in awareness she reports becoming increasingly able to "stop" and choose more accurate and appropriate responses. She describes her growing ability to observe thoughts without necessarily reacting in an habitual manner and uses her initial experience with yoga to exemplify this:

> I said, 'I can't do this'...I've always told myself you can't do that. It's like when I was thirteen, and everyone is looking at you. I didn't want to look foolish and that has carried through the rest of my life. It's sad. When my family skied I feel once..I never tried again. I can see from doing simple yoga that I can trust my body more.

Joan has continued to deepen her awareness of internal patterns and she has begun to make deliberate and repeated attempts to alter these patterns. Much of her confidence to do so appears to be originating from a growing awareness and trust in her body via the meditation and yoga. Like Harry and Jim, she expresses a deepening body-based trust in her own internal resources. However, unlike Harry and Jim, she is using the methods and skills that she is learning to recognize and elaborate on dysfunctional internal patterns. Her descriptions of her internal responses are becoming more

differentiated and she is beginning to associate multiple dimensions of her internal experience to classes of situations.

During Interview 1 she spoke about an internal response pattern that is associated with, "Taking things too personally." She now reports becoming aware that she experiences the same internal response when "feeling defensive" in a variety of interpersonal situations. These are new insights for Joan. As a result, she now says that she often becomes directly aware of the initiation of these internal patterns and is learning to take internal action on these patterns before they lead to tension, gut pain or headaches. She describes this process while using the example of a family outing:

> I have to be conscious of it [the internal pattern]. I was hot, it was crowded and I was uncomfortable. Yet, I just stopped, I just relaxed and I enjoyed the moment. It was good to be able to come away instead of my normal way, even though I wouldn't vocalize it, which would be to think, 'Gosh, I can't wait to get off of this stupid wagon because I'm so uncomfortable, I can't move my legs, and on the outside I'd be smiling and everybody would think that everything's fine. But everything turned really fine inside because I changed my thought pattern.

In the above account, Joan appears to be learning to articulate the steps she experiences when attempting to make internal changes on internal patterns: "I have to be conscious of it"; "I just stopped...I relaxed." Her descriptions suggest that she became aware of typical internal dialogue while recognizing the pattern of

incongruence between her "outside" and her "inside" experience and she "changed" her internal thought pattern.

During the last half of the course Joan describes having "a rude and not pleasant awakening":

> Somebody who is a controlling person has never been in my estimation a good quality, nothing I've ever strived towards...I grew up around controlling people and I always wanted to <u>not</u> be that way and now it's like a light turning on. I am that way! I want to control things...people and it was a rude awakening when I found out. I don't know why I never knew it before but all of a sudden I became aware of it. [emphasis hers]

One of the ways that she has experienced mindfulness practice has been in the recognition of <u>numerous</u> internal patterns; the effect that they have had in her life; and most importantly, how she has unwittingly perpetuated these patterns:

> If it was a person that did something that made me nervous, I would say (internally), 'Well, I'll be sick' and I was... Sometimes I wonder if I said, "I'm going to be sick' because that would hurt them [others] or 'Because of you, I'm going to be sick.' And he [husband] would see me sick and say, 'Gosh, look what I did to her.' So I wonder if I was doing it even more consciously than unconsciously...I did it to get back at people, to play the martyr. So it was like a self fulfilling prophecy.

Joan is beginning to recognize reciprocity and recursiveness between her internal responses and external situations. The internal pattern itself is helping to construct a situation that she expects, eg. "That I'll be sick." She has begun to recognize the intrapsychic conflict that fuels and perpetuates this pattern.

Like Jim and Harry, Joan reported a preference for the yoga and the body scan during the first-half of the intervention. Harry and Jim maintained this preference throughout the intervention. However, during the second-half of the program, Joan developed a preference for the sitting meditation without taped instructions. This shift in preference of "formal" practice may be important for several reasons and may be expressive of Joan's development at the Pattern stage of S-K.

First, the sitting meditation is much more "bare" than either the yoga or body scan meditation. The practitioner assumes an upright posture that is itself a physical expression of openness and vulnerability. Second, even with taped instructions, there is a minimal amount of external guidance. The meditator is left much more on her or his own and Joan does not even rely on minimal guidance but prefers to practice without external guidance. Third, attention is initially "anchored" in the awareness of breathing but progressively expands to include a deepening awareness of and an encounter with present-moment intrapsychic material. The gradual development of calmness and concentration, coupled with a deepening ability to apply mindfulness in daily life appears to have allowed Joan a shift in focus that engendered the development of insight into the nature of a host of mind states, eg. defensiveness, anxiety, fear of losing control. As such, both intrapsychic conflict, and

the origins of this conflict are being brought back into her conscious awareness. This appears to be Joan's experience during the course of the intervention. It appears to match her stage specific movement.

At follow-up, Joan reports experiencing a period of regression that occurred four weeks after the conclusion of the intervention. This lapse in daily practice was accompanied by the recurrence of daily headaches. She continued to practice "informally" on a regular basis and reengaged in formal practice because she felt that, "it was too valuable to leave it alone."

She describes "informal" practice as "almost second nature" and says she has continued to become both increasingly sensitive to bodily signs of stress reactivity and confident in her ability to utilize meditation-based strategies to handle situations more appropriately.

She has had further insight into her internal patterns and says that although she has known for a long time that, " I'm really hard on me", only recently has she begun to realize that, "It is unnecessary and I always thought that it was a good thing to be." She reports attempting to deliberately alter this pattern:

> It used to be that if someone was coming over, everything had to be perfect, because I have to look perfect to them. I'm no longer like that. Things are as neat and clean as they can be but if something's out of place or I haven't gotten a chance to dust, it's not really any big problem. If they don't like it it's their problem.

She speaks further about her insight:

> I guess I was always putting pressure on myself expecting them to expect me to be perfect. [I'm] learning it's okay to be me. It's just not a thought anymore. It's a lot more, it's really believing it.

When asked if she could describe <u>how</u> she has begun to internalize this sense of self this is what she says:

> This is the first time [participating in the SR&RP], that I ever really took a look at myself. Just actually seeing who I am and I think I'm okay...If I met somebody who was like me I would be her friend. It's as simple as that, just <u>standing back</u> and really seeing what kind of person I am [underline mine].

As Joan reports that, "just standing back" has been the a crucial element in her experience in the SR&RP. This appears to have helped her to discover and/or elaborate on a host of internal patterns that were previously unavailable to her or amorphous in nature. As reported, she has moved towards a more direct recognition of her internal patterns and is making deliberate attempts to <u>internally modify</u> these patterns. She describes this process in terms of learning to more fluidly adapt to change. She uses her busy schedule as an example:

> One thing is being prepared physically with everything you need. The other part is definitely a mental preparation. For me, it's assuring myself that I can handle it, that it's going to be one of those days where you don't sit down until eight o'clock but it's gonna be okay. If you look at the whole perspective, it's an overwhelming day but none of them [tasks and errands] are all that difficult in themselves. Like for a day like today, all I can do is say, 'What's going on right now?' It's mentally backing up, taking a look at the whole picture but breaking it down piece by piece. I'm living more of my life in the present. It's easier that way, just knowing how to do it was the tough part. It's easier on my myself, my brain and my health.

During the intervention, Joan was working and parenting at home and has recently begun to work outside of her home on a part time basis. Previous to being offered this job, Joan had felt intimidated and in conflict with the person who offered her this position. The feeling of "defensiveness" in interpersonal relationships has been a long-standing pattern for Joan and her usual response when feeling defensive would be to become "passive." Instead of her usual response, she chose to "confront" this person a few weeks before being offered the job. She discusses this:

> Until I had that confrontation with that person I always felt really intimidated by her. At this point, I realize it was all in my head. She never had anything against me and I made it all up. So, realizing that has changed the way I think about people and how they react to me.

I asked her what exactly had "changed":

> It [I] was always very negative. I always didn't think that I measured up. I'm no longer blowing people's reactions out of proportion - I'm no longer doing that. Now, unless I have actually done something to hurt them, I don't have any doubts that I'll be accepted for who I am.

Once again, Joan appears to recognizing how her internal pattern, eg. "that I don't measure up" actually reinforced an expected behavior, eg."that I won't be accepted for myself. This is a new experience for her and although her descriptions of internal change remain somewhat global, she is experiencing an internal change in these dysfunctional patterns that expresses itself in positive

changes in health status and an increasing confidence in her ability to be "less controlling" in her usual manner.

Conclusion

This chapter examined in-depth, the experience of eight participants engaged in mindfulness meditation training within the context of a group, out-patient, hospital-based behavioral medicine clinic. Three distinct methods of analysis were utilized. These included: 1) individual case studies intended to present, in their own words, the individual experience of three participants; 2) a cross-sectional analysis that attempted to describe and examine in detail, the common patterns of experience of all participants during and following the conclusion of the formal intervention. The intention of this aspect of analysis was to begin to articulate a typology of experience associated with the clinical application of mindfulness meditation as utilized in the Stress Reduction Clinic at the University of Massachusetts Medical Center; and 3) to make an initial attempt to describe and understand the experience of participants in terms of Self-Knowledge Development Theory. The following chapter will summarize and discuss the conclusions and implications of this study.

CHAPTER 6

SUMMARY AND DISCUSSION

Introduction

This chapter will summarize and discuss the conclusions of the study. Following this discussion, the implications of his study will be considered. Two areas will covered: implications for Self-Knowledge Development Theory and implications for the clinical application of Mindfulness Meditation.

Summary of the Research Findings

Six of the eight participants completed the intervention. Of the non-completers, one person attended the first five sessions, was then hospitalized and was unable to attend the last three classes or the all-day session but attended all interviews and completed pre and post but no follow-up data. One person died and is not part of the pre/post data set. The mean reduction in pre/post medical symptoms for all participants was 29% (MSCL). The mean reductions in pre/post psychological symptomology was 36% (SCL-90R). Five of six participants (completers) completed all follow-up data. At follow-up, the overall reduction in medical symptoms (MSCL) was higher than at post; (mean 42%). Participants also showed continued reductions in psychological distress (SCL-90R) at follow-up; (mean 53%).

One of the two participants who showed increases in medical and psychological symptom measures at post, showed reductions in both psychological and medical symptoms at follow-up. The other subject did not complete follow-up data.

This quantitative outcome data suggests that mindfulness meditation training utilized in the context of an outpatient stress reduction program appears to be effective in reducing self-reports of medical and psychological symptoms. The majority of participants showed reductions in chronic medical symptoms (MSCL) and in clinically elevated levels of psychological distress on pre/post and follow-up measures (SCL-90R). These measures, appear to corroborate and further validate the subjective experience of participants. Although this outcome data suggests the efficacy of the intervention, it represents at best only a fraction of the participant's experience.

The qualitative, descriptive methods utilized, complete the story by providing a systematic, detailed account of the "lived experience" of the participants during and following the completion of the intervention. All participants who completed the intervention evidenced attitudinal and behavioral changes which may be attributed to the regular practice of mindfulness meditation. These included: an ability to enter into states of deep physiological relaxation; observation of mental content in a non-attached

manner and the subsequent cognitive changes that appear to be related to non-attached awareness; utilization of meditation-based skills and strategies in everyday situations; and an increased awareness of oneself, of relationships with others and to the world. Other commonly reported experiences included: increased levels of personal responsibility for one's health; a heightened capacity to more fluidly adapt to change; increased self-trust; personal insights; an improved ability to cope and a willingness to live a more present-centered existence.

There appears to be evidence that rigorous and sustained training in mindfulness meditation may lead to reductions in medical and psychological symptoms as well as positive changes in health behavior and attitude. However, the experience of systematic, in-depth interviewing must itself be considered an intervention and therefore may have contributed to the experiences reported by participants. In the context of the interview sessions participants were afforded an increased opportunity for self-reflection that they reported as being valuable. Thus, the interview sessions themselves appear to have contributed to the reported personal learning and insights of the participants.

Discussion of the Research Findings

Specific questions posed in Chapter 1 concerning the learning and application of mindfulness meditation within

the context of an outpatient stress reduction clinic as well as changes in self-perception need more detailed discussion. In addition, how MMT was utilized within the theoretical context of Self-Knowledge Development Theory will also be discussed in greater detail. The following observations seem justified by the available data:

Mindfulness Meditation

1) Mindfulness meditation is more than a process of relaxation. Although deep states of relaxation were reported by participants, a wide range of experiences beyond the ken of simple relaxation were reported. These included marked changes in perception of self and others; an ability to utilize meditative awareness in daily life; more fluid adaptation to change; and insight into previously held beliefs and assumptions as well as internal and external mental/emotional patterns and behaviors.

2) During the course of the study there appeared to be a progressive maturation of experience. For example, early reports of physical relaxation during periods of formal practice appeared to develop into an increasing experience of relaxation during the course of everyday life. As the experience of physical and mental relaxation deepened, participants reported attitudinal shifts such as a more relaxed attitude towards life, an increased willingness to

encounter adversity; and a renewed sense of appreciation for themselves, others and the world. Similarly, in the early stages of study, participants reported using mindfulness-based attentional strategies in daily life (informal meditation). These initial reports characteristically involved the awareness of breathing or bodily sensations used as a means of maintaining or recovering equilibrium more quickly following a stressful event. Toward the conclusion of the intervention and at follow-up, participants reported the continued deliberate use of these attentional strategies in specific situations. However, these self-reports also included and added dimension of experience; a <u>perceptual and attitudinal</u> shift that appeared to alter <u>how</u> they lived their daily lives. For example, one participant said, "I go back to my breath a lot in the course of the day" and "I'm much more confident, now I can be rational in situations and speak up when I see things." Another participant reported, using awareness of breathing and bodily sensations during transitions to maintain an internal sense of balance but said that mindfulness in daily life expressed itself most powerfully as a change in attitude that was gradually becoming internalized. She depicted these changes as "not taking things so personally and easing-up on myself." Thus, there appears to be developmental gradations and changes in experience as

mindfulness practice was sustained and deepened over the duration of the study.

3) There was variance in the experience of participants, yet common patterns of experience appeared to emerge progressively during and following the conclusion of the intervention. Multiple sub-categories of experience emerging progressively through each of the four interview cycles can be summarized under four broad categories: sensitivity/reconnection; calmness/observation; insight/understanding; and consolidation/individualization of practice.

Sensitivity/Reconnection

The data strongly suggests that during the <u>early</u> weeks of MMT, participants experienced an increased sensitivity to and aware of their bodies, thoughts and feelings, and the world around them in ways that they had been previously unaware of. This is not to suggest that after one or two weeks of meditation practice (Interview 1) that participants "achieved" an on-going "state" of sensitivity and reconnection to their bodies, thoughts, feelings etc. However, an increased sensitivity to and more direct proprioceptive awareness of the body and of internal percepts was a commonly reported experience. This ability appears to be an essential element in the process of learning to self-regulate and voluntarily reinstate

homeostatic balance. As this "skill" developed participants reported initial reductions in medical symptoms.

Calmness/Observation

Similarly, at the half-way point in the intervention (Interview 2) participants reported the experience of calmness during formal meditation and in everyday life. This was accompanied by a greater capacity to observe a wider range of internal percepts and environmental stressors in a less reactive manner. These initial experiences of calmness and stability appeared to be followed by the eruption of a wide range of painful memories and at times, deep sadness. Paradoxically, although these experiences were traumatic, participants reported the experience of non-attached observation to be both the catalyst for such experiences as well as the "skill" that allowed them to handle these experiences more adroitly. Goleman [1976] has termed this process "global desensitization" and suggests that this may be a normally occurring aspect of mindfulness meditation training.

Insight/Understanding

The ability to observe in a non-attached manner appears to have been followed by what classic Buddhist meditation texts refer to as "insight" [Thera, 1962; Hanh, 1988] (Interview 3). Thus, participants reported, "seeing the

same things but seeing them differently" and discussed experiencing a deeper understanding of the origins of a variety of internal and external patterns and behaviors. Consequently, participants reported that these insights, coupled with non-attached awareness and an ability to maintain calmness in the midst of adversity or to recover more quickly following stressful events led to a growing experience of self-trust. This was <u>not</u> limited to formal practice. Thus, participant's reported a greater tolerance for and openness to a wide range of painful or unpleasant internal percepts or external situations without their usual need to immediately change or modify them. Likewise, participants also reported an increasing awareness and openness to internally and externally derived experiences of happiness and pleasure.

Consolidation & Individualization of Practice

At follow-up (Interview 4) all participants reported "regression" that was related to lapses in the regularity of formal practice or in changes in the quality of formal practice. These appear to be a normal part of the learning cycle of MMT as noted by Kornfield [1979]. However, <u>during</u> these periods of "regression," participants reported a consolidation and <u>continuation</u> of <u>informal</u> practice. Thus, the informal dimension of mindfulness practice was <u>maintained</u> and reported to be an important element of

maintained and reported to be an important element of positive changes in coping ability.

All participants reported reengagement in formal practice following the reemergence of presenting medical and psychological symptoms for which they were initially referred to the intervention. These periods of regression appear to be a naturally unfolding part of the experience of MMT and as participants reengaged in formal practice they chose a form of practice that was unique to their particular needs. Thus, they continued to practice mindfulness both informally and formally after the conclusion of the intervention while tailoring both aspects of practice to their individual needs and situations.

4) All participants reported experiences similar to the early stages of meditation as reported by more experienced Vipassana meditators [Brown & Engler, 1986] and Zen meditators [Dubs, 1986] practicing meditation in more traditional settings. The accounts of participants in this study most closely resemble elements of the first two stages of the Vipassana meditators (Table 1, pg.45) and stages 1 through 4 of the Zen meditators (Table 2, pg.49). The primary characteristics of these stages include: an increased quality of concentration; the capacity to learn to recognize and attend to internal experience; less distraction while observing intrapsychic events; an ability

to more comfortably observe; and the experience of spontaneous insight into internal behavior patterns.

These findings appear to support previous developmental stage studies of mindfulness meditation and suggest that the experiences reported by study participants engaged in MMT in a non-traditional context, eg. a hospital-based, outpatient behavioral medicine clinic, may be more characteristic of the practice of mindfulness meditation than of a particular setting.

5) There was a definite interaction between the "formal" and "informal" aspects of meditation that began early in the intervention and <u>continued</u> after the conclusion of the intervention. The results of this study concerning the "informal" dimension of mindfulness practice have been noted elsewhere and strongly suggest that <u>informal</u> meditation is an important and often overlooked aspect of self-care for developing and <u>maintaining</u> positive, long term changes in health status, and health behavior beyond the time constraints of a treatment program [Kabat-Zinn, 1990]. Although previous studies have suggested the efficacy of the "informal" dimension of MMT, this study has provided specific and detailed descriptions of this process as experienced by participants following the conclusion of the intervention.

6) There appear to be distinguishable patterns of informal meditation among beginning meditators. These were termed: deliberate, spontaneous, and trends of mindfulness in daily life. Deliberate moments of mindfulness were planned strategies utilized in everyday situations, eg. awareness of breathing while stopped at traffic lights. Spontaneous moments of mindfulness were random and unplanned. They appeared to arise on their own and may be a consequence of regular mindfulness practice. Thus, participants reported being aware of the rhythm of breathing "without thinking about it" or responding uncharacteristically in adverse or threatening situations. Trends of mindfulness in daily life referred to changes in coping responses and attitudes that participants described as becoming more generalized and operational in everyday life, eg. "Before, I would run around yelling and screaming and now I'm much more relaxed"; " Almost everyday has been brighter, but even if it isn't bright if there is a problem, I don't feel overwhelmed by it. Now, when I know it's happening I can act on it."

7) There appears to be a distinct, interactive relationship between formal and informal meditation and reported changes in self-perception. As already discussed, informal meditation seemed to emerge from sustained formal practice. Likewise, changes in self-perception appeared to originate from these interdependent aspects of mindfulness meditation

(formal & informal). For example, participants initially characterized, "being more relaxed" or "calm" during formal practice, as a "new" or novel experience. They then reported similar or identical experiences in everyday situations (informal meditation). These direct experiences appear to have contradicted their usual ways of perceiving themselves, eg. as "a tense person", "a constant worrier", "an aggressive predator" while supporting and setting into motion, a self-motivating, interactive cycle that fostered increasingly regular formal practice. This in turn seemed to engender the use of deliberate meditation-based attentional shifts in daily life (informal meditation), and further changes in their usual self-perception. This phenomena was not limited to the experience of physical relaxation but included a wide-range of experience such as being able to consciously observe internal percepts and environmental events outside of formal meditation in a manner similar to when practicing formally. Thus, participants described a growing competency for utilizing non-attached observation during formal practice and in everyday life that then led to reported increases in perceived levels of self-confidence and self-trust when faced with difficult or uncomfortable experiences.

8. Continued reductions in medical and psychological symptoms and the continuation of formal and informal

practice were reported at follow-up. These changes were independent of referral source, diagnosis or gender. All participants continued to practice formal meditation at least three times per week (two of six completers) and most practiced an average of five times per week (four of six completers) for thirty minutes or longer. Participants reported the development of personalized forms of mindfulness practice that were tailored their specific needs and situations and appeared actively engaged in mindfulness practice at follow-up.

The Experience of Participants from the Perspective of Self-Knowledge Development Theory

9. Participants were arrayed within two basic stages of self-knowledge when rated by an independent, expert coder. Four participants were at the "Situational" stage. Within this basic stage are two sub-stages: "Situational 1"; (one participant) and "Situational 2"; (three participants). The remaining four participants were at the "Pattern" stage. All persons at the Pattern stage were within the sub-stage: "Pattern 1." Both males in the study were at Situational stage. Each were in separate sub-stages.

10. Two participants showed increased medical and psychological symptomology at post. Both of these participants were males and both were at the Situational level of self-knowledge, as defined by SKT. One of these

participants at the sub-stage: "Situational 2" showed reductions in psychological symptoms (SCL-90R) at follow-up; (36%). His medical symptoms (MSCL) remained slightly above pre-program levels (from 8 to 10 symptoms; 25%) but fell below post-program levels; from 17 to 10 symptoms). The other participant did not complete follow-up measures. Both of these participants were presented in detail in Part 3 of the analysis (Chapter 5) and both experienced distinctly different knowledge disturbances during the course of the intervention. The person at the "Situational 1" sub-stage used the meditation as a kind of "situational" remedy that functioned primarily as a means of experiencing physical relief from chronic pain and as a method for changing his moods. Throughout the study, his descriptions of experience remained global and there was little detail about internal experience. However, his self-reports suggest a subtle shift in reasoning about situations. Rather than feeling either powerless in situations or always "fighting" situations, he began expressing the possibility of "working with situations" and developing new strategies to handle situations more effectively. Thus, there appeared to be some loosening of his usual situational reasoning.

The participant at "Situational 2" experienced and accommodated significantly more intrapsychic conflict and personal insight concerning the discovery of dysfunctional internal patterns that he had previously considered to be

external, situationally-dependent sources of stress. The participants at the Situational stage of SK can best be described as beginning to "discover a self in situations."

Whether the increased medical and psychological symptoms are related to the nature of the intervention as experienced by people at the "situational" stage of SK cannot be confirmed and two other participants at this stage showed reductions in pre/post symptoms. Furthermore, whether the self-knowledge disturbances themselves resulted in increased medical and psychological symptoms can not be ascertained. However, it is plausible and points further to the role of psychosocial factors in health and illness. More importantly it begs the following questions, What role do naturally occurring developmentally-based changes play in the continuum of health and illness? and What role can developmentally sensitive, educationally-oriented interventions play in complimenting traditional medical care?

11. Although two participants at the Situational stage of SK showed increased symptomology at post, they reported their overall response to the intervention as quite positive. This is not surprising and suggests the limitations of looking exclusively at symptom-oriented outcome measures when attempting to ascertain the efficacy of a medical intervention. In light of SKT, it suggests that the

disturbance itself is a part of the cycle of personal learning and that knowledge about the ways people reason about their experience might inform clinician/educators about specific ways to address the individual needs of participants when designing and conducting educationally-oriented interventions in a medical setting.

12. Participant's at varying stages and sub-stages of self-knowledge experienced MMT and used the intervention differently. This has already been discussed in terms of the "situational" stage. A detailed analysis of one person at the "pattern" stage revealed similar findings. Generally speaking, all participants at the Pattern stage can be described as " Pattern Discoverers." For them, mindfulness practice served as a means of: 1) discovering more internal patterns of behavior; 2) recognizing some of the origins of those patterns; 3) related these internal patterns to multiple classes of situations; and 4) attempting to make deliberate changes in these internal patterns. This consistency of response appears evident for all study participants at the Pattern stage of SK.

13. All participants at the Pattern stage reported a marked increase in intrapsychic conflict and they appeared to approach these conflicts in a consistent manner. As the intervention proceeded they became increasingly willing to

closely observe and learn from what they were observing. They, like all participants, initially experienced the mindfulness practice as body-centered. However, once they established a sense of physical stability and calmness they seemed to use the meditation practice as a pathway for mental/emotional access. Although they were at times, disturbed by what they "observed", they appeared more willing to acknowledge, engage and examine the objects of observation and use this experience in the service of self-knowledge. Importantly, although each participant at the Pattern stage experienced significant intrapsychic conflict, they showed no increases in medical and psychological symptoms at post. On the contrary, all three participants showed medical and psychological symptom reductions at post and two of three showed continued reductions at follow-up. The remaining participant in the Pattern stage, although exhibiting more symptoms at follow-up than at post, remained below initially reported pre-program symptom levels. This data appears consistent with a primary tenet of mindfulness practice: the content of what is being observed is less important than how it is observed, eg. with conscious awareness. This attentional stance towards intrapsychic material may be more readily available to persons at the Pattern stage of SK. As already discussed, persons at the Situational stage also reported an observational stance of conscious awareness, however, their descriptions were more

physically-based and the eruption of intrapsychic material appeared to be less available and less-easily accommodated than participants at the Pattern stage.

14. The central methodology of this study was in-depth interviewing. Although all participants reported this as a valuable aspect of their experience, it appeared to be particularly important to those participants at the Situational stage of SK. The interviews, in conjunction with the observational training inherent in mindfulness meditation, seemed to afford them a previously unavailable measure of <u>self-reflection</u>. All participants at the Situational stage of SK spoke sparingly during the weekly sessions. However, they reported finding the weekly classroom sessions important. The group-oriented, classroom format seemed to provide them a "situational richness" that informed them about the myriad difficulties that other people were experiencing. This experience, coupled with the systematic self-inquiry associated with mindfulness meditation appeared to function as a mirror that in turn allowed them the possibility of reflecting on a "self" that exists across a variety of situations rather than as a "self" that <u>is</u> situationally determined.

15. The study did not focus on possible pre/post stage changes in self-knowledge as defined by SKT, but instead

examined and described the varying ways that people at differing stages of self-knowledge experienced and utilized the intervention. Among study participants there does appear to be evidence of within-stage growth and evidence of within stage movement, although difficult to measure, has also been noted in other SKT studies [Sweitzer, 1985].

Additional Observations

16. This study did not investigate the possible relationship between the turbulence associated with normally occuring adult developmental tasks and increased medical and/or psychological symptoms. However, there is some inferential data suggesting that people at varying stages of self-knowledge who engaged in a systematic process of self-understanding showed both increases and decreases in symptoms while participating in the intervention. These changes in symptom measures appear to be related to the ease or difficulty they experienced when encountering knowledge disturbances about themselves, their usual behaviors, their internal mental and emotional patterns and long-held assumptions. These disruptions are a normal part of adult development and self-knowledge theory may provide a useful perspective from which to view these disturbances within a developmental context. Therefore, structural developmental theory in general and self-knowledge theory in particular provides an important perspective on the role of development

and the possible impact of normally occurring developmental tasks as a psychosocial variable in health and illness.

17. The "Life-Title" responses of participants appear to be reflective of reported changes in their experience over the duration of the study (Table 15, pg.261). These brief biographical sketches were an initial attempt to explore the possible accuracy and efficacy of asking medical patients to "name" the current condition of their life as perceived by them and to examine possible changes in perception about their lives as they engaged in a psychoeducational, behavioral medicine intervention were increased self-responsibility and skills-based learning were emphesized.

Implications for the Clinical Use of Mindfulness Meditation

This study has implications for clinical mindfulness meditation research in four major areas. The first area is **research methodology.** This study has attempted to combine words and numbers and in so doing has inquired in-depth, into the experience of medical patients engaged in a form of self-inquiry known as mindfulness meditation. As such, this study has provided a detailed, process-oriented description of mindfulness meditation training as experienced by eight participants within the context of a clinical setting. This approach is novel in terms of clinical meditation research and should provide researchers one example of a research

methodology that regards as central, the "lived experience" of study participants without sacrificing the need for more quantitative outcome measures.

The choice of individual and cross-sectional qualitative case methods should prove particularly useful to clinicians interested in utilizing mindfulness-based interventions since these descriptive approaches provided both a detailed and panoramic view of the process during and following the conclusion of the intervention. This kind of detailed, phenomenological description is essential for the development of more refined, educationally-oriented, mindfulness-based medical interventions. Likewise, it should assist researchers in designing research models that investigate in greater detail the range of reported experiences as well as specific patterns of experience in order to better understand their relationships and possible effects.

The second area is **"informal"** meditation. Previous mindfulness-based research has suggested the value of the informal dimension of meditation and has inquired into the perceived value and frequency of informal practice among medical patients in follow-up studies [Kabat-Zinn, Lipworth, Burney & Sellers, 1986; Kabat-Zinn & Chapman-Waldrop, 1988]. This study has built upon and <u>extended</u> this initial research in several areas. First, has attempted to describe with greater precision the <u>process</u> involved in developing and

learning to apply meditation in everyday life. This has provided a more detailed description of the "informal" dimension of meditation. Secondly, it has highlighted the importance of viewing meditation as training in the development of a moment-to-moment awareness that is applicable across a wide range of experiences rather than as a technique to be practiced in relative isolation. Third, it provides a rich description of the interdependent nature of formal and informal meditation and their apparent usefulness in the lives of medical patients. This study has explored a method for extending our understanding of informal meditation when utilized in a medical setting. Further research is needed to understand in detail, this dimension of mindfulness meditation as it represents one pathway for the development of long-term, patient-centered health education and health enhancement.

Thirdly, meditation when viewed from a behavioral perspective has been seen as a technique for relaxation and as a self-regulatory strategy. This study strongly suggests that although self-regulatory effects such as relaxation and reductions in medical and psychological symptoms were reported by most participants, mindfulness training is a more complex phenomena. The emergence of common patterns of experience across gender, diagnosis and differing stages of self-knowledge resulted in the description of a typology of experience. This typology suggests a learning process

specific to mindfulness meditation when applied in a clinical setting. Clinicians and researchers may find this particularly useful since it describes both the step-by-step process of meditation as experienced by study participants during and after the intervention while also attempting to describe the specific effects of mindfulness practice in the lives of the participants. At best, this is an initial attempt and further research is warranted to refine our understanding of this phenomena.

Finally, this study has described the ways medical patients endeavored to use mindfulness meditation following the conclusion of the formal intervention. This is an important and previously uncharted area of inquiry. It provides insight into the potential use of mindfulness practice as a component in long-term health maintenance. More importantly, it describes the difficulties associated with maintaining mindfulness practice without a formal structure as well as chronicling the strategies used by participants to reengage in regular practice following periods of regression. Information garnered from this aspect of the study should inform clinicians in advance about potential difficulties encountered by patients. This in turn should lead to the development of support structures and strategies designed to minimize the potentially negative impact associated with lapses in regular practice. More importantly, this information should inform practitioners

about periodic cycles of regression that appear to be a normal part of personal growth and learning associated with mindfulness meditation.

Conclusion

The central purpose of this research has been an examination of mindfulness meditation and its implications in health education and health enhancement. Qualitative and quantitative methods were combined and the resulting data suggest the efficacy of this approach. Likewise, the results suggest the value of inquiry that combines Eastern and Western models of human growth and development. The findings are preliminary and justify further inquiry.

In Pali, the original language of Buddhist writings, the word for meditation is "bhavana"; its English equivalent is "development." To study meditation is to study human growth and development. This study has attempted to understand these processes by a systematic and careful attention to the patient's point-of-view.

APPENDICES

APPENDIX A

The ERT 2

Instructions

Note to test administrators: As you read these instructions, you will come across numbers in parentheses. These numbers indicate pauses; you should pause for the number of seconds indicated before continuing. You will also come across instructions to you. These will also be in parentheses, but will be underlined.

In a moment you will begin an exercise whose purpose it is to find out how different people know things about themselves. There are two parts to this exercise, First, I will have you close your eyes and help you remember some important experiences in your life. Then, I'll ask you to open your eyes and write the answers to some questions. Your answers will be kept in the strictest confidence; no one except myself and an independent coder will see your responses with your identifying number on it. Are there any questions before we begin?

For the first part of this exercise, it is best if you get in a comfortable and relaxed position. Go ahead and get as comfortable as you can. (Wait until subjects have gotten into position) Okay? Close your eyes when you feel ready, take a few deep breaths and relax as best as you can (10).

I am going to ask you to think back and remember some things that happened to you that you consider important. We'll start with yesterday and we'll go back as far as you can recall. As I ask you to think about different times in your life, sometimes you will remember things while other times you might not. Don't worry if you can't think of anything; just relax and wait for the next instruction.

First, see if you can remember anything important that happened to you yesterday (10), last week (10), last month (10), last year (10), three years ago (10), when you were in high school (10), when you were of junior high school age (10), when you were of elementary school age (10), and finally, when you were even younger (10).

I want you to think of a time in your life when you had to deal with a problem or conflict; an experience that might have been uncomfortable, yet was and is important to you. It might be something you will always remember. You may have already recalled some experience like this, and you may now be able to recall many more, but for now pick one specific incident (5).

Now, I want you to remember the incident as much as you can. First, picture the place where you were (2).

What did it look like, and who was there (2)? Can you picture what <u>you</u> looked like? (2) Now, see if you can remember exactly what happened (5). What did <u>you</u> do and say (5)? What did other people do or say (5)? See if you can remember any of your thoughts, or what you were saying to yourself (5). What were you <u>feeling</u> then (5)? What do you imagine other people were thinking and feeling (5)? Think a little bit about what led up to this incident, and what happened as a result (5). Go ahead and finish the scene in your mind. Take your time and when you are ready, at your own pace, open your eyes. (<u>**Wait until everyone has opened their eyes before continuing**</u>).

The next part is the written section. Write as quickly as you can. If you need more space, you may write on the backs of the pages.

1. Describe as fully as you can and in as much detail as possible the experience you remembered. Please include:
- What you did and what others did.
- What you were feeling and thinking in this situation.
- Specifically, what conditions or events made you respond as you did.
- What led up to this experience.
- What the results of this experience were.

2. How was this experience important or special to you <u>then</u>?

3. How is this experience important or special to you <u>now</u>?

4. From the experience you just remembered, please describe some things that you know about yourself now.

5. In what ways were your thoughts, feelings or actions in this situation typical or atypical of thoughts, feelings or actions you had in other situations? Is there a "pattern" to your responses in these situations? If so, please describe it in terms of your thoughts, feelings and actions.

6. What do you like and/or dislike about the ways you think, feel and act in such situations?

7. Describe anything you have tried to do to modify your thoughts or feelings in order to change your way of responding in these situations. Please explain how your strategy affected your response.

8. Do you have any ideas about ways you <u>might</u> try to modify any of your thoughts or feelings in order to change your way of responding?

APPENDIX B

The MSCL
(in pocket)

APPENDIX C

The SCL-90-R
(in pocket)

REFERENCES

Ajaya, Swami. Psychotherapy East and West. PA: Himalayan International Institute, 1983.

Alschuler, A., Evans, J., Tamashiro, R., & Weinstein, G. Self-Knowledge Education Project: Final Report. University of Massachusetts, Amherst, 1975.

Alschuler, A., Weinstein, G. & Evans, J., Towards a theory of self-knowledge development. Unpublished paper, University of Massachusetts, Amherst, 1974.

Anand, B., Chinna, G. and Singh, B. Some aspects of electroencephalography studies in yogis. Electroencephalography & Clinical Neurophysiology, 1961a, 13:452-456.

Benson, H., Beary, J. and Carol, M. P. The relaxation response. Psychiatry, 1974, 37:37-46.

Benson, H. The Relaxation Response. New York: William Morrow & Co., 1975.

Benson, H. and Wallace, R. Decreased blood pressure in hypertensive subjects who practice meditation. Circulation, 1972a, Suppl. #2, 516.

Bernhard, J., Kristeller, J. and Kabat-Zinn, J. Effectiveness of relaxation and visualization techniques as an adjunct to phototherapy and photochemotherapy of psoriasis. Journal American Acad. Dermatology, 1988, 19: 572-573.

Boals, G. Toward a cognitive reconceptualization of meditation. Journal of Transpersonal Psychology, 1978, 10 (2):143-182.

Bogdan, R. & Biklen, S., Qualitative Research For Education. Boston: Allyn & Bacon, 1982.

Brown, D. A model for the levels of concentrative meditation. International Journal of Clinical & Experimental Hypnosis, 1977, 25:236-273.

Brown, D. The stages of meditation in cross cultural perspective. In Transformations of Consciousness. Wilbur, K., Engler, J. and Brown, D. (Eds.), New Science Library, 1986.

Brown, D. and Engler, J. The stages of mindfulness meditation: A validation study. In Transformations of Consciousness. Brown, Engler, Wilbur (Eds.), New Science Library, Shambhala, 1986.

Cassell, E.J. The nature of suffering and the goals of medicine. New England J. of Medicine, 1984, 306, 11:639-645.

Cauten, N. and Prymak, C. Meditation verses relaxation. Journal of Consulting & Clinical Psychology, 1977, 45(3): 496-497.

Corby, J. C., Roth, W.T., Zarcone, V.P. and Kopell, B.S. Psychophysiological correlates of the practice of Tantric Yoga meditation. Archives of General Psychiatry, 1978, 35:571-580.

Cottingham, H.F. Psychological education: The guidance function and the school counselor. School Counselor, 1973, 20:340-345.

Curtis, W.D. and Wessberg, H.W. A comparison of heart rate, respiration, and galvanic skin response among meditators, relaxers, and controls. Journal of Altered States of Consciousness, 1975, 6(2):319-324.

Damon, W. and Hart, D. Development of self-understanding from infancy to adolesence. Child Development, 1982, 53: 841-864.

Das, H. and Gastaut, H. Variations de l'activite electrique du cerveau, du couer et des muscles squelettiques an cours de la meditation et de l'extase yogique. Electroencephalography & Clinical Neurophysiology, 1955, Supp. #6:211-219.

Davidson, J. Physiology of meditation and mystical states of consciousness. Perspectives in Biological Medicine (1976) 19:345-380.

Deathridge, G. The clinical use of mindfulness meditation techniques in short-term psychotherapy. Journal of Transpersonal Psychology, 1975, 7(2):133-143.

Deikman, A. The Observing Self. Boston: Beacon Press, 1982.

Deikman, A. Deautomization and the mystic experience. Psychiatry, 1966, 29:324-328.

Delmonte, M.M., Electrocortical activity and related phenomena associated with meditative practice. International Journal of Neuroscience, 1984, 24:217-231.

Derogatis, L.R. SCL90-R Manual II. Towson, MD, Clinical Psychometric Research, 1983.

Dillbeck, M.C. and Bronson, E.C. Short-term longitudinal effects on the TM technique on EEG power and coherence. International Journal of Neuroscience (1981) 14:147-151.

Dohrenwend, B.S, Dohrenwend, B.P. (Eds.). Stressful Life Events: Their Nature and Effects. New York: Wiley, 1974.

Dowsett, N. Psychology for Future Education. Sri Aurobindo Society, Pondicherry India: 1977.

Dubs, G. Psycho-spiritual development in zen buddhism: A study of resistance. Journal Transpersonal Psychology, 1987, 19(1):19-86.

Duhl, B., From the inside out and other metaphors: An integrated approach to training in multicentric thinking as derived from a family therapy program. Unpublished dissertation, University of Massachusetts, Amherst, 1982.

Eliade, M. Yoga, Immortality and Freedom. 2nd edition, Princeton, NJ: Princeton Univ. Press, 1969.

Engle,G L., The need for a new medical model: A challenge to Biomedicine. Science 1977,196:129-136.

Ferguson, P.O. and Gowan, J.C. Transcendental meditation: Some prelimenary findings. Journal Humanistic Psychology, 1976, 32, 7:51-60.

Fischer, R. A cartography of the ecstatic and meditative states. Science, 1971, 174:897-904.

Flavell, J. Structures, stages and sequences in cognitive development. In W.A. Collins (Ed.), The Concept of Development (Minnesota symposia on child psychology, vol.15). Hillsdale, NJ: Erlbaum Associates, 1982.

Fulton, P., Meditation as medicine. Common Boundary Magazine, March/April, 1990.

Gellhorn, E. and Kieley, W. E. Mystical states of consciousness: Neurophysiological and clinical aspects. The Journal of Nervous and Mental Disease, 1972, 154 (8): 399-405.

Glaser, B.G. and Strauss, A.L. The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine-Atherton, 1967.

Goleman, D. The Varieties of the Meditative Experience. New York: EP Dutton, 1977.

Goleman, D. Meditation and the unconscious: An Asian approach to mental health. American Journal of Psychotherapy, 1976, 41-54.

Goleman, D. Meditation as a meta-therapy: Hypnotheses toward a proposed fifth state of consciousness. Journal of Transpersonal Psychology, 1971, 3(1):1-25.

Goleman, D. and Schwartz, G. Meditation as an intervention in stress reactivity. Journal of Consulting and Clinical Psychology, 1976, 44:456-466.

Goleman, D. The Buddha on meditation and states on consciousness, part II: A typology of meditation techniques. Journal of Transpersonal Psychology, 1972, 4(2):151-210.

Guttman, L. The basis for scalogram analysis. In S.A. Stouffer, Measurement and Prediction. Princeton: Princeton University Press, 1950.

Hanh, Thich Nhat. The Miracle of Mindfulness: A Manual of Meditation. Boston: Beacon Press, 1976.

Hanh, Thich Nhat, Transformation and Healing: Sutra on the Four Establishments of Mindfulness. Berkeley, CA: Parallex Press, 1990.

Hanh, Thich Nhat. Breathe! You Are Alive: Sutra on the Full Awareness of Breathing. Berkeley, CA: Parallex Press, 1988.

Heil, J.D. Visual imagery change during relaxation meditation training. Dissertation Abstract International, 1983, 43(7):2-338.

Heron, J. Experiential research methodology. In Human Inquiry: A Sourcebook of New Paradigm Research. Reason, P. and Rowan, J. (Eds.), New York: J. Wiley, 1981.

Herrigel, E. Zen in the Art of Archery. New York: McGraw-Hill, 1953.

Hjelle, L.A. Transcendental meditation and psychological health. Perceptual and Motor Skills, 1974, 39:623-628.

Ikemi, Y. and Ikemi, A. An oriental point of view in psychosomatic medicine. Paper delivered at 8th World Congress, International College of Psychosomatic Medicine, Chicago, 1983.

Ivey, A. Developmental counseling and psychotherapy: A Piagetian approach. Work in progress. Amherst, MA, 1984.
Jenkins, C.D. The coronary-prone personality. In W.D. Gentry and R.D. Williams (Eds.), Psychological Aspects of Myocardial Infarction and Coronary Care. St. Louis: Mosby, 1975.

Jenning, R. and O'Halloran, J.P. Metabolic effects of transcendental meditation. In H. Shapiro and R. Walsh (Eds.), Meditation: Classic and Contemporary Perspectives. New York: Aldine, 1984.

Kabat-Zinn, J., Tarbell, S., French, C., Santorelli, S., Dubois, J., Curley, F., Pratter, M., Irwin, R. Functional status of patients with COPD. Poster presented at Society of Behavioral Medicine, 1988.

Kabat-Zinn J., Skillings, A. Sense of Coherence and Stress Hardiness as predictors and measures of outcome of a stress reduction program: A three year follow-up study. Manuscript in preparation.

Kabat-Zinn, J., Sellers, W., Santorelli, S.F. Symptom reduction in medical patients following mindfulness meditation for stress reduction. Poster presented at AABT Meeting, Chicago, 1986.

Kabat-Zinn, J. Full Catastrophe Living. New York: Delacorte Press, 1990.

Kabat-Zinn, J., Lipworth. L., Burney, R., Sellers, W. Reproducibility in four-year follow-up of a training program in mindfulness meditation for the self-regulation of chronic pain. Pain Supplement 2, 1984, 303.

Kabat-Zinn, J., Lipworth, L. and Burney, R. The clinical use of mindfulness meditation for the self-regulation of chronic pain. Journal of Behavioral Med., 1985, 8:163-190.

Kabat-Zinn, J. Lipworth, L. Burney, R. and Sellers, W. Four year follow-up of a meditation-based program for the self-regulation of chronic pain: Treatment outcomes and compliance. Clinical Journal of Pain, 1986, 2:159-173.

Kabat-Zinn, J. and Skillings, A. Sense of coherence and stress hardiness as measures of outcome of a stress reduction program. Poster presented at Society of Behavioral Medicine Meeting, San Francisco, 1989.

Kabat-Zinn, J. and Chapman-Waldrop, A. Compliance with an outpatient stress reduction program: Rates and predictors of program completion. Journal of Behavioral Med., 1988, 11:333-352.

Kabat-Zinn, J., Skillings, A. Sense of coherence and stress hardiness as predictors and measures of outcome of a stress reduction program. Poster presented at the annual meeting of Society of Behavioral Medicine, San Francisco, March 31, 1989. Manuscript in preparation.

Kabat-Zinn, J. An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation. Gen. Hosp. Psychiatry (1982) 4: 33-37.

Kabat-Zinn, J., Beall, B. and Rippe, J. A systematic mental training program based on mindfulness meditation to optimize performance in collegiate and olympic rowers. Paper presented at VI World Congress in Sport Psychology, Copenhagen, Denmark, 1984.

Kabat-Zinn, J. & Santorelli, S.F. Stress in the priesthood. Unpublished report. University of Massachusetts Medical Center, 1990.

Kabat-Zinn, J., Massion, A.O., Kristellar, J., Fletcher, K.E., et al. Effectiveness of a mindfulness based stress reduction in the treatment of anxiety disorders: A pilot study. Paper presented at Society of Behavioral Medicine Meetings, 1990. (in press) American Journal of Psychiatry, July, 1992.

Kanas, N. and Horowitz, M. Reactions of TMers and non-meditators to stress film. Archives Gen. Psychiatry, 1977, 34(12):1431-1436.

Kapleau, P. The Three Pillars of Zen. Boston: Beacon Press, 1969.

Kasamatsu, A. and Hirai, T. An electroencephalographic study of the Zen meditation (zazen). Folia Psychiatria et Neurologica Japonica, 1966, 20:315-336.

Kegan, R. The Evolving Self: Problem and Process in Human Development. Cambridge, MA: Harvard University Press, 1982.

Kirsch, I. and Henry, D. Self-desensitization and meditation in the reduction of public speaking anxiety. Journal Consulting & Clinical Psychology, 1979, 47:536-541.

Kitawaga, E.M. and Hauser, P. Differential Mortality in the United States: A Study in Socioeconomic Epidemology. Cambridge: Harvard University Press, 1973.

Klopfer, B. and Boyer, L.B. Notes on the personality structure of a north american indian shaman: Rorshach interpretation. Journal of Projective Techniques and Personal Assessment, 1961, 25:170-178.

Kohlberg, L. and Mayer, R. Development as the aim of education. Harvard Educational Review, 1972, 42: 449-496.

Kohr, E. Dimensionality in the meditation experience: A replication. Journal of Transpersonal Psychology, 1977, 9(2):193-203.

Kornfield, J. and Goldstein, J. Seeking the Heart of Wisdom. Boston: Shambhala Press, 1988.

Kornfield, J. Intensive insight meditation: A phenomenological study. Journal of Transpersonal Psychology, 1979, 11(1):41-58.

Krishnamurti, J. Freedom from the Known. New York: Harper & Row, 1969.

Kutz, I., Borysenko, J. and Benson, H. Meditation and psychotherapy: A rationale for the integration of dynamic psychotherapy, the relaxation response, and mindfulness meditation. American Journal of Psychiatry, 1985, 142:1-8.

Lazarus, R.S. Coping and adaptation. In W.D. Gentry (Ed.) The Handbook of Behavioral Medicine. New York: Guilford Press, 1982.

Lesh, T. Zen meditation and the development of empathy in counselors. Journal of Humanistic Psychology, 1970, 10(1):39-74.

Lincoln, Y. and Guba, E. Naturalistic Inquiry. Beverly Hills, CA: Sage, 1985.

Linden, W. The relationship between the practice of meditation by schoolchildren and their levels of field dependence-independence, test anxiety, and reading achievement. Journal of Consulting & Clinical Psychology, 1973, 41:139-143.

Loevinger, J. Ego Development: Conceptions and Theories. San Francisco: Jossey-Bass, 1976.

Mahoney, M.J., & Thorensen, C.E., Self-Control: Power to the Person. Monterey, CA: Brooks-Cole, 1974.

Marlatt, G., Pagano, R., Rose, R., Margues, J. K. Effect of meditation and relaxation training upon alcohol use in male social drinkers. In D.H. Shapiro & R.N. Walsh (Eds.), The Science of Meditation. New York: Aldine, 1980, (in press).

Marshall, C. and Rossman, G. Designing Qualitative Research. Newbury Park, CA: Sage 1989.

Maupin, E., Individual differences in response to a zen meditation exercise. In Tart (Ed.) Altered States of Consciousness. New York: J. Wiley, 1969.

Maupin, E. Individual differences in response to a Zen meditation exercise. Journal of Counseling Psychology, 1965, 29:139-145.

Merriam, S., Case Study Research in Education: A Qualitative Approach. San Francisco: Jossey-Bass, 1988.

Michaels, R., Huber, M. and McCann, D. Evaluation of TM as a method of reducing stress. Science, 1976, 192, 4245, 1242-1244.

Morse, D. R., Martin, S., Furst, M. and Dubin, L. A physiological and subjective evaluation of meditation, hypnosis, and relaxation. Psychosomatic Medicine, 1977, 39:304-324.

Mullen, D. Cutting back after a heart attack: an overview. Health Education Monographs, 1978, 6(3):295-311.

Mullen, P., Reynolds, R. The potential of grounded theory for health education research: linking theory and practice. Health Education Monographs, 1978, 6(3):280-294.

Murphy, M. and Donovan, S. The Physical and Psychological Effects of Meditation. San Rafael: Esalen Institute, 1988.

Nidich, S., Seeman, W. and Derskin, T. Influence of transcendental meditation on a measure of self-actualization: A replication. Journal of Counseling Psychology, 1973, 20:565-566.

Nyanapontka. The Heart of Buddhist Meditation. New York: Samuel Weiser, 1973.

Oppenheimer, J.R. Science and the Common Understanding. New York: Simon & Shuster, 1954.

Orme-Johnson, D.W., Kolb, D. and Hebert, J.R. An experimental analysis of the affects of TM on reaction time. In Orme-Johnson, D. and Forrow, J., Scientific Research on the TM Meditation Program. Collected papers, Vol. 1, New York, M.E.R.V. Press, 1977.

Ornish, D. Dr. Dean Ornish's Program for Reversing Heart Disease. New York: Random House, 1990.

Ornish, D., Brown, S. E., Scherwitz, L. Can lifestyle changes reverse coronary artery disease?: The lifestyle heart trial. Lancet, 1990, 336:129-133.

Ornstein, R. The Psychology of Consciousness. San Francisco: W.H. Freeman Co., 1972.

Osis, K., Bokert, E. and Carlson, M.L. Dimension of the meditative experience. Journal of Transpersonal Psychology, 1973, 5(1):109-135.

Otis, L.S. If well-integrated but anxious, try TM. Psychology Today, 1974, 7:45-46.

Patton, M.Q. Qualitative Evaluation Methods. Newbury Park, CA: Sage, 1980.

Peskin, A. In search of subjectivity - one's own. Educational Researcher, October 1988, pgs. 17-21.

Phillips, K. Substance abuse prevention: effects of a developmentally based psychological education curriculum. Unpublished dissertation, University of Massachusetts, 1980.

Phillips, K., McLain, K., and Jones, L. Decisions and consequences: A secondary classroom curriculum. Report to the Div. of Human Development and Guidance Resources, Dept. of Educational and Cultural Services, Augusta, ME, 1977.

Piaget, J. Six psychological studies. New York: Random House, 1968.

Roberts, T. States of consciousness: A new intellectual direction, a new teacher education direction. Journal of Teacher Education, 1985, 57(2):55-59.

Roberts, Thomas. Multistate education: Metacognitive implications of the mindbody psychotechnologies. Journal of Transpersonal Psychology, 1989, 21(1).

Rossman, G. and Wilson, B. Numbers and words: Combining quantative and qualitative methods in a single large-scale evaluation study. Evaluation Review, 1985, 9(5):627-643.

Santorelli, S.F. Personal observations while working with institutionalized adolescents. Worcester State Hospital, Worcester MA, 1984.

Seeman, A. and Seeman, T.A. Health behavior and personal autonomy: A longitudinal study of the sense of control in illness. Journal of Health & Social Behavior, 1983, 24: 144-160.

Seeman, W., Nidich, S. and Banta, T. Influence of TM on a measure of self-actualization. Journal of Counseling Psychology, 1972, 19(3):184-187.

Shafii, M., Lavely, R., and Jaffe, R. Meditation and the prevention of alcohol abuse. Amer. Journal of Psychiatry, 1975, 132(9):924-945.

Shafii, M. Silence in the service of ego: Psychoanalytic study of meditation. International Journal of Psychoanalysis, 1973. 54(4):431-443.

Shapiro, D. H. and Zifferblatt, S. M. Zen meditation and behavioral self-control. Amer. Psychologist, 1976a, 31: 519-532.

Shapiro, D. H. & Giber, D. Meditation and psychotherapeutic effects. Archives pf General Psychiatry, 1978, 35:294-302.

Shapiro, D. H. Meditation: Self-Regulation Strategy and Altered State of Consciousness. New York: Aldene, 1980.

Shapiro, D.H. Behavioral and attitudinal changes resulting from a Zen experience workshop in Zen meditation. Journal of Humanistic Psychology, 1978, 18(3):21-29.

Shovholt, T. Issues in psychologhical education. Personnel and Guidance Journal, April 1977, pg. 472-476.

Speigel, D., Bloom,J.R., Kraemer, H.C., Gotheil, E. Effects of psychosocial treatment on survival of patients with metastatic breast cancer. Lancet, 1989, 2:888-891.

Speigel, D. and Spira, J. Supportive Expressive Therapy: A Treatment Manuel of Psychosocial Intervention for Women with Recurrent Breast Cancer. Stanford, CA, Psychosocial Treatment Laboratory, Stanford U. School of Medicine, 1991.

Sweitzer, F. An analysis and comparison of five structural developmental theories. Unpublished paper. University of Massachusetts, Amherst, 1984.

Sweitzer, F. Towards a reconsideration and refinement of the pattern stage of self-knowledge development. Unpublished Dissertation, University of Massachusetts, Amherst, 1985.

Sweitzer, F. Application of a cognitive developmental theory in a psychoeducational program for adolescents. Unpublished paper, Wendell, MA: Maple Valley School, 1980.

Syme, S.L. Sociocultural factors and disease etiology. In WD Gentry (Ed.), Handbook of Behavioral Medicine. New York: Guilford, 1984.

Tamashiro, R. Measuring self-knowledge development: construction of a prelimenary scoring manual. Unpublished dissertation. University of Massachusetts, Amherst, 1976.

Tart, C. States of consciousness and state specific sciences. Science, 1972, 176:1203-1210.

Tart, C. States of Consciousness. New York: EP Dutton, 1975.

Tart, C. Waking Up. Boston: Shambhala, New Science Library, 1986.

Tart, C. (Ed.). Altered States of Consciousness. New York: Wiley, 1969.

Thera, N. The Heart of Buddhist Meditation. New York: Samuel Weiser, 1962.

VanNuys, D. Meditation, attention, and hypnotic susceptibility: A correlational study. International Journal of Clinical & Experimental Hypnosis, 1973, 21: 59-69.

Wallace, R., Benson, H. and Wilson, A. A wakeful hypometabolic physiologic state. American Journal of Physiology, 1971, 221(3):795-799.

Walsh, R. and Rauche, L. The precipitation of acute psychoses by intensive meditation in individuals with a history of schizophrenia. American Journal of Psychiatry, 1979, 138(8):1085-1086.

Walsh, R. The consciousness disciplines and the behavioral sciences: Questions of comparison and assessment. American Journal of Psychiatry, 1980, 137:663-673.

Walsh, R. Initial Meditation Experience. Part II. Journal of Transpersonal Psychology, 1965, 10(1):1-28.

Walsh, R. Initial meditation experience, Part 1. Journal of Transpersonal Psychology, 1977, 9(2):151-92.

Walsh, R. Meditation research and practice. Journal of Humanistic Psychology, 1983, 23:18-50.

Weinberger, J., McLeod, C., McClelland, D., Santorelli, S.F., Kabat-Zinn, J. Motivational change following a meditation-based stress reduction program. Paper presented at 1st International Conference on Behavioral Medicine, Univ. of Uppsala, Sweden, June 1990.

Weinstein, G. Differentiating sub-stages in the stages of self-knowledge development. Manuscript in preparation, University of Massachusetts, 1992.

Weinstein, G. and Alschuler, A.S. Educating and counseling for self-knowledge development. J. of Counseling and Development, 1985, 64:19-25.

Weinstein, G. Self science education. In J. Fried (Ed.), New Directions for Student Services: Education for Student Development. San Francisco: Jossey Bass, Sept. 1981.

Welwood, J. Self-knowledge as the basis of an integrative psychology. Journal of Transpersonal Psychology, 1979, 2(1):23-40.

Wilbur, K. Ontogenetic development: Two fundamental patterns. Journal of Transpersonal Psychology, 1981, 13(1): 33-58.

Wilbur, K. Spectrum of Consciousness. Wheaton, IL: Theosophical Publishing House, 1977.

Wilbur, K. The Atman Project. Wheaton, IL: Quest, 1977.

Williams, R. The Trusting Heart. New York: Times Books, 1989.

Woolfolk, R. The psychological correlates of meditation. Archives of Gen. Psychiatry, 1975, 32:1326-1333.

Yin, R.K. Case Study Research: Design and Methods. Newbury Park, CA: Sage, 1984.

Ziff, J. Psychological education and developmental theory: differential processing of a human relations training exercise based on self-knowledge stage theory. Unpublished doctoral dissertation, University of Massachusetts, 1979.

MEDICAL
SYMPTOM CHECKLIST (MSCL)

If you have *recently* been bothered with these problems check YES. (i.e. in the past MONTH)

YES NO

- ☐ ☐ frequent or severe headaches
- ☐ ☐ neck pains
- ☐ ☐ neck lumps or swelling
- ☐ ☐ loss of balance
- ☐ ☐ dizzy spells
- ☐ ☐ blackouts/fainting

- ☐ ☐ blurry vision
- ☐ ☐ eyesight worsening
- ☐ ☐ see double
- ☐ ☐ see halos or lights
- ☐ ☐ eye pains or itching
- ☐ ☐ watering eyes

- ☐ ☐ hearing difficulties
- ☐ ☐ earaches
- ☐ ☐ running ears
- ☐ ☐ noises in ears

- ☐ ☐ dental problems
- ☐ ☐ sore or bleeding gums
- ☐ ☐ sore tongue

- ☐ ☐ wheezing or gasping
- ☐ ☐ frequent coughing
- ☐ ☐ cough up phlegm
- ☐ ☐ cough up blood
- ☐ ☐ chest colds

- ☐ ☐ rapid or skipped heartbeats
- ☐ ☐ chest pains
- ☐ ☐ shortness of breath with normal activity
- ☐ ☐ swollen feet or ankles

YES NO

- ☐ ☐ recurring indigestion
- ☐ ☐ frequent belching
- ☐ ☐ nausea
- ☐ ☐ vomiting
- ☐ ☐ pain in abdomen
- ☐ ☐ bloated abdomen
- ☐ ☐ constipation
- ☐ ☐ loose bowels
- ☐ ☐ black stools
- ☐ ☐ grey or whitish stools
- ☐ ☐ pain in rectum
- ☐ ☐ itching rectum
- ☐ ☐ blood with stools

- ☐ ☐ frequent urination
- ☐ ☐ involuntary escape of urine
- ☐ ☐ burning on urination
- ☐ ☐ brown, black or bloody urine
- ☐ ☐ weak urine stream
- ☐ ☐ difficulty starting urine
- ☐ ☐ constant urge to urinate

(MEN ONLY)

- ☐ ☐ burning or discharge
- ☐ ☐ lumps or swelling on testicles
- ☐ ☐ painful testicles

(WOMEN ONLY)

- ☐ ☐ a missed period
- ☐ ☐ menstrual problems
- ☐ ☐ bleeding between periods
- ☐ ☐ tension or pain before periods
- ☐ ☐ heavy bleeding
- ☐ ☐ bearing down feeling
- ☐ ☐ vaginal discharge
- ☐ ☐ genital irritation
- ☐ ☐ pain on intercourse
- ☐ ☐ swelling or lumps in breasts
- ☐ ☐ painful breasts
- ____ number of pregnancies
- ____ number of births
- ____ miscarriages
- ____ premature births
- ____ cesareans
- ____ abortions

YES NO

- ☐ ☐ aching muscles or joints
- ☐ ☐ swollen joints
- ☐ ☐ back or shoulder pains
- ☐ ☐ weakness in arms or legs
- ☐ ☐ painful feet
- ☐ ☐ trembling
- ☐ ☐ numbness
- ☐ ☐ leg cramps

- ☐ ☐ skin problems
- ☐ ☐ scalp problems
- ☐ ☐ itching or burning skin
- ☐ ☐ bruise easily

- ☐ ☐ nervousness or anxiety
- ☐ ☐ nervous with strangers
- ☐ ☐ nail biting
- ☐ ☐ difficulty making decisions
- ☐ ☐ lack of concentration
- ☐ ☐ absentminded/loss of memory
- ☐ ☐ lonely or depressed
- ☐ ☐ frequent crying
- ☐ ☐ hopeless outlook
- ☐ ☐ difficulty relaxing
- ☐ ☐ worry a lot
- ☐ ☐ frightening dreams or thoughts
- ☐ ☐ feeling of desperation
- ☐ ☐ shy or sensitive
- ☐ ☐ dislike criticism
- ☐ ☐ angered easily
- ☐ ☐ annoyed by little things
- ☐ ☐ family problems
- ☐ ☐ problems at work
- ☐ ☐ sexual difficulties
- ☐ ☐ change of sexual energy
- ☐ ☐ considered suicide
- ☐ ☐ sought psychiatric help

- ☐ ☐ loss or gain in weight
- ☐ ☐ frequently feel warmer or colder than others
- ☐ ☐ loss of appetite
- ☐ ☐ always hungry
- ☐ ☐ armpits or groin swelling
- ☐ ☐ unusual fatigue or weariness
- ☐ ☐ difficulty sleeping
- ☐ ☐ fever or chills
- ☐ ☐ motion sickness
- ☐ ☐ excessive sweating
- ☐ ☐ night sweats
- ☐ ☐ hot flashes

Comments or special problems: _____

APPENCIX C
The SCL-90-R

IN THE PAST WEEK HOW MUCH WERE YOU BOTHERED BY:		NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
41. Feeling inferior to others	41	0	1	2	3	4
42. Soreness of your muscles	42	0	1	2	3	4
43. Feeling that you are watched or talked about by others	43	0	1	2	3	4
44. Trouble falling asleep	44	0	1	2	3	4
45. Having to check and double-check what you do	45	0	1	2	3	4
46. Difficulty making decisions	46	0	1	2	3	4
47. Feeling afraid to travel on buses, subways, or trains	47	0	1	2	3	4
48. Trouble getting your breath	48	0	1	2	3	4
49. Hot or cold spells	49	0	1	2	3	4
50. Having to avoid certain things, places, or activities because they frighten you	50	0	1	2	3	4
51. Your mind going blank	51	0	1	2	3	4
52. Numbness or tingling in parts of your body	52	0	1	2	3	4
53. A lump in your throat	53	0	1	2	3	4
54. Feeling hopeless about the future	54	0	1	2	3	4
55. Trouble concentrating	55	0	1	2	3	4
56. Feeling weak in parts of your body	56	0	1	2	3	4
57. Feeling tense or keyed up	57	0	1	2	3	4
58. Heavy feelings in your arms or legs	58	0	1	2	3	4
59. Thoughts of death or dying	59	0	1	2	3	4
60. Overeating	60	0	1	2	3	4
61. Feeling uneasy when people are watching or talking about you	61	0	1	2	3	4
62. Having thoughts that are not your own	62	0	1	2	3	4
63. Having urges to beat, injure, or harm someone	63	0	1	2	3	4
64. Awakening in the early morning	64	0	1	2	3	4
65. Having to repeat the same actions such as touching, counting, washing	65	0	1	2	3	4
66. Sleep that is restless or disturbed	66	0	1	2	3	4
67. Having urges to break or smash things	67	0	1	2	3	4
68. Having ideas or beliefs that others do not share	68	0	1	2	3	4
69. Feeling very self-conscious with others	69	0	1	2	3	4
70. Feeling uneasy in crowds, such as shopping or at a movie	70	0	1	2	3	4
71. Feeling everything is an effort	71	0	1	2	3	4
72. Spells of terror or panic	72	0	1	2	3	4
73. Feeling uncomfortable about eating or drinking in public	73	0	1	2	3	4
74. Getting into frequent arguments	74	0	1	2	3	4
75. Feeling nervous when you are left alone	75	0	1	2	3	4
76. Others not giving you proper credit for your achievements	76	0	1	2	3	4
77. Feeling lonely even when you are with people	77	0	1	2	3	4
78. Feeling so restless you couldn't sit still	78	0	1	2	3	4
79. Feelings of worthlessness	79	0	1	2	3	4
80. Feeling that something bad is going to happen to you	80	0	1	2	3	4
81. Shouting or throwing things	81	0	1	2	3	4
82. Feeling afraid you will faint in public	82	0	1	2	3	4
83. Feeling that people will take advantage of you if you let them	83	0	1	2	3	4
84. Having thoughts about sex that bother you a lot	84	0	1	2	3	4
85. The idea that you should be punished for your sins	85	0	1	2	3	4
86. Thoughts and images of a frightening nature	86	0	1	2	3	4
87. The idea that something serious is wrong with your body	87	0	1	2	3	4
88. Never feeling close to another person	88	0	1	2	3	4
89. Feelings of guilt	89	0	1	2	3	4
90. The idea that something is wrong with your mind	90	0	1	2	3	4

APPENDIX C
The SCL-90-R

NAME _____

DATE _____

SEX
MALE
FEMALE

TYPE OF INFORMATION
PRE
POST
FOLLOW-UP

INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please fill in one of the numbered spaces to the right that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE PAST WEEK INCLUDING TODAY. Mark only one numbered space for each problem and do not skip any items. Make your marks carefully using a No. 2 pencil. DO NOT USE A BALLPOINT PEN. If you change your mind, erase your first mark carefully. Please do not make any extra marks on the sheet. Please read the example below before beginning.

IN THE PAST WEEK HOW MUCH WERE YOU BOTHERED BY:	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
EXAMPLE — 1. Backaches	0	1	2	3	4

CLINIC NUMBER										
	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9

IN THE PAST WEEK HOW MUCH WERE YOU BOTHERED BY:	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
1. Headaches	1	2	3	4	5
2. Nervousness or shakiness inside	1	2	3	4	5
3. Repeated unpleasant thoughts that won't leave your mind	1	2	3	4	5
4. Faintness or dizziness	1	2	3	4	5
5. Loss of sexual interest or pleasure	1	2	3	4	5
6. Feeling critical of others	1	2	3	4	5
7. The idea that someone else can control your thoughts	1	2	3	4	5
8. Feeling others are to blame for most of your troubles	1	2	3	4	5
9. Trouble remembering things	1	2	3	4	5
10. Worried about sloppiness or carelessness	1	2	3	4	5
11. Feeling easily annoyed or irritated	1	2	3	4	5
12. Pains in heart or chest	1	2	3	4	5
13. Feeling afraid in open spaces or on the streets	1	2	3	4	5
14. Feeling low in energy or slowed down	1	2	3	4	5
15. Thoughts of ending your life	1	2	3	4	5
16. Hearing voices that other people do not hear	1	2	3	4	5
17. Trembling	1	2	3	4	5
18. Feeling that most people cannot be trusted	1	2	3	4	5
19. Poor appetite	1	2	3	4	5
20. Crying easily	1	2	3	4	5
21. Feeling shy or uneasy with the opposite sex.	1	2	3	4	5
22. Feeling of being trapped or caught	1	2	3	4	5
23. Suddenly scared for no reason	1	2	3	4	5
24. Temper outbursts that you could not control	1	2	3	4	5
25. Feeling afraid to go out of your house alone	1	2	3	4	5
26. Blaming yourself for things	1	2	3	4	5
27. Pains in lower back	1	2	3	4	5
28. Feeling blocked in getting things done	1	2	3	4	5
29. Feeling lonely	1	2	3	4	5
30. Feeling blue	1	2	3	4	5
31. Worrying too much about things	1	2	3	4	5
32. Feeling no interest in things	1	2	3	4	5
33. Feeling fearful	1	2	3	4	5
34. Your feelings being easily hurt	1	2	3	4	5
35. Other people being aware of your private thoughts	1	2	3	4	5
36. Feeling others do not understand you or are unsympathetic	1	2	3	4	5
37. Feeling that people are unfriendly or dislike you	1	2	3	4	5
38. Having to do things very slowly to insure correctness	1	2	3	4	5
39. Heart pounding or racing	1	2	3	4	5
40. Nausea or upset stomach	1	2	3	4	5

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