

A MIXED METHODS APPROACH EXPLORING THE EFFECTS OF A
MINDFULNESS BASED STRESS REDUCTION PROGRAM

by

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(Under the Direction of Edwin Risler)

ABSTRACT

The purpose of this study was to explore the effects of a mindfulness based stress reduction program (MBSR) using a mixed methods approach. The MBSR is an eight week educational and experiential group program that meets once a week for two and a half hours where participants learn a variety of stress reduction strategies such as; mindfulness meditation techniques, breathing exercises, body scans, and hatha yoga postures. The overarching mixed methods design used was the equivalent status design with parallel/simultaneous qualitative and quantitative components (Tashakkori & Teddlie, 1998). The quantitative component of this study utilized a pre-experimental pre-test post-test design with six treatment groups, with a total of 43 subjects. Two outcomes measures were used, the Beck Depressions Inventory and the Rand 36-Item Health Survey 1.0. Both practically and statistically significant results emerged in the areas of depression, emotional well-being and social

functioning. The research question guiding the qualitative data component of this dissertation was; how does mindfulness impact human beings? The data collection methods used during the qualitative phase were focusing and bounding data (Miles & Huberman, 1994), nonprobability sampling procedures, and semi-structured in-depth interviews. The qualitative data were analyzed using the modification of the van Kaam method of phenomenological analysis outlined by Moustakas (1994). Five themes emerged in the composite description of interview data; learning new coping skills, increased awareness, present moment living, learning about self, and improved interpersonal relationships. The results indicate that the process of how mindfulness impacts human beings and effects change is highly complex. The results suggest that there exists an indirect path to symptom reduction and stress reduction that is highly effective towards influencing change in human beings. This indirect path is valuable in the sense that it has the power to reduce suffering and improve quality of life with or without a direct impact on symptoms. The results further indicate that a theoretical relationship exists between the assumptions of Buddhist philosophy and the MBSR intervention.

INDEX WORDS: Mindfulness based stress reduction program,
Mindfulness meditation, Mind-body interventions,

Mixed methods research, Phenomenological
analysis.

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DEDICATION

I would like to dedicate this dissertation to my family for providing me with the support and encouragement that has guided me throughout this endeavor. To my loving husband, Adam McKinney, I thank you for your patience, love, support and encouragement. The many sacrifices you have made to accompany me on this journey are greatly appreciated. You have been my source of strength to lean upon (both figuratively and literally) during periods of weakness and confusion. Your loving actions have kept me grounded and focused. Your unconditional acceptance of my personal and professional growth continues to inspire me.

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CHAPTER 1

INTRODUCTION

Complementary and alternative medical practices, also referred to as holistic medicine, have greatly expanded in use and popularity across the United States throughout the past ten years. Research studies empirically validating the efficacy of such techniques have emerged within the conventional medical community as well as in the fields of psychiatry and psychology (Irvin et al., 1996; Killeen & Brady, 1997; Teasdale et al., 2000). Fewer studies about the efficacy of complementary and alternative practices have been researched in the field of social work (Finger & Arnold, 2002), however, an examination of the characteristics and assumptions of holistic medicine suggest a strong congruence with the foundations of social work practice. In light of the congruence between holistic medicine and the practice of social work, research regarding the integration of such methods into the field of social work is warranted.

Problem Statement

In the United States, the predominant model of behavioral medicine is the Western conventional medical model, which targets the physical symptoms of disease and illness and works

toward reducing and eliminating specific symptoms (Graham-Pole, 2001). Although this model has led to amazing advances in health care such as prolonged life expectancy and reduced suffering (Weil, 1995), the holistic health movement has emphasized a need to expand the conventional model of medicine to include a focus on emotional, psychological, and spiritual aspects of disease and wellness (Gordon, 1981). It is vital to recognize that the holistic movement is not advocating for the dismantling or replacement of the conventional western model of medicine, but rather encouraging the addition of models and practices to enhance the overall system of health and medicine.

The mission of expanding the conventional Western model has gained legitimacy over the past ten years. In 1992 the Office of Alternative Medicine was created by the National Institute of Health and in 1998 this office was further expanded by the establishment of the National Center for Complementary and Alternative Medicine (NCCAM). The main goals of the NCCAM involve research, training, education and information dissemination (NCCAM, 2003). Most recently former President Clinton established the White House Commission on Complementary and Alternative Medicine Policy (WHCCAMP), another initiative to explore, assess and disseminate information regarding holistic health practices (WHCCAMP, 2003).

Eisenberg et al. (1998) conducted a study about the trends and usage rates of complimentary and alternative medicine (CAM) in the United States and they found that four out of ten American citizens used CAM interventions during 1997 and that over 27 billion dollars was spent on CAM during that year. Over the course of a seven year period (1990-1997) during which Eisenberg et al.'s study was conducted, the number of visits to a CAM practitioner rose 47% and by 1997 the number of visits to CAM practitioners was greater than the number of visits to personal care physicians. These statistics indicate a growing public interest in CAM yet the profession of social work has only begun to empirically explore CAM interventions in social work settings. During a literature review, Finger and Arnold (2002) identified four holistic interventions applicable to social work practice and they concluded that:

There is a very limited social work presence in the literature on mind-body perspectives, particularly in the area of outcome research. While many social workers have also promoted the use of these techniques (Farnum & Powell, 1986; Zastrow, 1987), few research articles by social workers on this topic exist, and as indicated by the research cited in this paper, the majority of the existing studies were conducted by physicians or psychologists.

Additionally, few solutions to remedy this situation have been proposed and/or implemented (p. 69).

There is a definite need to examine holistic interventions from a social work perspective. This dissertation intends to add to the knowledge base of social work by contributing empirical based research exploring the effects of a mindfulness based stress reduction program, a mind-body intervention applicable for use in various social work settings.

Significance of the Study

Social work has historically advocated for and operated from a model of health which encompasses more than only the physical aspects of illness. Mary Richmond (1917) suggested the need for social work to consider and address a person's social and environmental factors prior to determining how best to satisfy a person's needs. More specific to the field of behavioral medicine, Karls and Wandrei (1994) developed a classification system for social workers titled person in environment (PIE), which they advocate for use in medical and mental health settings. The PIE system describes and classifies problems based on assessments within four aspects of a person's functioning; social, environmental, psychological, and physical. Karls and Wandrei (1994) describe the PIE system as an integrated model, "following the principles of a holistic approach, the task force concluded that a comprehensive picture

of the client's problem must include the intrapsychic difficulties as well as physical health problems he or she might be experiencing" (p. 15). Zide and Gray (2001) also developed a model of assessment for use by social workers in behavioral health settings called the competency-based assessment model. This model is based on an eco-systems perspective and seeks to assess problems by examining an individual's biological, psychological, interpersonal, environmental, and cultural factors. These models of social work are congruent with the holistic health movement in that they seek to explore more than solely the physical aspects of disease.

The holistic health movement, although relatively new to the Western world, is not a new model of health. In fact, holistic medicine has been practiced in many Eastern societies for thousands of years (Lewith, Kenyon & Lewis, 1996). Gordon (1981) describes the relatively recent Western version of holistic medicine as,

Holistic medicine includes an appreciation of patients as mental and emotional, social and spiritual, as well as biological and physiological beings. It respects their capacity for healing themselves, and regards them as active partners in, rather than passive recipients of, health care. It does not neglect the treatment of disease, but does emphasize the reduction of stress and patient

education, and the prevention of illness and health promotion (p. 114).

The holistic health movement is itself a paradigm with its own distinct assumptions and perspectives about health and wellness. These foundational assumptions are congruent with the core values and ethical principles of the social work profession outlined in the National Association of Social Workers' (NASW) Code of Ethics (2005). One of the characteristics of the holistic medicine paradigm as outlined by Gordon (1981) is, "A holistic approach to medicine and health care includes understanding and treating people in the context of their culture, their family, and their community" (p. 116). This is consistent with the social workers ethical responsibility of cultural competence and social diversity. The NASW Code of Ethics (2005) states, "Social workers should understand culture and its function in human behavior and society, recognizing the strengths that exist in all cultures" (p. 9). The NASW Code of Ethics (2005) also suggests that social workers, "be mindful of individual differences and cultural and ethnic diversity" (p.5).

Another characteristic of the holistic medicine paradigm emphasizes "helping people to understand and help themselves" and "uses therapeutic approaches that mobilize the individual's innate capacity for self-healing" (Gordon, 1981; p. 117). This assumption deals with an individuals right to self-

determination, an ethical responsibility social workers strive to attain. The NASW Code of Ethics (2005) states, "Social workers promote clients' socially responsible self-determination [and] ...seek to enhance clients' capacity and opportunity to change and address their own needs" (p. 5-6).

Another value of social work that is congruent with the holistic medicine paradigm is the commitment to social justice. Social workers advocate for and seek to improve the conditions of oppression faced by vulnerable clients. The holistic health movement is also concerned with social justice issues, as one of the characteristics is, "...a commitment to change those social and economic conditions that perpetuate ill health" (Gordon 1981, p. 118).

Although there are similarities between the assumptions of holistic health and the values and ethics of the social work profession, evidence for the use of such techniques is necessary to support the practice of holistic interventions within the field of social work. Social workers must first rely on evidence based practice interventions, and then assess the appropriateness of interventions within a given practice setting.

Just as social work has a large variety of practice methods and practice settings, the methods by which holistic medicine is practiced are widespread. Holistic methods of practice include

relaxation therapy, meditation, biofeedback, hypnosis, imagery, chiropractic, acupuncture, homeopathy, massage therapy, herbal medicine, electromagnetic medicine, spiritual medicine, therapeutic touch, and exercise and nutrition (Freeman & Lawlis, 2001). Within each of the above methods of practice there are many distinct interventions, some with their own set of beliefs and assumptions, however, with the similarities between the paradigm of holistic medicine and the values and ethics of the social work profession, the interventions that have arisen in the holistic health movement may be of particular interest in social work settings.

Of particular interest to the field of social work are various stress reduction techniques. Vattano (1978) argued that many of the social and psychological problems experienced by clients of social workers result in excessive amounts of stress and anxiety. He suggested that the social work profession integrate research-based self management procedures, such as relaxation training, systematic desensitization, and meditation into the practice of social work. Since the late 1970s there have been some research based studies on various stress reduction techniques within the social work literature (Schofield & Wheaton, 1992; Derezotes, 2000; Wolf & Abell, 2003); however there is virtually no research in the social work

literature about the specific intervention of mindfulness based stress reduction programs.

Background Information

The setting for this dissertation research was Athens Regional Medical Center's institute for health and wellness called the Mind Body Institute. The mission of the Mind Body Institute is, "Helping individuals, families and communities achieve optimal health and vitality through the integration of education, research, tools for healthy living, and caring, professional guidance" (Athens Regional Mind Body Institute, 2002). The Institute describes itself as, "...a holistic healing center that integrates ancient wisdom with modern medicine to promote and sustain health and vitality" (Athens Regional Mind Body Institute, 2003). The Mind Body Institute is headed by Dr. Richard Panico, medical director and psychiatrist. The services offered at the Institute include psychiatric services, acupuncture, mindfulness based stress reduction programs, yoga programs, preparing for surgery workshops, and other variations of the above services, including nutritional counseling.

Athens Regional Medical Center is one of two main hospitals in Clarke County, Georgia. The Medical Center serves a large population of residents from 17 counties in Northeast Georgia. The Mind Body Institute was created and funded by the Athens Regional Medical Center to provide the public with complementary

medical services. Residents from the 17 county area are eligible to receive services at the Mind Body Institute and services are offered on a fee for service basis.

One of the primary services offered at the Mind Body Institute is a mindfulness based stress reduction (MBSR) program. This study examined the effects of the MBSR program using a mixed methods research approach. Due to the limited knowledge of this intervention in social work settings, this study combined quantitative and qualitative methods in an exploratory effort to assess the effects of the program in various areas of human functioning.

Purpose of the Study

The mindfulness based stress reduction program (MBSR) was developed by Jon Kabat-Zinn (1990) at the Stress Reduction Clinic of the University of Massachusetts' Medical Center. It is an eight week program which utilizes techniques such as hatha yoga, body scans, and mindfulness meditation to reduce stress and improve awareness. The purpose of this study was to examine the effects of the MBSR program in a broad range of areas of functioning from a mixed methods approach.

This study used an equivalent status design with parallel/simultaneous quantitative and qualitative components (Tashakkori & Teddlie, 1998). This design, used in mixed methods research projects, includes both a quantitative and a

qualitative phase of research, which are conducted simultaneously during overlapping time periods. The qualitative and quantitative phases of research have distinct methods of data collection and data analysis.

The quantitative research phase examined the following four research questions:

1. Do participants of the MBSR program experience improvements in depression after completion of the program?
2. Do participants of the MBSR program experience improvements in general health after completion of the program?
3. Do participants of the MBSR program experience improvements in emotional well-being and physical functioning after completion of the program?
4. Do participants of the MBSR program experience changes in social functioning after completion of the program?

The research design used during the quantitative phase is a pre-experimental pre-test post-test design with multiple treatment groups (Campbell & Stanley, 1963). The pre-test and post-test data is archival data, previously collected by the Mind Body Institute. Data was collected using two measures, The Beck Depression Inventory and The Rand 36-Item Health Survey 1.0. Basic descriptive statistics were applied to demographic variables and inferential statistics were used to compare pre-test and post-test means.

During the qualitative phase of the study, the research questions changed over time. Initially, there were two research questions; do participants of the MBSR program experience improvements in psychological, emotional and physical well-being after completion of the program, and do participants of the MBSR program experience changes in social relationships and spiritual beliefs after completion of the program. However, as the data were collected a pattern emerged, in that the data did not respond directly to these particular questions. Therefore, these two initial research questions were combined into one more general question, how does the MBSR program impact people?

The data collection methods used during the qualitative phase were focusing and bounding data (Miles & Huberman, 1994), nonprobability sampling procedures, and semi-structured in-depth interviews. The qualitative data were analyzed using a phenomenological approach. The specific method used was the modification of the van Kaam method of phenomenological analysis outlined by Moustakas (1994). This process is an intricate seven step process used to extrapolate meaning from text, which was applied individually to each of the 16 interviews conducted during the qualitative data collection phase. One composite description is then constructed, which identifies primary meanings within the data.

This combination of quantitative and qualitative research approaches provided for the opportunity to explore the effects of the MBSR program in various areas of functioning in a more comprehensive manner than if conducted separately.

CHAPTER 2

LITERATURE REVIEW

Mindfulness-based stress reduction programs have been used to treat a variety of problems in a variety of fields, however the construct of mindfulness has only recently begun to be scientifically examined in the research literature. Hayes and Wilson (2003) describe mindfulness as a pre-scientific concept: Scientific definitions of mindfulness exist, however many questions remain about how and why mindfulness effects change in individuals.

There exist several mindfulness interventions; however this chapter reviews only the literature regarding the Mindfulness-Based Stress Reduction program. The current MBSR literature is limited to outcome studies found primarily within the fields of medicine, psychology, and community health. The field of social work has yet to research the MBSR intervention. This chapter examines the peer-reviewed research articles about the MBSR intervention found in the fields of medicine, psychology, and community health, and examines the potential uses of the MBSR program for the field of social work.

Medicine

In the medical field, MBSR programs have been successfully used with a variety of patients suffering from various ailments. In the area of cancer research, Carlson, Speca, Patel and Goodey (2003) conducted a pre-post intervention study with 59 early stage breast and prostate cancer patients. The findings indicated significant changes in quality of life scores, symptoms of stress scores, and sleep quality scores in the subjects. Speca, Carlson, Goodey & Angen (2000) conducted a randomized wait-list control trial with 90 outpatients diagnosed with various types and stages of cancer. The intervention used was a 7-week meditation program modeled after Kabat-Zinn's (1990) MBSR program. The findings indicated that the treatment group experienced a 65% reduction in total mood disturbances and a 31% reduction in symptoms of stress. The depression, anxiety, anger and confusion subscales on the Total Mood Disturbances scale were significantly lower for the treatment group when compared to the control group. The treatment group also experienced significant decreases in stress in the areas of cardiopulmonary and gastrointestinal symptoms, emotional irritability, and habitual patterns of stress. In 2001, Carlson, Ursuliak, Goodey, Angen & Speca performed a follow up study on the original research and the findings indicated that the

improvements in stress and mood were maintained at a six-month follow up.

Massion, Teas, Herbert, Wertheimer, & Kabat-Zinn (1995) investigated the effects of mindfulness meditation on physiological levels of melatonin. This study hypothesized that increased levels of melatonin are associated with regular practice of mindfulness meditation. A cross sectional design was used along with a treatment group (n=8) of regular (5-7 sessions a week) meditators and a control group (n=8) of non-meditators. Melatonin levels were measured through analysis of urine samples. The results indicated support for the hypothesis, suggesting that the practice of mindfulness meditation is associated with higher levels of melatonin. The authors indicated that this is an important finding because of the potential for melatonin to maintain health and prevent diseases, such as cancer.

In a recent study by Davidson et al. (2003), which utilized a randomized controlled design, the brain electrical activity and level of antibody titers were measured on a treatment group with 25 subjects and on a control group with 16 subjects. The left-sided anterior activation was significantly increased for the control group, which indicates enhanced immune function. In addition, the treatment group subjects showed a significantly greater level of antibody titers in response to receiving an

influenza vaccine, which indicates a more positive response to the vaccination.

MBSR programs have also been used in the treatment of chronic pain. Kaplan, Goldenberg, & Galvin-Nadeau (1993) evaluated the impact of a 10-week MBSR program on fibromyalgia using a pre-test post-test design with 77 subjects, all diagnosed with fibromyalgia. Results indicated that 51% of the subjects experienced a 25% significant improvement in at least half of the outcomes and another 19% experienced a 50% significant improvement in at least half of the outcome measures. Outcomes assessed included psychiatric symptomatology (SCID & SCL-90R), physical functioning (FIQ, FAG & visual analogs) and coping strategies (CSG). Kabat-Zinn, Lipworth & Burney (1985) studied the effects of a 10-week MBSR program with 90 outpatients suffering from various types of chronic pain, the majority of whom had received previous unsuccessful conventional treatments for the pain. A pre-test post-test design was used and the physical, affective and psychological aspects of pain were measured. Results indicated a 58% statistically significant reduction in pain intensity, a 30% reduction in functional impairment, and a 55% statistically significant reduction in mood disturbance. Follow up data indicated maintained improvements in all areas except pain intensity.

Two studies have been conducted using the MBSR intervention with medical students. Shapiro, Schwartz & Bonner (1998) used a matched wait-list control design in which 78 pre-medical and medical students were assigned either to a wait-list control group or a 7 week MBSR program. Three areas of functioning were assessed; psychological symptomatology, including depression and anxiety, empathy, and spiritual experience/feelings. Significant differences were found in all areas assessed between the control and treatment groups at post-intervention. Hoffman, Goldberg, Bockian, Broadwell, & Palmieri (1998) used a mixed method design evaluating a four week MBSR program with 35 medical residents. Pre and post test data were collected from a treatment group and a control group to assess empathy and self-esteem. In addition, 7 semi-structured interviews were randomly conducted with treatment group participants. Findings indicated improvements in both empathy and self-esteem in the treatment group. In addition, 5 of the 7 interviewees reported increased ability to listen to patients and decreased personal stress.

Other areas of medical research in which MBSR interventions have been shown to be effective include heart disease and dermatology. Tacon, McComb, Caldera, & Randolph (2003) conducted a pilot study with 20 female subjects diagnosed with heart disease. Subjects were assigned to either a wait-list control group or a treatment group, which underwent an 8 week MBSR

program. Anxiety, emotional control, coping styles and health locus of control were assessed and the treatment group resulted in significant statistical differences in all areas except locus of control. Kabat-Zinn et al. (1998) evaluated the effects of mindfulness meditation instructional tapes with a patient population diagnosed with moderate to severe psoriasis. 37 subjects were randomly assigned to either the treatment group or a control group. Both groups were undergoing traditional phototherapy or photochemotherapy for the treatment of psoriasis. Findings indicated that the rate of reduction of psoriatic lesions in the treatment group was significantly more rapid than the rate of healing in the control group. Measures of psychological functioning were also assessed via the SCL-90-R and the State-Trait Anxiety Inventory, however no differences were reported between pre-intervention and post-intervention in either the treatment or control groups.

Three studies have been conducted on heterogeneous patient populations rather than targeting a specific illness. Reibel, Greeson, Branard, and Rosenzweig (2001) examined the effects of an 8-week MBSR program on 136 patients with various medical conditions. They assessed patient functioning in the areas of physical functioning, emotional well-being and psychological distress using a pre-test post-test design with a one year follow-up. Results indicated significant improvements in

physical and emotional well-being, a 28% reduction in physical symptoms and a 38% overall reduction in psychological distress. No significant differences were found in comparing the one-year follow-up data with the post-intervention data, suggesting improvements were maintained. In addition, 91% of the follow-up sample reported that they continued to practice meditation approximately five times per week. Majumdar, Grossman, Dietz-Waschkowski, Kersig & Walach (2002) conducted an outcome evaluation in a German sample of 21 patients diagnosed with various types of chronic, psychological or psychosomatic illnesses. A pre-test post-test design with a 3-month follow-up was used to assess the effects of an 8-week MBSR program on emotional and physical well-being, psychological distress and life satisfaction. Results indicated that changes of moderate to large effect size were revealed in all areas of functioning assessed.

Roth (1997) evaluated an 8-week MBSR program in a sample of 21 English speaking and 51 Spanish speaking patients in an inner city environment. Using a pre-test post-test design to assess physical symptoms, self-esteem, anxiety and overall psychological distress, results indicated improvements in both the English and Spanish speaking subjects. Findings revealed a significant change in psychological distress, self-esteem and medical symptoms in the English speaking subjects and a

significant change in anxiety, self-esteem and medical symptoms in the Spanish speaking subjects. Roth and Stanley (2002) used the sample of English and Spanish speaking subjects in the above study to examine the healthcare utilization rates one year before the MBSR intervention and one year after the MBSR intervention. The findings indicated a statistically significant decrease of chronic care visits in the sample of 47 subjects. These two studies indicate the need to further study MBSR in various cultural populations as well as examine the cost-benefits of mindfulness interventions.

In the area of medical research MBSR interventions have shown promise for the treatment and management of cancer, pain, psoriasis and heart disease. The literature also reveals benefits of mindfulness interventions in the education of medical students and with heterogeneous patient populations. Many social workers are employed in medical settings and work with people with the above ailments. Integrating mindfulness interventions into the practice of social work may be beneficial for medical social workers, oncology social workers, social workers employed at pain clinics, and hospice social workers. Mindfulness interventions were also found to increase empathy in medical students. Empathy is a skill of vital importance in the field of social work and thus social work educators may also

benefit from integrating mindfulness techniques into the training of social work students.

Psychology

The field of psychology has investigated mindfulness interventions for the treatment of depression, anxiety, and eating disorders, and several research studies advocate for the integration of mindfulness and psychotherapy. Teasdale, Segal, Williams, Ridgeway, Soulsby, and Lau (2000) evaluated the efficacy of mindfulness-based cognitive therapy (MBCT) for the treatment of recurrent depression. This study involved 145 subjects, in recovery from a depressive episode, were randomly assigned to either a control group, undergoing treatment as usual, or a treatment group, undergoing MBCT. Assessment measures used were the Structured Clinical Interview for DSM-IV, the Hamilton Rating Scale: Depression, and the Beck Depression Inventory. Findings indicated that for subjects with 3 or more previous depressive episodes, the rate of relapse declined by 50%, however no decrease occurred for patients with only 2 previous depressive episodes. These results are further confirmed by Mason and Hargreves's (2001) qualitative study of MBCT for depression. The authors interviewed seven participants of an MBCT group treatment program using an open ended semi-structured interview style, guided by grounded theory. Findings

suggested that MBCT provides patients with useful tools for managing and coping with distress and recurrent depression.

Kabat-Zinn et al. (1992) studied the effectiveness of a MBSR program in the treatment of anxiety, using a pre-test post-test repeated measures design including a three month follow-up, with 24 patients diagnosed with either a generalized anxiety disorder, panic disorder without agoraphobia, or panic disorder with agoraphobia. Findings indicated statistically significant reductions in anxiety from pre-test to post-test as measured by clinician ratings and self ratings, the Fear Survey Schedule, and the Mobility Inventory for Agoraphobia. Miller, Fletcher & Kabat-Zinn (1995) conducted a 3-year follow-up of the above research study. Follow-up data was collected on 18 of the 24 subjects. The same outcome measures were used and no significant changes were found from post-treatment to follow up. Patients, therefore, maintained their improvements for three years.

Kristeller and Hallett (1999) found that a 6-week MBSR group was successful in reducing binges in 18 women diagnosed with a binge eating disorder. A pre-test post-test repeated measures design was used and significant reductions were revealed in anxiety and depression.

Although the above research studies have been conducted in the recent past, the psychology literature has been advocating for the use of mindfulness meditation in psychotherapy since the

1970s. Deatherage (1975) suggested that mindfulness meditation could be useful in helping non-psychotic psychiatric patients improve insight and facilitate therapeutic understanding of their illness. In this study five adults were individually taught mindfulness meditation techniques for a period of 2-12 weeks. All five subjects experienced improvements in insight, thus enhancing the process of psychotherapy. Kutz, Leserman, Dorrington, Morrison, Borysenko, and Benson (1985) assessed the efficacy of a 10-week mindfulness meditation program on 20 subjects who had been engaged in private psychotherapy for a period of 1 to 10 years. The subjects were diagnosed with a variety of psychological disorders, excluding psychotic disorders. A pre-test post-test design with a 6 month follow-up was used. Statistically significant results were yielded on the SCL-90-R Global Severity Index as well as on the Profile of Mood States Inventory. Follow-up data indicated that improvements in all areas were maintained six months post intervention.

These studies suggest that mindfulness meditation interventions are useful in the treatment of patients with psychological disorders. Social workers comprise the largest portion of professionals in the field of mental health. Clinical and psychiatric social workers should investigate the potential benefits of mindfulness interventions for use in social work settings.

Community Health

The above literature provides evidence for the use of mindfulness interventions in clinical populations, but there also exist literature that indicates benefits of using mindfulness programs in non-clinical samples. Astin (1997) used a randomized wait-list control design with a sample of 28 undergraduate students to determine the effects on psychological distress, sense of control and spirituality. Results indicated that the treatment group experienced a 64% decrease in psychological distress, significant changes in overall sense of control, and a significant improvement in spiritual experiences with comparison to the control group.

Williams, Kolar, Reger, & Pearson (2002) used a randomized control design to evaluate the efficacy of a wellness-based mindfulness stress reduction program. 103 subjects were recruited from radio and newspapers advertisements in Morganton, West Virginia. The Daily Stress Inventory, the SCL-90-R, and the Medical Symptoms Checklist were used to assess daily hassles, psychological distress, and medical symptoms. Results revealed that the treatment group decreased daily hassles by 24% in comparison to the control which also showed a decrease of 7%. Overall psychological distress was decreased by 44% in the treatment group and medical symptoms decreased by 46% in the

treatment group as compared to an increase in medical symptoms of .42% in the control group.

Relevance to Social Work

The peer-reviewed research articles examined above in the areas of medicine, psychology, and community health indicate that use of the MBSR intervention may have positive outcomes for a wide range of individuals suffering from a range of disorders and stressors. Social workers are employed in each of these areas as medical social workers, clinical social workers and community social workers, yet no outcome research has been conducted specifically for the field of social work by social workers.

This dissertation is an evaluation of an 8-week MBSR program on a non-clinical community sample, which will contribute to the social work research literature in the area of mindfulness interventions and evidence based practice. The purpose of this study was to examine the effects of an MBSR program using a mixed methods design.

CHAPTER 3

CONCEPTUAL FRAMEWORK

Mindfulness is a construct which grew out of the philosophy of Buddhism. Buddhism has been characterized in a variety of ways such as a religion, a philosophy, a way of life, and a code of ethics (Keown, 1996). Buddhism can be one of these, all of these, or none of these descriptions, depending on the intention behind the practice. One thing that Buddhism is definitely not, is a theory of human behavior. Traditionally, social science dissertations are conceptualized or grounded within a particular theory of human behavior and research ultimately confirms or refutes the assumptions of the underlying theory. As with many complimentary medical interventions, the MBSR program was not developed from a theory of human behavior. Its foundation and rationale are derived from a complex philosophical perspective.

Teasdale, Segal, Williams, Ridgeway, Soulsby, & Lau (2000) developed an intervention similar to the MBSR program, called the Mindfulness-Based Cognitive Therapy (MBCT) program. The foundation and rationale of the MBCT program is explained by these authors within the context of cognitive theory. The MBCT intervention is aimed specifically at treating the clinical disorder of recurrent depression.

As illustrated in the literature review, the MBSR program has been utilized with a variety of clinical and non-clinical populations. The MBSR program (unlike the MBCT program) is not designed as a treatment for any specific disorder. This is a result of the MBSR program being grounded in a philosophical perspective rather than a theory of human behavior. This unique position may have important implications in the areas of problem definition and treatment solutions (Hayes & Wilson, 2003). It is therefore necessary to examine the philosophy of Buddhism as the theoretical foundation of the MBSR intervention.

Buddhism

Buddhism first arose as a religion in the fifth century B.C. in India with the birth and life of one man named Siddhartha Gautama. Gautama was born to a wealthy family in Kosala, Northern India but he chose to renounce his aristocratic life and instead dedicate his life to a quest for spiritual awakening. He traveled throughout the countryside of India with no possessions searching for spiritual awakening and was finally able to attain enlightenment or nirvana through deep meditation. This moment of enlightenment was said to have taken place as Gautama sat under a Bodhi tree in a meditative state for over four weeks. It was during this time that Gautama realized what were later referred to as the Four Noble Truths and his identity changed to Gautama Buddha. (Mitchell, 2002).

The Four Noble Truths are insights about the existence and meaning of life, which are necessary to realize before one can reach a state of enlightenment. The Four Noble Truths are translated in various ways, but can be described as follows; the truth of suffering, the truth of the cause of suffering, the truth of the extinction of suffering, and the truth of the path to the extinction of suffering (Mizuno, 1996).

The first truth, that of suffering, states that physical and mental suffering, such as old age, illness, fear or sadness are inevitable elements of life. The cause of suffering, the second truth, suggests that suffering is caused by human desires, cravings and attachments. The third truth is that it is possible to end suffering, through releasing cravings and desires and through the process of nonattachment. The fourth and final truth is that there exists a path or a Way, described as a set of practices that aide in the process of the extinction of suffering.

This set of practices was developed by Buddha to assist his disciples in attaining the Four Noble Truths and it is known as the Eightfold Path. The Eightfold Path is a way of thinking, acting, and living characterized by the following eight steps; right understanding, right thought, right speech, right action, right livelihood, right effort, right mindfulness, and right

concentration. Each step has specific methods by which to achieve that particular state of mind.

In the eighth step, that of right concentration, the concept of mindfulness is discussed. The state of right concentration is attained through two specific meditation practices, tranquility meditation (samatha) and insight meditation (vipassana) (Mitchell, 2002). It is here within the practice of insight meditation that the concept of mindfulness emerged.

Theravada Buddhism and Insight Meditation

After Gautama Buddha's death, his disciples gathered together, in what are known as council meetings, to record the teachings of the Buddha. During these meetings debates arose regarding particular aspects of the teachings of Buddha and thus different variations of Buddhism arose. In approximately 250 B.C. the King of Sri Lanka, Asoka, called the third council meeting and a variation of Buddhism known as Theravada Buddhism arose from this meeting. Theravada Buddhism quickly spread throughout India, Sri Lanka and Southeast Asia and has remained one of the major branches of Buddhism today (Mitchell, 2002).

In the sixteenth through the eighteenth centuries Portuguese and Dutch colonists occupied Sri Lanka and thus introduced Europeans to the philosophy of Theravada Buddhism. In the late 1800s Theravada Buddhism was introduced to America in

the form of newspaper reports of events in the East. In the following hundred years Buddhist texts were translated into English and Buddhist organizations began to arise (Reat, 1994).

In the twentieth century, immigrants from Sri Lanka, Thailand, Cambodia and other Southeast Asian regions settled in the United States and established Theravada Buddhist temples. Americans grew interested in Buddhist practices and many temples began to offer laypersons training in meditation techniques. The primary meditation technique taught to Americans was insight meditation, a practice originally suggested by Gautama Buddha to cultivate right concentration. By the 1970s an insight meditation movement had begun, in which the practice of insight meditation, also referred to as mindfulness, was encouraged as a relaxation and concentration technique without the dogma of the Buddhist religion (Mitchell, 202). Therefore, although insight meditation continues today to be an intricate part of the Buddhist religion, it is also practiced by many non-Buddhist persons to cultivate peace of mind, health, vitality and happiness. This non-religious practice of insight meditation, also known as mindfulness is the basis upon which the mindfulness based stress reduction program is founded.

Mindfulness

In 1979, Jon Kabat-Zinn founded the Stress Reduction Clinic at the University of Massachusetts Medical Center. He personally

developed the Mindfulness Based Stress Reduction Program which has been offered to patients at the Stress Reduction Clinic for the past 24 years. Over 13,000 people have completed the MBSR program at the Stress Reduction Clinic (Healy, 2001) and there are over 240 other hospitals or clinics around the country who presently offer MBSR courses (Kabat-Zinn, 1997).

Kabat-Zinn (1994) describes mindfulness as, "... a practical way to be more in touch with the fullness of your being through a systematic process of self-observation, self-inquiry, and mindful action" (p. 6). Mindfulness is about paying attention to the present moment and cultivating a peaceful mindset about the present moment. It is a meditation practice which enables one to be more aware of their thoughts, feelings and bodily sensations and teaches how to approach our thoughts, feelings and sensations without judgment. Mindfulness is a state of mind achieved through repeated practice and results in greater awareness, clarity of thought, peaceful emotional states and acceptance of physical reality.

Mindfulness Based Stress Reduction Program

The mindfulness based stress reduction program evaluated in this dissertation and implemented by the Mind Body Institute is modeled after the MBSR program offered at the Stress Reduction Clinic, University of Massachusetts Medical Center. It is an eight week program meeting once per week for two and a half

hours each session. The course is directed by an instructor, who has received professional training from Kabat-Zinn and Santorelli at the Stress Reduction Clinic. Participants of the program receive a manual with general course information and compliance tracking sheets, the book, *Full Catastrophe Living* by Jon Kabat-Zinn (1990), and two mindfulness meditation practice tapes including a guided body scan, two guided hatha yoga sessions, and a guided sitting meditation. These materials are available from the Stress Reduction Clinic, University of Massachusetts Medical Center. The group sessions are comprised of instructional/educational information, group discussions, and experiential practice of various mindfulness techniques including breathing, meditation, body scans, and hatha yoga. Participants are asked to make a commitment to practice these techniques at least six days per week for 45 minutes per day. The purpose of the MBSR program is to reduce the stress and tension associated with everyday life by bringing about a shift in perspective that changes one's focus from stress and negativity to enjoyment, appreciation and peace of mind. The connection between mind and body is emphasized and presented as a coping skill to empower individuals to gain control over their thoughts, emotions and physical sensations through gaining insight into the interconnectedness of life. Therefore, rather than strive to reduce particular symptoms or heal specific

disorders, the goal of the program is to alter a person's relationship with disorders, symptoms, thoughts, emotions and bodily sensations that may occur within the context of various areas of human functioning. This dissertation, using both qualitative and quantitative methods, identifies areas of functioning in which the MBSR program at Athens Regional Medical Center is effective in producing change and uncovers the process by which that change occurs in individuals that completed the course.

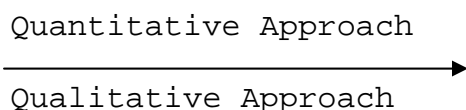
CHAPTER 4

METHODS

This study uses a mixed method approach, combining both qualitative and quantitative methods. This chapter reviews the specific methodological components used including the research design, the research questions and hypotheses, the outcome measures, the data collection plan and the data analysis plan. Descriptions of these components are provided along with a rationale for their use. The University of Georgia's Human Subjects Institutional Review Board reviewed and granted permission for data collection beginning in May, 2003 and extending through May, 2005. In addition, the Athens Regional Medical Center Institutional Review Board also reviewed and granted permission for this dissertation project.

Mixed Method Research Design

The overall methodological approach guiding this study is an equivalent status design with parallel/simultaneous quantitative and qualitative components (Tashakkori & Teddlie, 1998). This design can be visually represented as follows;



In the above design, the quantitative and qualitative phases are conducted during overlapping time periods and both approaches are used about equally to investigate the research problem (Tashakkori & Teddlie, 1998).

Although the underlying scientific philosophies of quantitative and qualitative approaches vary in their underlying assumptions, many authors have argued that they can be appropriately combined within one research project (Datta, 1994; House, 1994; Howe, 1998; Brewer & Hunter, 1989; Reichardt & Rallis 1994; Firestone, 1987; Sieber, 1973). A research project examining 57 mixed methods evaluation designs conducted by Green, Caracelli, & Graham (1989) also concluded that it is advantageous to combine quantitative and qualitative approaches throughout the research process.

The quantitative research approach of this dissertation is detailed below, beginning with the research questions and hypotheses, moving on to the design, outcome measures, data collection process, and ending with the data analysis process. Then, the qualitative research approach is discussed, including the research questions, the data collection process and the data analysis process.

Quantitative Research Methods

Research Questions and Hypotheses

The conceptualization of the quantitative approach includes four research questions and five corresponding hypotheses. The following is a list of the research questions (RQ) along with the hypothesis (H) that is linked to that particular question.

RQ 1: Do participants of the MBSR program experience improvements in depression after completion of the program?

H 1: Participants of the MBSR program will experience decreased depression, as assessed by the Beck Depression Inventory, administered at program intake and at program discharge.

RQ 2: Do participants of the MBSR program experience improvements in general health after completion of the program?

H 2: Participants of the MBSR program will experience improvements in general health, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge.

RQ 3: Do participants of the MBSR program experience improvements in emotional well-being and physical functioning after completion of the program?

H 3: Participants of the MBSR program will experience improvements in emotional well-being, as assessed by the

Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge.

H 4: Participants of the MBSR program will experience improvements in physical functioning, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge.

RQ 4: Do participants of the MBSR program experience improvements in social functioning after completion of the program?

H 5: Participants of the MBSR program will experience improvements in social functioning, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge.

Quantitative Research Design

The design used for the quantitative component of this study is a pre-experimental pre-test post-test design with multiple treatment groups (Campbell & Stanley, 1963). This design can be represented by the following diagram:

Y1	O1	X	O2
Y2		O1	X O2
Y3		O1	X O2
Y4		O1	X O2
Y5		O1	X O2
Y6		O1	X O2

The pre-test and post-test data is archival data, previously collected by the Mind Body Institute for the purpose of program evaluation. The above design is appropriate for use in the practice setting of the Mind Body Institute. The intervention is taking place regardless of any efforts to assess it and therefore, a pre-experimental design is an adequate design to use to introduce research protocol in a practice setting. Although the use of this design is justified, it is not without limitations.

Internal validity is compromised with the use of this pre-test post-test design, specifically in the areas of history, maturation, testing effect, and regression towards the mean (Campbell & Stanley, 1963). The results, therefore, will be interpreted with caution because any changes on the dependent variables cannot confidently be attributed to the MBSR intervention. Due to the nature of the practice setting, these threats to internal validity could not be eliminated. External validity is also compromised with the use of this design in the areas of reactive effects of testing and unrepresentative samples.

Although the above limitations to internal and external validity are a reality, the context of the setting must be considered. The Mind Body Institute is in the formative stage of development and the use of randomization and control groups was

not appropriate at the time. Due to ethical considerations and limited resources the pre-test post-test design was the appropriate design for the setting at the time. The results will be useful to the future development of programs at the Mind Body Institute. In addition, this research in the field of social work is in the exploratory stage, and therefore tentative results need to be examined before committing the resources to conduct better controlled research designs.

Outcome Measures

There are two outcome measures used in this study, the Beck Depression Inventory and The Rand 36-Item Health Survey 1.0. The following is a review of the psychometric properties of both measures. The outcome measures are intended to assess subjects' functioning within the areas of depression and general health. Please refer to Appendix A and B for copies of the outcome measures.

Beck Depression Inventory (BDI)

The Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a 21-item self report instrument used to measure depression. The BDI is a summated scale with scores ranging from 0 to 63. Higher scores indicate a greater severity of depression. The internal consistency reliability of the BDI calculated by Cronbach's Alpha is .93 (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Groth-Marnat (1990) reported that the

test-retest reliability of the BDI alternates depending on length of time between tests, ranging from .46 to .86. A 13-item short form was created and used to conduct a parallel-form reliability test with the BDI. These correlations ranged from .89 to .97, which indicates high parallel-forms reliability (Beck, Rial, Rickells, 1974).

Beck, Ward, Mendelson, Mock, & Erbaugh, (1961) report high content validity as assessed by clinician analyses. Groth-Marnat (1990) confirms the content validity of the BDI, stating that items were consistent with the Diagnostic and Statistic Manual-III diagnosis for depression. Concurrent validity is also established as moderate with comparison to the Hamilton Psychiatric Rating Scale for Depression (.73), the Zung Self Reported Depression Scale (.76), and the MMPI Depression Scale (.76) (Groth-Marnat, 1990). The BDI has also been found to discriminate between clinical and non-clinical populations. The BDI has been used in previous MBSR research.

Rand 36-Item Health Survey 1.0 (Rand-36)

The Rand-36 is one of several health related quality of life measures that was developed during the Medical Outcomes Study, a large scale observational research project which assessed patient outcomes within a variety of health care delivery systems (Stewart, et. al, 1992). The items on the Rand-36 are identical to the Short Form-36 (Ware & Sherbourne, 1992)

but the scoring procedures differ. The Rand-36 is a 36 item self report measure with eight subscales; general health, physical functioning, role limitations due to physical health, role limitations due to emotional health, emotional well-being, social functioning, pain, and energy/fatigue. Each item is scored from 0 to 100 points, with higher scores indicating a more favorable condition. Then, items within each subscale are averaged together to create a total score for each subscale.

Cronbach's Alpha was used to calculate the internal consistency of each individual subscale, which ranged from .78 to .93, thus the internal consistency is moderate to high. The measure has good content related validity as measured by face validity analysis. Both discriminate and convergent tests of validity were performed and support for construct validity has been established (Stewart et al., 1992).

Data Collection Process

The pre-test and post-test data used in this study are archival data previously collected by the Mind Body Institute. The first treatment group (Y1) included 26 participants at pre-test and concluded with 11 participants at post-test. The MBSR intervention for Y1 was implemented September 18, 02 through November 6, 02. The second MBSR course was conducted from October 17, 02 to December 12, 02 with a pre-test total of 15 participants and a post-test total of 8 participants in Y2. The

third treatment group (Y3) had a total of 21 pre-test participants and 11 post-test participants and the intervention took place February 6, 03 through April 4, 03. The fourth treatment group (Y4) was conducted between April 10, 03 and May 29, 03. In this group there were 15 pre-test participants and 8 post-test participants.

The fourth MBSR group is unique for several reasons. First it involved an additional theme of weight management. Issues related to body weight and eating habits were discussed within the context of the mindfulness concepts and exercises. Second, this group was conducted with an additional instructor. The second instructor was trained as a nutritional consultant and not as a mindfulness instructor. This additional instructor added educational information on nutrition and weight management issues. The fourth group is also unique because the researcher completed this group as a participant. Although the researcher did complete the pre-test and post-test outcome measures, that data is not included in this research project. The implications of these issues are further discussed in the discussion section of this dissertation.

The fifth MBSR course was conducted between July 24, 2003 and September 11, 2003. The fifth treatment group (Y5) had a total of 14 pre-test participants but unfortunately due to a problem with staff turnover, there are no post-test data

available for this group, although 8 people did complete the group. The sixth and final MBSR group (Y6) that was evaluated in this dissertation had a pre-test total of 11 participants and a post-test total of 5 participants and the intervention occurred between October 21, 03 and December 16, 03. Therefore, there are a total of 102 subjects for which pre-test data exist and a total of 43 subjects for which post-test data exist.

The subjects were asked to complete two assessment measures, the Beck Depression Inventory and the Rand 36-Item Health Survey 1.0 both at the pre-test (O1) and at the post-test (O2) observations. The Mind Body Institute previously recruited the participants for the above assessments and intervention from which the archival data in this research study is compiled.

There was minimal to no discomfort anticipated for the research subjects. The outcome measures were voluntary and thus the subject did not have to answer the questions. The results of participation are confidential and the data used by the researcher is aggregated. The names of the participants were replaced by a code in the data base. The identifying names have been kept separate from the data base. The data base has been stored in a secure location at the hospital and at the researcher's home. The researcher is the only person who has had access to the aggregated data for the purpose of data analysis. The researcher entered the aggregated data into the Statistical

Products and Service Solutions (SPSS) statistical package software version 10.00 for Windows.

Data Analysis Process

The SPSS software was used to conduct the quantitative analysis of the pre-test and post-test data compiled from the Beck Depression Inventory and the Rand 36-Item Health Survey 1.0. Hypotheses 1 through 5 were evaluated by applying the pre-test post-test paired t-test statistic. A one-way ANOVA was conducted to assure no differences were found at pre-test scores. Cohen's d statistic was used to evaluate the effect size and measure the impact of the statistically significant findings. In addition, an independent sample t-test was conducted to test for differences between genders in the post-test sample. Due to the nature of the archival data, the only demographic variable available was gender. Basic descriptive statistics were applied to the gender variable.

Qualitative Research Methods

Research Question

During the initial conceptualization of the qualitative research process the following two research questions emerged. The initial two qualitative research questions were; do participants of the MBSR program experience improvements in psychological, emotional and physical well-being after completion of the program, and do participants of the MBSR

program experience changes in social relationships and spiritual beliefs after completion of the program? However, as the researcher continued to gather interview data, the researcher noticed a pattern emerging, in that the data did not respond directly to these particular research questions. Therefore, the researcher changed stances, to include a wider view of the effects of mindfulness and the two research questions were combined into one, general research question, how does the MBSR program impact people?

The need to modify research questions during the qualitative research process is not uncommon. Miles and Huberman (1994) state that research questions "... may be refined or reformulated in the course of fieldwork" (p. 23). Padgett (1998) states "... qualitative research questions and designs are messy, flexible, and not always predictable [and research questions] may or may not change over the course of the study" (p. 28).

Data Collection Process

The data collection procedures for the qualitative research process involved three main components, focusing and bounding data, sampling procedures, and instrumentation procedures. The focusing and bounding of data involved identifying and defining the cases for study. Cases were defined as individuals who completed an MBSR course at the Mind Body Institute, Athens Regional Medical Center in Athens, Georgia between the dates of

September 18, 2002 and December 16, 2003. Only group participants who completed the entire 8 week course and were above the age of 18 were considered as participants for the qualitative component of this study. The focusing and bounding of data was ultimately guided by the conceptualization of this research project.

After the cases were defined and identified, sampling techniques were used to select subjects from within the entire sample. The entire qualitative sample consisted of 51 adults over the age of 18, who had completed the MBSR course at the Mind Body Institute between the dates of September 18, 2002 and December 16, 2003. Due to the requirements of the University of Georgia's Institutional Review Board as well as the requirements of the Athens Regional Medical Center's Institutional Review Board, the researcher was not allowed access to the names and addresses of course participants, and therefore, the researcher drafted a recruitment letter, which was mailed to the entire sample by hospital staff. Those course participants who received the letter and were interested in participating in the study were asked to contact the researcher directly for further instruction. Two rounds of recruitment letters were mailed out to course participants, one in October of 2003 and one in December of 2003. Please see appendix C for copies of these recruitment letters. A total of 12 people responded to the two

rounds of recruitment letters. These twelve subjects were therefore derived from the basic technique of purposive sampling. Although, purposive sampling methods are a form of non-probability sampling and thus have low external validity, they are appropriate for use in research on relatively new constructs, such as mindfulness (Bernard, 1994).

The researcher was not satisfied that a point of saturation was achieved with 12 subjects, therefore to gain access to additional subjects the tactic of snowball sampling was implemented. The coordinator of the MBSR programs at the Mind Body Institute agreed to contact several course participants whom she believed may be interested in participating in the study and she gave these participants the researcher's contact information so they could volunteer for the study if interested. An additional 4 subjects were derived from this method of snowball sampling. Bernard (1994) states, "snowball sampling is an effective way to build an exhaustive sampling frame" within small populations (p. 97). Although the researcher concluded that a point of saturation had been reached after 14 subjects, an additional two subjects were included in the project to ensure saturation. Therefore, a total of 16 subjects participated in the qualitative research process. These subjects were equally distributed across the six MBSR courses that were conducted within the dates of data collection.

The third component of the qualitative data collection process was the instrumentation process. The primary instrument used in the qualitative part of this study was a semi-structured interview guide (found in appendix D). As recommended by Lofland and Lofland (1995), the first page of the interview guide is a facesheet, used to record demographic information about the subject as well as information relating to the date, time and location of the interview. The interview guide is a semi-structured design, consisting of both close ended and open ended questions. There are 20 questions on the interview guide, which were derived from the holistic framework and conceptualization of this study as well as from the current literature on the topic of MBSR research.

After the volunteer subjects contacted the researcher, an interview time, date and location were agreed upon between the researcher and the subject. At the agreed upon meeting place, the researcher reviewed the interview procedures, including issues of confidentiality and consent, with the subject. At this point the subject was asked to sign the interview consent form approved by the University of Georgia's Institutional Review Board and the Athens Regional Medical Center's Institutional review board and one copy was given to the subject and another copy was retained by the researcher. Please see appendix E for a copy of the consent form. The interviews varied in length of

time to conduct, ranging from a minimum of 35 minutes to a maximum length of two hours. Fourteen of the sixteen interviews were audio-taped, however during one interview the audio recorder failed leaving a total of thirteen interviews recorded on audio-tape. The researcher hand recorded written notes during all sixteen interviews. One subject specifically requested not to be audio-taped and another subject insisted on the interview being conducted via the telephone. The researcher frequently used probing techniques during all 16 of the interviews as well as appropriate amounts of rapport building and joining. Such tactics are recommended for use in semi-structured interviewing by several qualitative experts (Miles & Huberman, 1994; Padgett, 1998; Wengraf, 2002).

Data Analysis Process

The process used to analyze the qualitative data in this dissertation begins with the transcription of interview data. The researcher transcribed each of the thirteen audio-taped interviews verbatim into word documents. The remaining three interviews were typed as word documents from the researchers hand written notes completed during the interview. It took an average of six hours to transcribe each interview.

A phenomenological analysis was used on the transcribed interview data. Moustakas (1994) describes the phenomenological analysis process as follows,

The aim is to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions general or universal meanings are derived, in other words the essences or structures of the experience. Phenomenological analysis is an interpretivistic method of data analysis appropriate for use in researching experiences that occur in real word settings (van Manen, 1990).

The specific method of phenomenological analysis used was the modification of the van Kaam method as outlined by Moustakas (1994). For each interview, the horizontalization process was used for listing and preliminary grouping. Next, the process of reduction and elimination was used to determine invariant constituents. Then, the invariant constituents were clustered and organized by theme and a final validity check was performed on the themes identified. The next step is to construct an individual textural description of the themes, followed by an individual structural description and a textural structural description. In each of these steps the data is extrapolated further and further until the essence of the experience is identified. The final step in this process is to create a composite description, which represents the entire group of participants interviewed and identifies the primary meanings within the data (Moustakas, 1994).

Trustworthiness

The qualitative research process used in this dissertation is subject to certain threats to the trustworthiness of the study. A number of strategies were employed to increase issues of trustworthiness in the areas of credibility, dependability, and confirmability (Lincoln & Guba, 1985). Credibility refers to the criteria for rigor involved in the research process and the accuracy of the findings. To ensure the credibility of this study, detailed descriptions of the research site and the interview sample are provided for the reader, rich and thick data descriptions are included in the analysis, and the extrapolation of themes and meanings follows a detailed and orderly process for each of the interviews conducted. In addition, the use of mixed methods provided for triangulation of findings, and the process of peer debriefing was utilized to ensure accurate interpretations of meanings.

Dependability refers to the extent to which the research can be replicated. Several authors suggest that detailed descriptions of the research process will increase the dependability of the study (Miles & Huberman, 1994; Padgett, 1998). In the current dissertation, the data collection process as well as the data analysis process was described in detail to ensure that the same methods could be reproduced by others. In

addition, a total of 16 subjects dispersed equally across the six treatment groups enhanced issues of dependability.

Confirmability refers to the reduction of bias within a study. The two types of bias that pose a threat to this study are researcher's biases and respondents' biases. To control for researcher bias, a clear and concise audit trail was developed and followed. In addition, the rigorous and detailed eight step phenomenological method of analysis reduced the amount of personal bias in the findings. As for respondents' biases, the researcher purposely explained to each of the participants that the intention of the researcher was to gather their subjective view of the process rather than to measure their knowledge of the concepts. Issues of confidentiality were also explained in detail in attempts to reduce respondent's biases.

Researcher Perspective

Although methods were employed to reduce the amount of researcher bias that existed in this dissertation, it is impossible to eliminate bias entirely. Therefore, the reader should be aware of the perspective of the researcher.

I have practiced various forms of yoga and meditation for over 10 years. My personal experience with meditation is with a form of transcendental meditation rooted in the practice of Kriya Yoga (Yogananda, 1998) based on Hindu philosophy. Although some similarities exist between transcendental meditation and

mindfulness meditation, I had no previous practice experience with mindfulness meditation prior to embarking on this research. I did participate in the fourth MBSR course taught at the Mind Body Institute and practiced the mindfulness techniques during that time period.

I am a licensed clinical social worker engaged in private practice as a therapist, working primarily with abuse and trauma survivors. During the past 5 years I have integrated various mind-body techniques, such as meditation, yoga, imagery, and hypnosis, into my clinical practice. I believe strongly in the mind-body connection and the framework of the holistic health perspective discussed in chapter one of this dissertation.

CHAPTER 5

FINDINGS

The purpose of this dissertation was to explore the effects of a mindfulness based stress reduction program using a mixed methods approach. In this chapter, the results of the quantitative research hypotheses are presented followed by the findings of the qualitative research procedures.

Quantitative Findings

Sample

Archival data was used from six treatment groups, which took place between September, 2002 and December, 2003. Due to the nature of the archival data, the only demographic information available is the gender of the participants. There were a total of 102 subjects enrolled across the six treatment groups, all of whom were at least 18 years of age. Table 1 displays the breakdown of gender within treatment groups.

Hypothesis 1

The first quantitative hypothesis is; participants of the MBSR program will experience decreased depression, as assessed by the Beck Depression Inventory, administered at program intake and at program discharge. A paired samples t-test was calculated to compare the pre-test mean depression score with the post-test

Table 1

The Distribution of Gender by Frequency and Percent within MBSRTreatment Groups

<u>MBSR Group</u>	<u>Males</u>	<u>Females</u>
Group #1	8 (31%)	18 (69%)
Group #2	2 (13%)	13 (87%)
Group #3	8 (38%)	13 (62%)
Group #4	2 (13%)	13 (87%)
Group #5	2 (14%)	12 (86%)
Group #6	1 (09%)	10 (91%)
Total	23 (23%)	79 (77%)

mean depression score. The mean of pre-test depression was 9.76 (SD = 7.91) and the mean for the post-test depression score was 6.20 (SD = 6.15). A statistically significant decrease from pre-test depression to post-test depression was found ($t = -4.19$, $df = 40$, $p = .000$).

The impact of statistical significance for the change in depression scores was analyzed using Cohen's d statistic. Results indicate a medium-large effect size ($d = 0.65$). Therefore, these results have both statistical and practical significance.

An independent sample t -test was also calculated comparing the mean score of change in depression for males to the mean

score of change in depression for females. No significant difference was found was found ($t = -1.24$, $p > .05$). The mean score of males ($X = 4.78$, $SD = 2.49$) was not significantly different from the mean score of females ($X = 6.59$, $SD = 6.81$).

Hypothesis 2

The second quantitative hypothesis is; participants of the MBSR program will experience improvements in general health, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge. A paired samples t-test was calculated to compare the pre-test mean general health score with the post-test mean general health score. The mean of pre-test general health was 63.48 ($SD = 20.71$) and the mean for the post-test general health score was 63.75 ($SD = 20.48$). A statistically significant increase from pre-test general health to post-test general health was found ($t = -0.98$, $df = 31$, $p = .000$), however Cohen's measure of effect size indicates an extremely small effect size ($d = .02$). Therefore, changes in general health lack practical significance.

An independent sample t-test was calculated comparing the mean score of change in general health for males to the mean score of change in general health for females. A significant difference was found ($t = -2.04$, $p = .05$). The mean score of males ($X = 52.5$, $SD = 22.2$) was statistically different from the mean score of females ($X = 68.5$, $SD = 18.5$).

Hypothesis 3

The third hypothesis is participants of the MBSR program will experience improvements in emotional well-being, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge. A paired samples t-test was calculated to compare the pre-test mean emotional well-being score with the post-test mean emotional well-being score. A statistically significant increase from the pre-test score to the post-test score was found ($t = -3.73$, $df = 35$, $p = .000$). The mean of pre-test emotional well-being was 66.33 ($SD = 19.77$) and the mean for the post-test emotional well being score was 74.89 ($SD = 13.58$). The effect size, computed by Cohen's d , indicated a medium effect size ($d = .62$). Therefore this hypothesis is supported in terms of both statistical and practical significance.

An independent t-test was also calculated to compare the mean score of change in emotional well-being for males to the mean score of change in emotional well-being for females. No significant difference was found ($t = -1.04$, $p > .05$). The mean score of males ($X = 70.5$, $SD = 14.65$) was not statistically different from the mean score of females ($X = 76.15$, $SD = 13.27$).

Hypothesis 4

The fourth quantitative hypothesis of this dissertation is; participants of the MBSR program will experience improvements

in physical functioning, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge. This hypothesis was tested by applying a paired samples t-test. The mean of pre-test physical functioning was 82.92 (SD= 19.91) and the mean for the post-test general health score was 84.17 (SD= 18.84). A statistically significant increase from pre-test general health to post-test general health was found ($t = -.660$, $df = 35$, $p = .000$), however Cohen's measure of effect size indicates only a small effect size ($d = .11$). Therefore, changes in physical functioning, although statistically significant, they lack practical significance.

An independent t-test was also calculated to compare the mean score of change in physical functioning for males to the mean score of change in physical functioning for females. No significant difference was found ($t = .035$, $p > .05$). The mean score of males ($X = 84.38$, $SD = 15.68$) was not statistically different from the mean score of females ($X = 84.11$, $SD = 19.91$).

Hypothesis 5

The final quantitative hypothesis of this study is; participants of the MBSR program will experience improvements in social functioning, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge. A paired samples t-test was calculated to compare the pre-test mean social functioning score with the post-test mean

social functioning score. The mean of pre-test social functioning was 72.79 (SD = 27.6) and the mean for the post-test social functioning score was 84.19 (SD = 18.54). A statistically significant increase from pre-test social functioning to post-test social functioning was found ($t = -2.692$, $df = 33$, $p = .004$).

The impact of statistical significance for the change in social functioning scores was analyzed using Cohen's d statistic. A medium effect size ($d = 0.46$) indicates these results have both statistical and practical significance.

An independent sample t -test was also calculated comparing the mean score of change in social functioning for males to the mean score of change in social functioning for females. No significant difference was found ($t = .223$, $p > .05$). The mean score of males ($X = 85.94$, $SD = 22.6$) was not significantly different from the mean score of females ($X = 84.26$, $SD = 17.54$).

Composite Results

Table 2 presents the results of the paired t -tests conducted on hypothesis one through five. The effect size, measured by Cohen's d statistic is also presented. Table 3 presents the results of independent t -tests applied to gender and the five dependent variable post-test scores.

Qualitative Findings

The findings for each individual interview are presented in this section. The data was analyzed using the modified van Kaam

Table 2

Differences Between Pre-Test Scores and Post-Test Scores on Five
Dependent Variables

Variable	Pre-Test Scores		Post-Test Scores		t	df	p	d
	M	SD	M	SD				
Depression	9.76	7.91	6.20	6.15	-4.19	40	=.000	.65
General Health	63.48	20.71	63.75	20.48	-.98	31	=.000	.02
Emotional Well Being	66.33	19.77	74.89	13.58	-3.73	35	=.000	.62
Physical Functioning	82.92	19.91	84.17	18.84	.660	35	=.000	.11
Social Functioning	72.79	27.6	84.19	18.54	-2.69	33	=.004	.46

method of phenomenological analysis as outlined by Moustakas (1994). The modified van Kaam analysis process involves seven through steps of the extrapolation of meanings from the interview text. The first step is listing and preliminary grouping. It is during this phase that the horizontalization process is conducted. The next step is reduction and elimination, during which invariant constituents are identified. The third step is clustering and thematizing the invariant constituents. The fourth step involves a final validity check of the invariant constituents and themes. The fifth step is the construction of individual textual descriptions, which are

Table 3

Independent t-test Scores Comparing Gender and Five Post-testVariables

Variable	Male		Female		t	p
	M	SD	M	SD		
Depression	4.78	2.49	6.59	6.81	-1.24	>.05
General Health	52.5	22.2	68.5	18.5	-2.04	=.05
Emotional Well Being	70.5	14.65	76.2	13.3	-1.04	>.05
Physical Functioning	84.34	15.68	84.1	19.9	.035	>.05
Social Functioning	85.94	22.6	84.26	17.54	.223	>.05

constructed from verbatim excerpts from the interview text. The data resulting from steps one through five are not presented within this dissertation because the information would risk identifying the interview participants. The data resulting from the later two steps of the analysis are presented.

For each participant, the individual structural description (step six) and the textural structural description (step seven) are presented. The individual structural description is the writer's initial narrative stage of extrapolation of meaning from the text. The textural structural description is the writer's final narrative stage of extrapolation of meaning and

includes the writer's interpretation of meaning. Pseudonyms are used to protect the identity of interview participants.

After these findings are presented for all 16 interview subjects, the composite demographic characteristics are reported followed by one composite description of the themes and meanings generated within the entire interview sample.

Interview Participant 1: Abby¹

Individual Structural Description. Abby had previous experience with meditation including the practice of mindfulness; however this was her first experience in an MBSR course. Abby describes mindfulness as "present moment awareness without judgment". She states mindfulness is beneficial "because it gives you the opportunity to experience life as it is happening rather than reacting to something that might have happened in the past or could happen in the future". She sees it as a way of living "life more fully" and being "less reactive". Mindfulness practices are a core part of this participant's daily life.

Abby reports that the course had positive effects on her relationships with others, especially her relationship with her husband and her relationships with colleagues. She states, "the most noticeable impact was on my relationship with my husband"

¹ All participant names are pseudonyms and data is limited to non-identifying information to ensure confidentiality.

because "I became less reactive to him". Abby also reports that she gained more compassion for her husband, which in turn enhanced their relationship. Regarding her relationships with colleagues, Abby reports she became less "defensive" and less "paranoid about people thinking negatively" of her. She states that she is now able to have a "more direct experience" of her interactions with coworkers because she is better able to "be present and listen" during interactions, rather than make assumptions about what others are thinking of her.

Abby also reports that mindfulness practices have enhanced her physical health. She states mindfulness has "helped me to keep my weight stable because of mindful eating. I eat when I'm hungry and I don't eat when I'm not hungry and I listen to what my body craves and I move when I feel like I need to move and I rest when I feel like I need to rest. Being tuned into my body in that way helps me stay overall pretty healthy."

The MBSR course also influenced Abby's psychological health in a positive way. Abby reports that she was "depressed" and "stressed out" at the beginning of the course, but by the end of the course she "felt better individually". She reports that her mood "was better", she felt more "hopeful" and she "developed compassion" for herself.

Abby states there is "a spiritual component inherent" in mindfulness and thus when she practices mindfulness on a regular

basis she feels "more of a sense of God". The course allowed her to feel like she was part of a "spiritual community", which she sees as a benefit of the course.

Abby also reports that she has used mindfulness techniques in the context of her profession, in working with people with mental health diagnoses. She states that the clients she worked with benefited greatly from the use of mindfulness techniques. She describes mindfulness as empowering for clients. She states, "I think it is empowering because you are giving people a skill that they can use anytime, anywhere, you don't need a gym, you don't need a pill, you don't need another person, it's just absolutely something you can do on your own anywhere and I think that is just a gift you can give to people". Abby states that mindfulness has helped her clients realize they have options for controlling their psychological states.

Textural Structural Description. The MBSR course influenced Abby in a variety of ways. Her overall quality of life was enhanced by present moment living. When she remains focused on the present, she is better able to experience the full range of interaction in each moment. She becomes less judgmental and makes fewer assumptions of what is occurring in social interactions and instead, she is better able to actively listen to others.

One of the main themes within her interview is the impact of mindfulness on her relationships. She became less reactive to others, which decreased conflict and increased her compassion and understanding. She was able to respond in social situations in a composed, controlled manner rather than to react in an intense or over emotional manner. She describes the respond verses react phenomenon occurring on a cognitive level, a behavioral level and an emotional level. She believes it affords one the opportunity to control their psychological states as well as their behaviors. This process is empowering because it provides people with accessible and inexpensive options for control over their own health.

Another theme within Abby's interview is the increased awareness of self that occurred for Abby as a result of practicing mindfulness techniques. She gained a heightened sense of awareness of her bodies physical needs. This gives her the opportunity to more accurately attend to her bodies needs, and thus acts to prevent or maintain her good health. She was also able to improve her mood over the course of the MBSR class by developing compassion and acceptance of her situation.

For Abby, mindfulness is a core component of her personal spiritual belief system. She feels the practice of mindfulness is a spiritual practice during which she feels closer to God.

The MBSR group environment allowed her to feel more connected to a "spiritual community".

Abby's overall experience with the MBSR group was a positive one. Her goals at the beginning of the group were to reduce her depression and anxiety and that did occur. In addition, it positively impacted her relationship with her husband and her colleagues. It enhanced her awareness and acceptance of self and strengthened her spiritual practice.

Interview Participant 2: Betsy

Individual Structural Description. Betsy reports this was her first experience with mindfulness. She took the course out of curiosity and hoped it would help her both personally and professionally. Betsy describes the core benefit of mindfulness as the focus on the present moment. Remaining focused on the present moment helps Betsy reduce her anxiety and appreciate her current environment and circumstances. She states that she is an "anxious" person who "worries a lot" and that she experiences "irrational thoughts" about her future. Betsy reports that mindfulness "helped me to concentrate on the present moment, to worry less and just leave the future and the past alone, and in that way it made my life better".

Mindfulness improved Betsy's relationships with her children and with the people she interacts with on a professional level. She reports that the concept of "respond, do

not react" influences her relationships in a positive manner. She states that mindfulness helps her to "think before I react" which makes her "less frustrated with my teenage son". When she begins to get frustrated she "takes a deep breath" and "listens" rather than "scream". She also states that she is less "defensive" in working with clients and coworkers. Betsy often works with people from different backgrounds and the mindfulness concepts help her "relate better to particular populations".

Betsy also reports that the practice of mindfulness helps people to learn about themselves. She states, "it is a technique that makes you aware of who you really are". She also reports that mindfulness gives you an opportunity to "separate yourself from stress". She states, "when you separate yourself from stress, then you can look at yourself and do something" about that stress. The stress in Betsy's life remains the same, but "the way I relate to stress and the way I handle it changed". Betsy reports that the "techniques learned from this class helped me beat depression" and they "make you feel better and make you stronger".

Textural Structural Description. Betsy's experience with the MBSR course was positive in several ways. The concept of remaining focused on the present moment helped Betsy to reduce her frequent worrying and to enjoy the individual moments of her

life. The practice of mindfulness allowed her to break her rapid cycle of anxiety provoking thoughts.

In addition, Betsy used the mindfulness techniques she learned in the course as coping skills to deal with the stress in her life. As a result of the course, she now has available to her, concrete things she can do during stressful situations, which help her better manage stress. She also gained a heightened awareness and understanding of herself.

Another benefit of the course for Betsy was the positive impact it had on her relationships with others. The concept of respond verses react significantly impacted Betsy's communication skills. She now responds to others in a clam manner, thinking and listening before she makes a reply. This improves her ability to improve rapport in both her personal and professional relationships.

Betsy reports she will continue to use the techniques she learned during the class and recommends the course to others. She believes mindfulness is a valuable concept for herself and others.

Interview Participant 3: Charlotte

Individual Structural Description. Charlotte was familiar with the book, *Full Catastrophe Living* and the audio tapes that accompany the book, but she had not previously taken an MBSR course. Her main reasons for taking the course were intellectual

curiosity and professional development. Charlotte described mindfulness as "a moment to moment awareness of where you are in your body and in your life". She views mindfulness as something that increases her awareness, gives her choices in life, and decreases the "franticness" of life. She reports that she is more aware of the decisions she makes and that mindfulness allows her to "take a step back from things and figure out what I can and what I can't do". Charlotte describes mindfulness as "empowering" because it gave her a method for "managing stress differently". She stated, "everything stressful in life is still there but I'm aware of my choices and once you realize that there are choices, it changes your attitude and you realize I could do this or that instead of feeling like something is imposed on you externally".

Charlotte also reports that mindfulness has had a "positive impact" on her "psychological well-being" because it improved her moods and reduced her anxiety level. She reports that the acts of "observing thoughts" and "paying attention to the body" help to "slow the mind", which lead to psychological and emotional health. She states that mindfulness helped her with her claustrophobia because it enabled her to "go behind" the claustrophobia and learn about herself.

Charlotte states that the practice of mindfulness enabled her to "let go of the business of the mind" and be more

"grounded". She tends to want to "fix everything and everybody", but mindfulness helps her to "let it be and accept it". She states for example in relationships, instead of "taking the bait, just being able to shrug my shoulders and say, that's not my issue and that's not something I need to worry about".

Mindfulness also "changed the way I relate to myself". Charlotte states that, "it's just a way to get in touch with who you are". She also reported that mindfulness is a way to be "more thoughtful about what you are doing and why you are doing it". In addition, the practice of mindfulness made Charlotte "more aware of God's presence. She reports she would recommend the class to anyone, especially "people who are dealing with anxiety and fear of the unknown".

Textural Structural Description. This participant gained several things from completing the MBSR course. Charlotte learned a new set of coping skills to deal with stressful life situations. These new skills influenced her behavioral and emotional responses to stress. Although the amount of stress in her life remained the same, she was able to integrate mindfulness techniques in her life that allowed her time to analyze situations and identify her options before acting. This process was empowering, increasing her confidence and improving her attitude about her ability to manage her stress.

Charlotte's self-awareness improved in the areas of cognitive processes and bodily sensations. These improvements in awareness lead to a more relaxed physical state, which reduced her anxiety and calmed her mind. This awareness also enabled her to more deeply examine her emotions and the emotional components of some of her behaviors, which resulted in personal revelations and self learning. Also in the area of awareness, Charlotte became more connected with her spiritual beliefs and felt the presence of God.

Another core benefit of mindfulness for Charlotte was that it aided in her process of acceptance. She was more readily able to accept people and situations, rather than feel a need to intervene and produce needed change. This process of acceptance reduced her need to control the people and events around her, which also reduced her mental stress.

Overall the course benefited Charlotte by providing her with new coping skills to heighten her awareness and learn more about herself. She plans on using these skills both in her professional and personal life.

Interview Participant 4: Deborah

Individual Structural Description. Deborah had no previous experience with mindfulness, nor had she taken a previous MBSR course. She states she took the course because she was "desperate". Her husband had recently been diagnosed with a

terminal illness and she was seeking something that could both help her cope with her emotional state, and help her and her husband battle his disease. Deborah described her situation upon entering the course by stating, "I'm a pretty problem solving, capable person, but I did not have the tools to deal with my husband dying. Nothing prepared me for that. When I looked to see what I was going to do there was emptiness".

Deborah began the interview by stating, the mindfulness course influenced me "significantly and it was something that saved me". Deborah reported that the class "ended up being a huge safety net" which provided an opportunity for her and her family to "get ourselves grounded again". She stated that the MBSR course "gave me the tools that I didn't have, that allowed me to not just cope, it allowed me to really move forward, progress". She further stated, "I am less afraid of the future because of everything that I learned and utilized and put into practice".

One of the major benefits of the course for Deborah was that it resulted in her gaining a sense of strength to personally cope with her husband's illness and also to assist her husband and children in coping with the crisis. Deborah reported that she "introduced" the mindfulness techniques to her husband and daughter. She stated, "I am able to give her the tools to help her talk herself down" during frantic situations.

In reference to helping her husband, Deborah stated that "I was able to give him positive self-talk strategies", which aided him in getting through pain, claustrophobia, seizures and radiation.

Deborah described mindfulness as a way of "recognizing that your mind controls a lot of body functions and that you control your mind and by teaching you how to slow down, see things, examine them, and make decisions about them, that can reduce a lot of stress that just comes with day to day living". She reports that mindfulness "brought everything to a conscious level" for her and thus she is better able to recognize pain and discomfort in her body and now has the tools to do something about that discomfort. She stated, "for example, my stomach is turning, I don't know that in the past I was even good at recognizing it was turning, much less how to get it to calm down, and this helped me to sort of recognize it and slow myself down enough to say what's going on, okay, let's think about that, why are you feeling that way, that's just anxiety, that's not real".

Deborah reports the class helped her to be "a less anxious person". She stated, "the most powerful thing that I learned for myself was you don't have to go down that path of anxiety, that's just thinking. All it is is thoughts, it's not reality and you can choose to sort of recognize that it's thoughts and get yourself off that path and onto a different one". She

further stated that, "I never thought about my thinking as being in my control and I never thought about my anxiety, as weird as this sounds, as just being anxiety, I thought it was real. I realized that I could act upon [my anxiety] in a constructive way and not just suppress it and chew on my jaw or let an ulcer form". Deborah learned to be more aware of her moods and emotions, which in turn helped her to make informed choices and better cope with those moods and emotions.

The MBSR course served as a safety and support network for Deborah in a time of crisis and gave her the tools to manage and cope with her emotions as well as the emotions and reactions of her family. She felt empowered by this and it gave her the strength and the confidence to handle the medical crisis her family was experiencing. It also provided her with the tools to "slow myself down," breathe and experience life for what it is. She stated, "it's okay to be still, and it's okay to be alone and it's okay to have quiet, that was another thing that was so valuable that I learned that changed my life".

Textural Structural Description. Deborah differs from the previous participants in regards to her motivation for taking the MBSR course. Deborah was dealing with a major medical crisis in her family. Her husband was diagnosed with a terminal illness only two months previous to her taking the course. Deborah was in a state of shock with limited skills to cope with the

possible death of her husband. The MBSR course provided Deborah with a set of coping skills to assist her and her family.

Among the coping skills Deborah gained were specific tactics such as breathing techniques and self talk strategies, as well as abstract concepts, such as realizing her thoughts are only thoughts. The tactics she learned helped her to regain her emotional and physical composure, focus on a particular course of action and move forward down that road, rather than remain in a continuous state of emotional helplessness. Deborah not only used these techniques for herself, but she taught her husband and children the techniques as well. This contributed to her feeling a great sense of empowerment. She was able to assist herself and her family in dealing with their crisis. Deborah gained a tremendous amount of personal strength from this experience.

The concepts Deborah learned also contributed to her sense of personal strength. By becoming more aware of the relationship between her thoughts and her behaviors, she was able to gain control over her responses to situations. She was also able to more quickly become aware of anxiety or physical discomfort and could then take steps to reduce that anxiety or pain from becoming as intense as it had in the past. Deborah realized that her past coping skills included avoidance and suppression techniques. Once she made this realization she also understood

that there was another option available to her, that of acceptance. She learned that through the process of acceptance, she could make better choices about her responses and thus be in more conscious control of her life.

The other major benefit Deborah gained from the MBSR course was the support group that resulted. By the very nature of the group context, the course became a source of human companionship and encouragement, which assisted Deborah in several ways. It became a safe place for Deborah to express her emotions. She also realized that she was not alone. She had the opportunity to meet other people that were struggling and coping with traumatic situations, which gave her a sense of hope and encouragement.

Deborah's perception of herself has undergone significant changes since completing this course. She has confidence in herself that she is able to manage any difficult situation that may occur in her future and she is thus less fearful of the future. Mindfulness has enabled Deborah to live her life with less anxiety, more awareness and greater self-control.

Interview Participant 5: Edith

Individual Structural Description. Edith has been practicing mindfulness meditation off and on for the past twenty years. She decided to take the course as a refresher to "re-introduce" herself to the concepts. Edith also struggles with a persistent auto-immune disorder which causes her continuous

physical pain and fatigue. She uses the mindfulness techniques and concepts to cope with her physical state.

During the interview, Edith stated that mindfulness "has made me stronger physically, spiritually and emotionally. Just being aware of the energy that flows through your body, being aware of your body" helps her to cope with her physical illness. She stated that in the past she had dealt with her pain by "trying to ignore" it. Mindfulness enables Edith to "be aware of that pain" and "deal with it instead of closing it off from yourself". The benefit of this is that it helps her to be "less fearful of that pain and more accepting of that pain" because she now understands that "my body is trying to tell me something and ignoring it is not going to get me better".

Edith states that "Western civilization and culture is under the illusion that if you feel uncomfortable or if you feel pain that you can take a pill and get rid of it". This is counter to her belief that pain and suffering is a normal part of the cycle of life. She reports that pain and suffering can have positive effects of teaching people to learn about themselves. She states that "suffering is what we do and what we experience and we can either take it to a higher place and be aware of it and what it does for us both good things and bad things or we can just ignore it and let it fester and continue to grow".

Edith reports that mindfulness is "empowering for those of us who have had an illness or continue to have an illness, or an addiction, or an emotional issue". Mindfulness has helped Edith "manage the chaos inside and around me" and thus helps her to "feel more in control" of her physical health. She states that mindfulness "is empowering, it makes me less fearful".

The concept of present moment living is important to Edith. She states that mindfulness is about "truly participating in each moment of your life, which is a very, very difficult thing to do". The benefit of being present, however is that it increases your joy and gives you the ability to make positive changes in your life. Edith states that "we spend our lives living too much in the past or in the future and I believe that we are doing ourselves a disservice by not enjoying or being where we are. There's just not a whole lot we can do about changing the past or the future but you can make a difference in the moment and I think we all tend to forget that".

Mindfulness also helps Edith to slow down her pace of life. She describes herself as a "very high energy, type A person" and mindfulness "works to calm me down". She reports that she uses the mindfulness techniques, such as breathing and grounding, to become more aware of stress and manage that stress. She states mindfulness "gives me the tools to take that stress and gives me an avenue of what to do with it, a productive means" of dealing

with it. Edith reports that this does not prevent stress from occurring in her life, but rather, assists her in coping with stress better. For example, she states "I feel like I've got the ability and the tools to bring myself back" from stressful situations.

Mindfulness has also helped Edith to be able to sit with her thoughts and emotions and separate out her judgments and fears from her experiences. She feels more confident to "sit with" negative emotions and learn from them or choose not to deal with it at that time. Therefore, she is no longer controlled by her fears, but rather, is more aware of "fear creeping into my thoughts" and the choices she has to deal with that process.

Another major benefit of mindfulness in Edith's life is the opportunity to learn about herself and others. She states, "a very, very big part of my practice is understanding myself, which makes it so I can understand others" as well. Mindfulness has helped Edith by "learning to be accepting and loving of myself and I think that comes out in my interactions with others" as well. She also reports that she is "much less judgmental, more compassionate, more kind and helpful to people" as a result of practicing mindfulness.

Edith also feels that mindfulness helps connect her to a higher power and be more aware of the fact that "we are all part

of something much greater than us". She reports that therefore, mindfulness is an integral part of her spiritual life. She states that "mindfulness has changed my life, the path, the journey of my life" and therefore it has become a part of her every day life.

Textural Structural Description. Edith has incorporated mindfulness concepts into her daily routine of living. She views mindfulness as a way of perceiving events and a method for learning about herself. Mindfulness has improved her awareness of physical sensations, thoughts, emotions and behaviors. Edith's previous methods of coping with negative feelings and painful bodily sensations were primarily avoidance and suppression. Through mindfulness, however, she learned another method of coping with suffering called acceptance. Acceptance enabled her to more fully experience her pain and suffering, rather than run from it. This shift in coping techniques provided Edith with a greater sense of strength and empowerment. She feels more in control of her options in dealing with pain and suffering, which leads her to be less fearful of that pain and enables her to experience it more fully. In this full experience of her pain she realized that she can learn positive things about herself and gain knowledge about the needs of her body.

Gaining knowledge and learning about herself and others is a theme that emerged from within Edith's mindfulness experiences. She reports that mindfulness has created opportunities for her to understand and accept herself, which leads to greater self-love and self-compassion. By experiencing this process within herself she can also relate better to others and thus has more patience, kindness and understanding of other peoples' life situations as well. Her increased awareness and understanding of self also enables her to separate self-imposed fears and judgments from the actual experience of events. The more aware she is of this process in her mind the less fearful and stressed she becomes from internal worries and the more cognizant she is of her options to manage intrusive fears and judgments.

Another theme within her interview was the concept of present living. Being present and being still reduces both internal and external distractions and gives her the opportunity to be more aware of her experiences, to enjoy her experiences more fully and appreciate the beauty in everyday things. This helps her to identify periods of becoming hyper and distracted and gives her a set of tools to use to re-focus and calm her mind and slow her actions. Being present also helps to connect Edith with her spiritual beliefs. She feels the presence of a higher power during these periods of stillness.

Mindfulness has influenced Edith in a number of ways. She has benefited greatly in her ability to cope with a persistent medical illness. She has gained a set of coping skills which reduced her anxiety and increased joy in her life and she has experienced greater compassion for her self and others as a result of practicing mindfulness techniques. Edith reports that she will continue to incorporate the techniques and concepts of mindfulness into her future lifestyle.

Interview Participant 6: Frances

Individual Structural Description. Frances had no previous experience with mindfulness prior to taking the MBSR course. She was familiar with other meditation practices but had never specifically practiced mindfulness. Her motivation for taking the course was intellectual curiosity.

Frances defined mindfulness as, "being aware of inner thoughts and feelings and outside stimuli without judging them". For Frances, the benefit of being aware of your thoughts and feelings without judgment is that it gives her "a choice of how to respond" in a particular situation "rather than an automated reaction". Frances reports that mindfulness provides an opportunity for one to identify and separate their thoughts from their judgments and in that moment one also has the ability to choose their response. She states, "it gives me that extra moment or two to choose a response", which she reports she is

"doing that sooner and more often" since the course. Therefore Frances states that changes have occurred in both her "thinking process" and in her "behaviors".

Frances also reports an overall improvement in her awareness of her emotions, thoughts, and feelings. She stated, "it highlighted my psychological states" and therefore "I feel like I have more control over my emotions and thoughts". Again, she reports being aware of her thoughts and emotions much sooner than she was before taking the course. She also states that the group environment was helpful in "recognizing emotions" and identifying behavior choices. She stated, "it helped to see how others dealt with things because I could relate what others were saying to my own situations".

The other major benefit Frances received from the course was that it helped her to "reinstate" her previous spiritual practice. She reported, "I had become lazy with my spiritual practice and it gave me a kick in the pants to jump start my process to be more mindful." The course helped her to re-focus her spiritual "purpose and goals" and resume her previous routine of daily spiritual practice. She stated, "the daily contemplation helped me be more committed to my spiritual beliefs" and "now I have better discipline than before".

Textural Structural Description. There are a total of three themes found within the interview data for Frances. First, the

course highlighted the concept of respond verses react. She realized the distinction within her own behaviors of an automatic, conditioned reaction verses a controlled, well thought out response. She realized that her thoughts and emotions were often mixed with personal judgments that caused her intense emotional reactions. When this process is conscious, she is then able to choose a response. Choices are illuminated giving her the feeling of being able to control her behaviors.

The second theme within her interview data is enhanced awareness of self. She reported more frequently becoming aware of her thoughts, feelings, and emotions. Just being more aware of her thoughts and feelings lead her to feel more control over those thoughts and emotions. One must first acknowledge the presence of a thought or an emotion before one can take steps to change or manage those thoughts and emotions.

The third theme that emerged within the interview of Frances was the reconnection to her previous spiritual beliefs and practices. The daily MBSR course exercises strengthened her connection with her personal spiritual beliefs. The MBSR course motivated her to prioritize her time and actions in accordance with her spiritual beliefs.

Interview Participant 7: Georgia

Individual Structural Description. Georgia reports that she had no previous experience with mindfulness or any other kind of

meditation technique, stating "I had no idea what mindfulness was". She took the course out of intellectual curiosity and to improve her professional skills and marketability.

Georgia states that mindfulness affected her physical health in both a preventative manner and during the treatment of ailments. Georgia stated that since she started practicing mindfulness her body "is wanting to rest more". She reports that listening to her bodies needs and following them will "prevent" her from future sickness. She also states that when she does get sick, mindfulness is "a way to react outside of medication". It will help her to uncover the causes of her sickness and help her to take time for herself. She states mindfulness helps her to be "more aware of how I was allowing myself to put things aside until they become problems or sickness" but now she can "slow things down" and remind herself to "think of a healthy balance between staying busy and being healthy".

Georgia reports that mindfulness "really slowed me down". She describes herself as someone who takes on many responsibilities and is always on the go. Mindfulness allowed her to "enjoy the smaller things" in life. She stated that prior to taking the course she "didn't even notice" when she "was doing anything enjoyable".

Georgia also reported that mindfulness effected her emotions and behaviors. She stated mindfulness "allowed me to

explore my emotions at a deeper level, you see through that thought based component and how one's reactions may be controlled by either past behaviors or just a thought that enters your mind". She felt that the MBSR course assisted her in exposing her thinking processes and how they effect her behaviors. She states now she is able to "look at my thoughts before I have such an intense emotional reaction". This has improved her awareness of self and improves her ability understand the behaviors of others as well.

Georgia's relationships with others have also improved as a result of the MBSR course. She states she is "much more aware of relationships" and more "present" in relationships. She reports that "sometimes [hurtful] things may be said in relationships" and mindfulness is a way to "understand what it is to that comment and where it may have come from before I let it stress me out or get to me". She states, "before I was taking much more to heart and not very consciously, now that I have more conscious control, it's much easier to handle slant comments because I am realizing that it just may be a different perspective and I have to choose how to respond and its my choice now instead of something that's gonna happen whether I want it to or not". Georgia feels more in control of her emotional reactions as a result of taking the MBSR course.

Georgia feels mindfulness is particularly helpful in improving bodily awareness, which can lead to self learning and personal growth. She explains that most people "go through life in their heads and I think people lose so much of life because they are in their heads and if people could float down and appreciate physically what's happening, I think that it's beneficial on so many levels". She reports that this is a difficult and challenging task, but worth it. She states, "sometimes I think ignorance is bliss and staying in your head is much easier than feeling things and going through things and being present" so mindfulness "is a great source of growth but it's painful".

Textural Structural Description. The practice of mindfulness influenced this participant in a variety of ways. It heightened her awareness of her fast paced life style, which lead her to slow down and create more of a balance between doing and just being. This reduction of activity allowed her to notice more about her body and her health. She learned more about her physical health needs such as the need for increased amounts of sleep. Paying attention to these needs and attending to them influenced her physical health in a preventive manner. Also, when she does experience illness, she feels more empowered because she now has additional ways of coping with illness such

as seeking the source of illness, rather than treating the symptoms with medication.

As mindfulness concepts influenced her to slow down her pace of life, it also enabled her to experience more joy in life. Normal, everyday activities such as eating and taking a shower, became opportunities to experience joy and learn about herself. Mindfulness also made her more aware of her need to care for herself and her body. She began to consciously incorporate self-care activities into her routine, which led to decreased stress and improved physical health.

Mindfulness heightened her awareness of the relationship between her thoughts, her emotions and her behaviors. She discovered that she has a choice of how to respond to her internal thoughts and emotions. This significantly impacted her relationships with others in her life. It improved her ability to communicate with others and it improved her understanding of others' internal processes and resulting behaviors. Mindfulness also improved her ability to be fully present while interacting with others. All of these changes lead to her heightened perceived sense of self control. She feels able to control her emotions and behaviors even in the midst of difficult social situations.

A richer experience of life has resulted for Georgia due to the practice of mindfulness. It has enabled her to "get out of

her head," be more aware, and fully feel life situations as they occur. She acknowledges there is difficulty and pain associated with this way of experiencing life, yet it provides for opportunities of immense personal growth.

Interview Participant 8: Heidi

Individual Structural Description. Heidi reports that she was familiar with the book, *Full Catastrophe Living* prior to participating in the course. She had read the book several times and practiced the exercises on her own, but she had never received any formal training, nor had she taken a previous MBSR course. Heidi suffers from an anxiety disorder and her motivations for taking the course were to improve her overall health and gain professional knowledge.

Heidi struggles with some of the underlying concepts of mindfulness. She stated that "the philosophy" behind mindfulness "is challenging because it isn't about trying to feel better or feel different. It's about feeling what you feel, so that's a real different outlook to me so it changed me in that I thought different things about what my goals might want to be". She further explains, "getting something out of it is not the right reason for doing it and it's a struggle for me, I'm a very Western thinker and so this non goal thing is very hard for me".

Heidi reported that mindfulness is "especially helpful for physical things, for learning to like my body and accept by body

with its aches and pains and not try to make it something different". She states that she has arthritis in her hand and has for years wanted "pain relief and better functioning", but the mindfulness course made her realize how much "energy I was spending trying to be something that I am not" and so she was able to accept the condition of her hand as it is. She stated, "I learned I can just release all that energy I'm spending and just say, okay, that's my hand and that's the way it is" and this made her feel "at ease". She stated, "it's a relief to say it's okay to just be who you are instead of trying to be this other thing". Mindfulness helps Heidi to be "more accepting" of her true self.

Mindfulness has changed the way Heidi reacts to stress. She states it has not reduced the amount of stress in her life, but provides her with "a different way of looking at stress," which helps her "to think about those things that stress me and in what ways I contribute to that stress".

Heidi acknowledges that being mindful "is certainly not effortless". She states it requires "a lot of attention work" but that it is beneficial because it exposes her to a "broader view" of life.

Heidi also reports that mindfulness has had a positive effect on her relationships with others, particularly in the area of improved communication skills. She explains, "When you

are interacting with somebody else, you are listening more as they are talking and you are sensing with more than just your eyes or your ears so you are taking in more information. It also helps the other person feel like you are not distracted so I think you have positive relationship things that go along with that".

Heidi reported that she has also used mindfulness techniques in her professional environment. Heidi works with patients whom she says are difficult to deal with at times. They often do things that may elicit negative emotional reactions. Therefore, she utilized mindfulness techniques and was able to "just let them talk, then I respond, not react". She states, "I am able to diffuse my anger level by being in the moment".

Textural Structural Description. For this participant, mindfulness is not a means to an end, but rather a technique that enables her to accept herself as she is. There are no goals, no striving to reduce pain, or improve moods but rather it is a process of accepting her current pain and moods. And it is in this process of acceptance that Heidi was able to find relief and contentment. Heidi acknowledged that although this is beneficial and comforting, it is also a challenging process that is often in direct opposition with her Western perspective of health. She struggled with the concept of feeling what you feel rather than have a goal to feel different in some way, but she

was able to incorporate this concept in her life which resulted in a greater appreciation of herself.

Mindfulness does not alter the stressors she experiences but rather effects the way she interprets and responds to stress. She is better able to understand how her thoughts and actions may effect stressful situations. It has provided her with the opportunity to expand her view of life situations.

Being in the moment has allowed her to improve her relationships with others. Her listening skills have improved and she is more patient and focused on the needs of others, which enhances both her personal and professional relationships. Her communication skills have improved as she is able to assess personal interactions more fully. She learned how to refrain from interjecting her thoughts onto others and allow others to express their views even if they are contradictory to her own views. Heidi learned to respond in her professional environment in a clam and reserved manner rather than feel emotionally charged with anger.

Although difficult, mindfulness has resulted in improvements in Heidi's social relationships and an enhanced ability to accept her physical health conditions. She is less anxious knowing it is safe for her to just be herself.

Interview Participant 9: Isabelle

Individual Structural Description. The MBSR course was Isabelle's first and only experience with mindfulness. She participated in the course out of intellectual curiosity and for her own general health. Isabelle describes mindfulness as "an awareness of our ability to control our mental and physical well-being". She states, "We often tend to think that things are out of our control", but "we actually do" have control of our well-being. Isabelle reports that mindfulness has helped her to be more aware of her tension levels. That awareness leads to more control over her tension because she has learned that she can use specific mindfulness skills to reduce her tension. She reports that mindfulness doesn't eliminate stress but that being more aware of stress helps her to respond differently to stress. She learned a variety of skills to assist her in reducing tension. For example, she stated, "being able to do different things to de-stress, such as deep breathing, sitting meditation, going for a mindful walk, helps stress relief". She adds that she believes that these techniques would also benefit someone dealing with a crisis situation or personal trauma.

Isabelle reports that mindfulness improved her awareness of her surroundings and actions and increased the amount of joy in her life. She states she is now able to "mindfully pay attention to the pleasure of biking" rather than "think about how many

more times I go around the circle or how many more miles to go". She adds, "being more mindful makes me really enjoy the biking itself and pay more attention to the surrounding".

Isabelle reports that she practices mindfulness every morning in an effort to calm down and be more positive throughout the day. She states, "I think meditation, particularly in the morning is a really good way to start the day and is a good vehicle for calming down and controlling stress and tension". It helps her to be "more even keel and accentuate the positives" in life. This improves her relationships with others because she is better able to "see the positive side of things" rather than "be upset with someone". She states, "I think just taking a deep breath does help relationships" because with mindfulness "you tend not to snap" at others. Isabelle adds, "Certainly the calmer or more in the moment you can be, the less you are bringing up old issues and that certainly impacts relationships".

The other thing the course did for Isabelle was make her more aware of how much "we are not mindful". She explains that "our minds are always racing, I guess in our society we are taught to multi-task and mindfulness is something that really takes a lot of effort these days, being fully in the moment, your mind being fully engaged in what you are doing as opposed to thinking ten different things at once". Mindfulness is a way

for Isabelle to reduce the mind's chatter and become more attentive to the present moment. She reports "there are many days that I go through the day and think I'm just scattered because I'm thinking of so many things at the same time and that's not how we should live our lives". Isabelle states, mindfulness is a way of "grounding one's self".

Textural Structural Description. Isabelle believes that people in the current Western culture tend to be fast paced, multi-taskers who are rarely focused on the present moment. She finds that people, including herself at times, are consumed by the multiple things they need to do on a daily basis. She disagrees with this lifestyle and suggests that the opposite actions produce the greatest amount of health and happiness. For Isabelle, mindfulness is a way to counter the popular culture and instead become focused on present moment awareness. Mindfulness provides Isabelle with opportunities to become centered and grounded in the present moment. This enables her to redirect her focus and attention on internal processes rather than external processes.

As a result of grounding herself in the present, mindfulness enables Isabelle to be more positive in her attitude about her self and others. She more readily seeks out the positives aspects of people and situations and remains focused on the positive aspects rather than allowing her mind to wander

off on negative thoughts. Grounding also helps Isabelle remain calm and stable throughout her day. These benefits also influence her relationships with others.

Isabelle's relationships with other people have improved as a result of practicing mindfulness. One effect is that she is less reactive to others, which prevents or deescalates emotionally charged interactions. Another effect of mindfulness is that remaining more focused on the present moment, helps one refrain from discussing past conflicts or future concerns. This enhances Isabelle's communication skills.

The MBSR course provided Isabelle with opportunities to improve her awareness as well as the coping skills necessary to reduce stress. Isabelle learned from the course that she has choices in how she responds to stress. The mindfulness techniques provide her with an assortment of tools from which she can use to reduce stress. Mindfulness also enabled Isabelle to more fully experience her environment and increase the amount of joy she experienced in daily activities.

Interview Participant 10: Janet

Individual Structural Description. Janet reports that she was familiar with the concepts of mindfulness prior to taking the course but this was her first experience with an MBSR course. She participated in the course out of intellectual curiosity and for enhanced professional knowledge.

Janet describes mindfulness as "a way of thinking". For Janet, it is about "being in the moment, attentive to where you are in the world, attentive to your physical self, your mind, your spiritual self, and your social self". Janet reports that one should strive to be in the moment and be attentive about their self because it improves one's general health. For example, she reports that by being mindful of "carrying tension" in her body, then "it doesn't last as long". She believes that just being more mindful of stress or tension helps to reduce the intensity and duration of the discomfort. She also reports that mindfulness helped her with "relaxation". She states that "mindfulness in daily life" helps her "just be aware of sensations, be in the moment and be unencumbered".

Janet reports that mindfulness improves her awareness of her surroundings. She states, "just walking sown the sidewalk, I am attentive to the sidewalk under my feet and to the wind and how the sun feels and all that sort of stuff". Janet states that this concept of "momentary awareness" has provided her with "the most benefits" but she is unable to explain how or why mindfulness creates these benefits. She is positive that it does help, but states, "I'm not exactly sure how or I'm not sure how to articulate it".

Janet states that mindfulness "did not change my stress level, it changed my response to stress". She explains she is

better able to relax and more aware of where she is carrying tension. She states, "instead of walking around with my shoulders on my ears for three days" I can relax quicker.

Janet used the mindfulness techniques as coping skills to help her deal with daily stress and difficult life situations. Janet describes her mind as "very much a blabber mouth" and she reports that mindfulness is useful in helping her reduce that mind chatter. When her mind is quiet and still she has opportunities for "realizations and insights". She reports that these insights have helped her get through some of the most difficult times of her life.

Textural Structural Description. Although Janet is adamant that mindfulness improves health, she has difficulty in articulating why or how that is the case. She believes the greatest benefit she gained from the course was the concept of present moment awareness. For Janet, present moment awareness enables her to be more aware of her physical environment and to be more attentive to her mind, body, spirit and social self.

This increased awareness of the various aspects of herself helps her to reduce tension in her body and improve relaxation. Prior to taking the course, Janet reacted to stress by feeling more distress. The mindfulness techniques provide Janet with a new set of skills to respond differently to stress, in a way that deescalates and relaxes her mind and body and thereby more

quickly relieves any physical tension associated with stress. Mindfulness influences Janet to feel less restricted by external stressors and more freedom from the pressures of life.

Mindfulness techniques assist Janet in relaxing her mind and her body and provide opportunities for her to remain focused in a peaceful state of stillness. In this stillness, she experiences useful insights into her feelings and behaviors which she uses as coping mechanisms in her daily life and during times of chaos. She learns about her self and feels connected to her spiritual beliefs.

Interview Participant 11: Andrew

Individual Structural Description. Andrew reported that he had no previous experience with mindfulness, nor has he participated in a previous MBSR course. He was motivated to take the course out of intellectual curiosity. Andrew described mindfulness as the "conscious awareness of one's experience of being". Andrew reported that it is inherently good for a person to be conscious of what one is doing and therefore mindfulness itself is inherently positive. He stated mindfulness "is a positive thing because it just seems like a form of honesty, really experiencing" life and "not allowing one's self to deny things".

Andrew reported that he personally benefited from the MBSR course in a variety of ways. He gained clarity in his perception

of self. He reported that mindfulness showed him "how some aspects of myself I viewed as false became apparent". He further stated that "Practicing mindfulness gave me the opportunity to see things clearer, so it gave me more self knowledge and improved my introspection".

Another benefit of mindfulness for Andrew was relaxation. He stated he found mindfulness "to be relaxing and have relaxing effects on my health". For example, he reported that he "became less anxious" as a result of the course. He also stated that mindfulness "was effective in reducing stress" but he acknowledged that "if you are checking stress level, you are doing it wrong" because "it is not a means to an end". Even so, the mindfulness techniques such as the breathing did result in "stress relief" for Andrew.

Andrew also reported that the course improved his relationships with others, especially his wife. He explained that "the course helped me to be less anxious, so my relationships with others improved as well. He further stated in regard to his wife, that the course "was positive for our relationship".

Andrew described the course as "a catalyst for change" in his life, which "gave me some re-direction". As a result of this re-direction, he was able to "make adjustments in his life",

which resulted in reducing his anxiety, improving his relationships and an improved awareness of self.

Textural Structural Description. Mindfulness enhanced this participant's experience of life by allowing him to fully experience each moment for what it is. This process increased his clarity of thought and reduced denial and self distraction, which in turn lead to deeper self reflection and a greater awareness and understanding of him self.

Formal practice of this conscious state of being carried over into the activities of his daily routine. It relaxed his mind, which has positive physical health effects and positive effects in his relationships with others. Since taking the course, his relationship with his wife has improved.

He acknowledged that mindfulness should not to be used as a treatment for symptoms but is rather a way of living and doing in daily practice which in turn may effect symptoms. The course acted as an impetus for Andrew to focus his thoughts on a course of action. It provided him with the opportunity to experience personal insights and revelations, which motivated him to change his behavior. Overall the course was helpful to Andrew in reducing anxiety, improving his relationships, and enhancing his self awareness.

Interview Participant 12: Brandon

Individual Structural Description. Brandon reported that he had been practicing mindfulness and studying the philosophy behind it for about one year prior to taking the MBSR course. He took the course to further his personal studies and learn more about himself.

The mindfulness course positively effected Brandon in a variety of ways. Brandon reported that his worldview expanded as a result of the course. He stated mindfulness "opens up your perception of things, not only expands it but makes your awareness more flexible, more expansive". He further explained, "you are not so narrowly focused, it's an open, accepting" attitude rather than a process of "funneling things out". It helped him to realize the numerous ways of perceiving things that exist beyond his own personal view.

Brandon also stated that his awareness improved as a result of practicing mindfulness. He described mindfulness as "intentionally paying attention to your body". He further explained that mindfulness "really does help you become more aware of what you are not aware of and you learn a lot about your internal processes". For example, he "became more aware of physical tension that I wasn't aware of before, and I wasn't aware of how much it was affecting me".

The course helped Brandon to be more cognizant of physical pain and tension throughout his body. He reported that prior to the course he was "so used to being physically stressed" that he "didn't even realize he was so tense," but after practicing mindfulness he was able to identify areas of tension and purposely focus on relaxing those areas. Mindfulness also improved his awareness of stress. He reported that practicing mindfulness helps him "manage" stress because as he become aware of stress, he identifies possible causes of that stress, and is then able to reduce the intensity of the experience.

Brandon's awareness of his emotions also improved as a result of the course. He reported that a large part of mindfulness is "being mindful of emotions". He stated that he "becomes aware" of what he is feeling "more quickly" and that this "filters over into his every day life". For example, he stated, "if you are feeling tired, you notice it, you're more aware of it" and then "you become more aware of your reactions, more aware of yourself and your responses". He reports that this also influences his relationship with others.

Brandon discussed at length the tendency for people to distract themselves in Western culture. He stated, "Today, everyone is so active, you have so many tendencies to just turn on the tv, so many ways to distract yourself". He believes this distractive nature is problematic, but that mindfulness is a

good way to "counter that". He stated, "for me, actually to sit down" and be mindful "is good" because you are "not seeking something out, you are just there, and you give your time totally to it, instead of going out and doing activities".

For Brandon, spending time being, rather than doing helps him to learn about his moods and feelings on a very "deep" level. He reported that it allows him to "become familiar" with his feelings rather than "try to get rid" of feelings. He stated it helps him "accept" his emotions and "be more patient" with himself. Brandon stated, "we are very good at distracting and going towards something else instead of sitting with our negative feelings". He further explains that sitting with a negative feeling "in a manner that is not trying to change it, not trying to label it, but just being with it, it's like a revelation" because being mindful "will reveal certain things that you push down and helps you reveal more about yourself, the ways you could be hurting yourself when you don't need to be". He stated, "If you just become aware of it and just be with it, it many not be as bad as you originally thought". He discussed an example about feeling anger. Brandon stated, "When I get angry, I don't necessarily have to run away, you realize there is a coming and a going" of the anger and "a lot of times you react out of fear" but you don't have to fear your own feelings. In summary, Brandon stated mindfulness is "a process of

revealing stuff and you just kind of be with it, instead of running away from it".

Textural Structural Description. For this participant, the practice of mindfulness techniques led to a shift in his perception of the world. He shifted from a narrow, individual perspective towards a wider, more open and accepting view of the world. This shift led to an expansion of his awareness of self and his relationship with others. Becoming more aware of thoughts, emotions, feelings, and psychological moods was a consistent theme throughout his responses. This increased awareness led to improvements in his ability to respond in a calm, controlled manner rather than to react in an intense, sporadic manner. He learned how to identify stress, which led to both a reduction of stress and an improved ability to manage stress.

Mindfulness afforded him with opportunities to "sit with" or just "be with" negative emotions. He learned that when he faces his internal moods, rather than denies or distracts himself away from his moods, he is able to come to a place of acceptance of his moods. By accepting his moods and feelings, he no longer feels a need to change, label or judge them. This acceptance leads to increased patience with himself and others and to an increase in self learning. He became less fearful of

his moods and feelings and thus more confident in his ability to know himself and experience his fluctuating moods.

Interview Participant 13: Chad

Individual Structural Description. The MBSR course at Athens Regional Hospital was Chad's first experience with mindfulness. He had no previous knowledge of mindfulness concepts. His motivation for participating was his general health. At the time he served as the primary caretaker for his wife, who was terminally ill.

The MBSR course significantly impacted Chad's life. He stated, "I really think I became a better man, a better person as a result of having taken this course". The course expanded Chad's worldview and exposed him to new perspectives of life. He reported, "I realized really for the first time that there is a lot out in this world that we live in, but we don't see what there is going on around us. In other words, there is a larger vista available to us that we don't take advantage of and this pointed that out to me very poignantly". Chad stated this realization will "stay with me for the rest of my life" and in that regard it helped him "to be a better man".

Chard described mindfulness as "a process by which an individual can observe and feel like he or she is a part of the universe, just a small part of it" and mindfulness "enables us to observe and benefit from our world and other people". For

Chad, mindfulness provided him with the opportunity to experience other ways of viewing the world around him, which lead to a greater appreciation of people and life. For example, he stated, "a person can go through life on a daily basis year in and year out and become accustomed to what they are doing," but mindfulness helps you realize "there is more out there than what you see by living that way and it helps open your eyes to the fact that life is wonderful and I can make life enjoyable". Chad believes this is how mindfulness "enhances one's life".

The MBSR course impacted Chad's relationships with others in a positive manner. He stated mindfulness improved "my daily relationships with other people, my wife, my coworkers, friends and so on". He reported that he tended to be "more patient, more understanding and less critical". He was also prompted to "do more for people" after the course, such as volunteer in the hospital or help people resolve their problems. He reported that he realized that "I can help other people enhance their lives as well".

Chad describes himself as a "tense, stressful person," always on the go. The course made him realize that it is possible to accomplish things in a more "relaxed way," however, having that knowledge does not always transfer over to his behavior. Therefore, he continues to struggle with his hyperactivity. He also reported that he has difficulty sleeping

and he had hoped that the course could help him "sleep better". He stated although mindfulness "tended to relax" him, it did not help him sleep better.

Textural Structural Description. The MBSR course effected Chad in ways he had never expected. His expectations of the course were to provide him with strategies to aide in rest and relaxation. Although the course did teach him techniques for relaxation, he also experienced a permanent shift in his thinking that changed his perception of life.

He experienced a revelation, which lead him to understand his place in the world and his relationship with others. His worldview changed from a self absorbed, narrow view to an acceptance and understanding of the vast differences that exist in the world. This shift in perspective influenced Chad to become more tolerant and appreciative of the differences that exist in the world. It peaked his curiosity about others and motivated him to reach out to others. It created a sense of excitement in his life and enhanced his ability to experience joy.

Chad was so moved by these insights that he found himself wanting to share this knowledge with others to help them increase the joy in their lives. His relationships with others changed as a result of him becoming less judgmental and more empathetic to others.

Chad acknowledges that although the concepts he learned in the course are intellectually satisfying, it is a challenge to integrate those ideas into his actual behaviors. It requires sustained effort to change old patterns of behavior. Chad continues to practice mindfulness and attend refresher courses whenever possible.

Interview Participant 14: Kate

Individual Structural Description. Kate reported that she had some previous experience with mindfulness prior to taking the MBSR course. She had attended a conference on mindfulness but she had not participated in a course. She took the class for her own personal health and to enhance her professional skills.

Kate described herself as a "high energy" person and one of the primary benefits of the course for Kate was that it helped to "slow me down". She described mindfulness as, "a respite from habits and activities of daily living," which "allows us another way of being". This is particularly beneficial to Kate because it provides her with the opportunity to focus herself. She stated, "it got me to a place where I could be centered and it reduced my need to fix things". She further explained mindfulness allowed her "to just be" rather than "always doing something". Entering a state of mindfulness helps Kate to feel relaxed and calm. She reported it makes her feel that "I always have what I need" in life.

Mindfulness improved Kate's self awareness and reduced her stress and anxiety. Kate reported, "Mindfulness is a way to increase my self awareness physically, emotionally and spiritually and I am paying more attention to myself, what I am doing, how much I am doing, and when I am doing things". She further explains, "by being quiet, being still long enough, I am aware of when I am susceptible to anxiety increasing and I can do something to not get caught up in the usual circular behavior, getting anxious, feeling helpless, eating," and so on.

Mindfulness has also effected Kate's behaviors by providing her with choices of ways to respond to particular situations. She reported that mindfulness makes her more aware of the choices around her behaviors. Kate reported that mindfulness gives her the time to think about alternate ways of responding to situations. Among the changes in her behaviors that have occurred as a result of taking the MBSR course are less multi-tasking, less caretaking of others, setting more limits with other people, and more patience and tolerance of others. She also reported that mindfulness "reduced my overall stress level" and "changed my self talk".

Mindfulness has improved Kate's sense of health and wellness. She stated, "I associate well being with control" and mindfulness made me realize that "I have options for wellness".

She further explains that "just knowing that I have more options, broadens my sense of wellness".

Textural Structural Description. For Kate, the practice of mindfulness creates an environment of safety, in which she feels free to relax her mind and body. This relaxation also filters over into her behaviors and she is able to reduce the pace at which she conducts her daily activities. Mindfulness enables her to shift her focus from external stimuli to an internal place of peace and concentration.

Mindfulness also provides her with opportunities to expand her awareness and learn about herself. She is more aware of her thoughts and feelings as she experiences them. She gained coping skills not only to identify her feelings but also to intervene in the thinking process to prevent or de-escalate the cycle of anxiety and depression she has experienced in the past.

This new set of coping skills has provided her with more options for self management of her physical, emotional and spiritual well being. Having more choices causes Kate to feel in control of her thoughts and behaviors and thus she is more confident in her health and well being.

Kate also integrated the concept of respond verses react into her behaviors. This concept also enhances her sense of self control and reduces stress. These mindfulness techniques have

been useful for Kate in both her personal and professional life experiences.

Interview Participant 15: Laverne

Individual Structural Description. Laverne reported that the MBSR course was her first experience with mindfulness. She took the course for her own general health and her intellectual curiosity about the topic.

Laverne described mindfulness as, "paying attention, absorbing, and taking life for what it is, and not assuming anything". Mindfulness helped Laverne to remain focused on the present moment and increased her awareness of her present surroundings. She stated, "it allows me to be more absorbed with what's going on around me right now, rather than be stuck in the future".

The MBSR course enabled Laverne to experience more joy in her life and experience a greater appreciation for herself. She reported, "mindfulness is enjoying the small things, moments, the here and now, and realizing everything is unique, like snowflakes". She further explained that "it made me think about my time and how I use it and how I can appreciate minutes instead of days or weeks and I am now more appreciative of my life and my situation in life".

The MBSR course also provided Laverne with skills to help her identify and manage stress. She reported that she learned "how to notice my stress level and focus on how to get it back

down or cope with it". For Laverne, just attending the classes made her feel calm and relaxed and thus reduced her stress. Outside of the classes she was more aware of stress and "it helped me realize why I feel the way I feel," and by identifying the sources of stress she was able to manage it better. The mindfulness tools helped her to "relax and center" herself during times of stress and intense emotion.

Mindfulness also improved Laverne's relationships with others and helped her to learn more about herself. Laverne stated, "I realized that I can be passive aggressive, and I realized what my actions do to other people, but I learned that I can choose my words carefully and that did change the way I relate to other people". She further explained mindfulness "makes you more conscious of what you do and say to others each moment of the day and it has allowed me to have more patience with myself and other people".

The course also expanded Laverne's perspectives. She reported, "I realized that there are all kinds of feelings and situations out there that I had never realized". The course provided her with the opportunity to be exposed to many other perspectives, which also enhanced her tolerance and understanding of self and others.

Textural Structural Description. Laverne benefited from the MBSR course in a variety of ways. Laverne gained the ability to

perceive life situations with enhanced clarity and less personal judgment, allowing her to experience events more accurately and remain focused on the present experience. This provided her with the opportunity to experience increased joy during ordinary daily activities. It also helped her to focus on the positives aspects of her self and her life and increased the amount of gratitude she experienced.

Laverne gained the coping skills to both enhance her awareness of stress and to manage the effects of stress in her life. She learned specific techniques that relaxed her mind and body and provided her with the opportunity for introspection. Through introspection she gained insights into the causes of her stress and ways to remain grounded during difficult situations.

Laverne's relationships with others were enhanced because she became more conscientious of her own statements and behaviors. She became aware of how her actions illicit specific responses in others and she learned to make adjustments in her behaviors, which in turn effected the behavior of those around her. This improved her sense of compassion for herself and others and thus she found herself being more patient in social situations. Laverne's general perceptions of herself and others were influenced because she experienced a variety of perspectives different than her own. This experience helped her

to step out of her personal perspective and consider other ways of interpreting events.

Interview Participant 16: Doug

Individual Structural Description. The MBSR course was Doug's first experience with mindfulness. His motivations for taking the course were intellectual curiosity and general health. Doug reported that the course benefited him in a variety of ways. Doug learned specific techniques that he uses for "stress management" and "anger management".

Doug described himself as an extremely productive person with a constant stream of duties and responsibilities to manage. He uses the mindfulness techniques to help "slow down" his thoughts and actions. Doug stated, "I go so fast, I try to get so much accomplished, I'm dealing with days and weeks and literally months ahead in my mind, while literally one issue is solved, I instantaneously go on to something else" and mindfulness is a way to slow down that cycle of activity. He further explains that "the brain is so over powering that it drives everything about you," but mindfulness "is a way to slow it down". It allows him to "schedule time for thoughtfulness," which enables him to be more patient with himself and others.

Doug reports that mindfulness "doesn't reduce the stressors I get" but that it does change "how I respond to those stressors". He explains, "The normal routine is, as stressors

increase, I tend to react with intensity and not uncommonly anger, with much more speed of doing everything" but after the mindfulness course he was able to respond in a more calm, less anger manner. He reports that the concepts of mindfulness would enter his mind during stressful situations and he would remind himself that "you can't stop the stressors, but you can change your perception, your body and what you react to". This would assist Doug in deescalating emotionally intense thoughts and feelings.

Doug also reported that mindfulness gave him a method for "reconnecting" to an "energy source" that centered him in the present moment and gave him a renewed sense of strength to deal with difficult situations in a calm manner. For example, he stated, "when things get really wild at work, I would check out for a few minutes to keep things in perspective and go outside and just spend 15 minutes walking around and just enjoy the day for a few minutes". Doug reports this ability to "put things in perspective" is a major benefit of the course.

Overall Doug reports that the course helped him to "feel better" and to "feel more energy". He stated, "if you've got more energy, you're better able to handle stress". He stated mindfulness "is a nice way to live your life and frankly, I think it would be nice if it were just how people would live their lives".

Textural Structural Description. This participant views mindfulness as a way of living one's life that connects one to the present moment and puts personal life issues in perspective. It was a set of tools that he could draw upon during stressful situations but it was also a way of thinking about the world and a way of describing life events. Mindfulness allowed him to experience life at a slower pace, which enabled him to be less reactionary. He became less angry and less impatient with himself and others. It empowered him to have some control over his constant brain activity and allowed him to experience moments of rest and joy in his life.

The practice of mindfulness did not affect the amount or type of stressors he experienced but it did affect the manner in which he responded to those stressors. He gained the ability to stop and ask himself, is this something worth reacting to? Often times, this process resulted in him being more patient and less aggravated. He used the mindfulness techniques to connect to a source of energy, which motivated him to deal with the stressors of life.

Qualitative Interview Sample

There were a total of 16 (12 female, 4 male) participants in the qualitative sample. Their age range was 23-88 years old with a median age of 48 years old. 15 of the participants were Caucasian and 1 was categorized as "other" race. The

participants were categorized into five different occupations; 1 (6%) retired, 3 (19%) business professionals, 2 (12%) medical personnel, 3 (19%) management/administration professionals and 7 (44%) social work/psychology professionals. Also within the sample, 38% (6) of the participants were experiencing mental or physical health problems or a family medical crisis during the time they attended the MBSR course, and 44% (7) of the sample identified themselves as having a "type A" personality.

Composite Interview Description

Each of the participants interviewed described unique and specific ways that mindfulness effected their lives. It is important to examine each person's individual experience to uncover the particular process by which the MBSR course influenced change in their lives, however there are commonalities that exist within the entire interview sample. This section discusses the common themes that emerged in the qualitative data.

There are five core themes found within the entire interview data set. The first theme is the concept of increased awareness. Participants reported an increased awareness of their thoughts, moods, feelings, emotions, and behaviors. They were more conscious of the way they were feeling or the self talk in their minds and more aware of their behaviors and responses to others as they occurred. The fact that they were more aware,

more quickly, of their thoughts, feelings and actions, led to a sense of feeling more in control of themselves. Many people reported feeling like they had more choices as a result of improved awareness.

This increased awareness also allowed people to explore their emotions at a deeper level. People felt less fearful of their thoughts and emotions and were able to "sit with" their feelings for a longer period of time without the distraction of self judgments.

Participants also reported an increased awareness of their environments. They began to notice and focus on their surroundings, which provided an opportunity for people to feel more appreciative of their environment. Many people reported experiencing more joy in their everyday activities. Experiencing more joy led to positive impacts on mood, decreasing stress and anxiety and improving relaxation.

Another area in which participants reported an increased awareness was spirituality. People reported an increased awareness of "the presence of God" and they reported feeling "closer to God". Many of the participants equated the practice of mindfulness with their spiritual practice. It led them to focus more and spend more time and energy on their spiritual beliefs.

A second theme within the interview data was that the participants learned and utilized additional coping skills. The participants reported that the stressors in their lives remained the same, but that their ability to manage those stressors improved greatly. Participants learned specific, concrete techniques available for use at any time, in any setting, that they could use during stressful situations to deescalate stress. Among the techniques or "tools" learned were breathing techniques, self-talk strategies, mindful walking, meditation and the body scan. Participants viewed these techniques as "options" or "choices", alternatives to becoming "stressed out".

The new coping skills they acquired allowed them to interpret and respond to stressful situations in new ways. This led to a sense of control and empowerment. Rather than feeling like they were controlled by external events and automatic emotional responses, they shifted to an internal locus of control. Some described this as a sense of freedom from habitual thoughts and behaviors. As one participant stated, "thoughts are only thoughts" and one can choose to believe them or not.

Many participants commented on the fast paced, distractive nature of American culture. They reported that mindfulness is a way of living that is "counter" to the current American culture. It is a way to "slow down" the pace of life and slow down the mind's constant chatter. This in and of itself led to a

reduction of stress, anxiety, and tension and improvements in relaxation and in feeling calm, safe and stable.

Participants also used these new coping skills to deal with physical illness and personal tragedy. Participants reported being able not only to deal with pain or death, but to progress, to "move forward" with their lives. They were able to come to a place of acceptance, rather than avoid, deny or force change. In this process of acceptance they found peace and contentment, which enabled them to move forward.

Improved social relationships was the third theme that emerged in the qualitative data. Participants reported that their relationships were enhanced by the concept of respond verses react. The former is a well thought out, calm and controlled emotional response as opposed to a rapid, emotionally intense reaction. Due to increased awareness and improved coping skills, people were able to control their responses and this improved relationships because it decreased conflict. Intense emotional reactions tend to escalate negative conflict, but controlled responses deescalate or even prevent negative conflicts from occurring.

As a result of being less reactive and less defensive, participants were able to improve their listening skills, which enhanced communication in both intimate relationships and casual relationships. Participants reported improved relationships with

spouses, coworkers, friends, family members and new acquaintances.

Participants also reported that the practice of mindfulness improved their patience, tolerance, and compassion for others. This led to being less judgmental and critical of others. People found themselves taking the time to understand their differences and focus on the positives in a relationship. Participants reported being more helpful to others and more empathetic and reported being more present, less distracted during communication. All of these factors enhanced participants' relationships with other people in positive ways.

The fourth theme within the data is the concept of present moment living. The participants found the concept of present moment living to be particularly beneficial in assisting them with "fully experiencing life". Participants reported that there is an "inherent goodness" in being attentive to the present moment. It reduces distractions such as judgments about the past and worries about the future.

Participants reported that present moment living enables them to remain "focused" and "centered". This led to a sense of calm and peace, which participants felt had positive effects on their physical and emotional health. They reported that while focused on the present, they are less anxious and more "grounded". They are also more attentive to the positive and

joyful aspects of life as they occur, which enhanced their gratitude and appreciation of their personal circumstances.

The final theme that emerged within the interview data was self learning. Participants reported increased understanding of themselves and their "fit" in the world. People stated that as they practiced mindfulness, they experienced "revelations and insights" about themselves and the world around them that had significant impacts on their perceptions of themselves and others.

Participants reported experiencing enhanced "clarity of introspection" leading to improved honesty with self and decreased denial. This led to greater self acceptance and self love. They were able to experience more compassion for themselves and more patience with themselves. Participants reported mindfulness allowed them to explore their thoughts and feelings which led to self knowledge and personal growth. Many of the participants acknowledged that this can be a difficult and challenging process, at times full of pain and unhappiness, but ultimately it leads to personal fulfillment and growth.

As the participants perceptions of themselves expanded so did their perceptions of others and the world around them. Some participants learned for the first time of the existence of multiple world views. The courses provided opportunities for participants to experience and learn from various perspectives

and it broadened their personal views. It provided alternate ways of interpreting, explaining and coping with life.

Coping skills, increased awareness, improved interpersonal relationships, present moment living and self learning are the most common themes found throughout the interview data. Each interview participant had varying ways of explaining and describing the process by which these concepts affected their lives, however the above composite description is a reflection of the collective meaning and essence of the data.

CHAPTER 6

DISCUSSION

The popularity of complimentary and alternative medicine interventions has significantly increased over the past ten years. Social workers are employed in settings where these techniques are taking place and they are increasingly learning about and implementing CAM interventions within their own practice areas, however few research studies exist in the social work literature (Finger & Arnold, 2002). One purpose of this dissertation was to contribute empirical research to the knowledge base of social work. Another purpose was to perform an exploratory study to assess the effects of a Mindfulness Based Stress Reduction intervention on participants who completed the course.

The MBSR program studied in this dissertation took place at the Mind Body Institute at Athens Regional Medical Center. The program is modeled after the MBSR program developed by Jon Kabat-Zinn at the University of Massachusetts Medical Center. The instructors were trained by Kabat-Zinn and his colleagues and the course utilized his training books and audiotapes. The MBSR is an eight week educational and experiential group program that meets once a week for two and a half hours and participants

are expected to perform daily practice exercises lasting 45 minutes.

Various institutions have used the MBSR course as a treatment intervention for physical health ailments such as cancer, chronic pain, psoriasis and heart disease, as well as for mental/emotional disorders such as, depression, anxiety and eating disorders. The MBSR program has also been implemented with non-clinical populations. The course is intended for people experiencing stress, regardless of whether or not they also suffer from a physical or mental disorder. The developer of the course used principles of Buddhist philosophy as the underlying theoretical foundation of the course. The course is not intended to propagate the dogma of Buddhist religion, but rather uses underlying Buddhist concepts in a secular context (Kabat-Zinn, 1984).

Research on the construct of mindfulness and the efficacy of mindfulness based interventions is relatively new and many questions still remain about its efficacy. The purpose of this dissertation was to explore the effects of the MBSR program at the Mind Body Institute using a mixed methods approach. The overarching mixed methods design used was the equivalent status design with parallel/simultaneous qualitative and quantitative components (Tashakkori & Teddlie, 1998). The use of this design

provided opportunities to use multiple approaches to study the unique MBSR intervention and its effects upon participants.

The quantitative component of this study utilized a pre-experimental pre-test post-test design with six treatment groups. Two outcomes measures were used, the Beck Depressions Inventory and the Rand 36-Item Health Survey 1.0, both with sound psychometric properties. These data were collected by staff at the Mind Body Institute. Due to the archival nature of the data, the researcher had no control over the data collection process, which was at times problematic. During the fifth treatment group, the Mind Body Institute experienced staff turnover, which resulted in the loss of that group's post-test outcome measures and therefore, these data could not be included in this study.

There were a total of five research hypotheses in this study. Results indicated that three of the five hypotheses were confirmed. The following results must be interpreted with caution. Due to lack of a more stringent experimental design, the changes in the dependent variables cannot be directly attributed to the intervention. Therefore, no conclusions can be made about the causality of these results. The three confirmed hypotheses are: participants of the MBSR program will experience decreased depression, as assessed by the Beck Depression Inventory, administered at program intake and at program

discharge; participants of the MBSR program will experience improvements in emotional well-being, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge; and participants of the MBSR program will experience improvements in social functioning, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge.

Both practically and statistically significant results emerged in the areas of depression, emotional well-being and social functioning. Symptoms of depression decreased, feelings of emotional well-being increased, and social functioning improved over the 8 week treatment period. This is consistent with previous mindfulness research as well as the qualitative findings of this dissertation. The qualitative data indicated frequent improvements in mood and emotional health. In addition, a leading theme within the qualitative data was improvements in social relationships.

The other two hypotheses: participants of the MBSR program will experience improvements in general health, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge; and participants of the MBSR program will experience improvements in physical functioning, as assessed by the Rand 36-Item Health Survey 1.0, administered at program intake and at program discharge, were found to be

statistically significant but not practically significant. The actual change in mean scores from pre-test to post-test for both general health and physical functioning were small and Cohen's effect sizes were minimal. It is possible that effects on general health and physical functioning appear over a longer duration of time than the eight weeks the intervention was administered. The subjects are expected to continue to practice the mindfulness techniques after completion of the course. Another possible explanation for these results can be found in the qualitative data. The qualitative data indicated that participants gained an acceptance of their physical health status rather than a change in physical health. Therefore, it is possible that the MBSR course assists participants in coping with physical functioning, rather than influencing direct improvements in physical functioning.

The qualitative component of this study consisted of a three phase data collection process. First, data were focused and bounded into identifiable and well defined cases. Second, purposive and snowball sampling methods were employed until a sufficient data saturation level was achieved. Purposive and snowball techniques are non-probability methods of sampling, and therefore have low external validity. Thus, generalizations to other populations cannot be supported; however, these data are used to provide additional support and explanation for the

quantitative findings of this study. The third stage of the data collection process was instrumentation. A semi-structured interview guide was developed with twenty open-ended questions in addition to demographic questions. Sixteen interviews were conducted with participants from each of the six treatment groups.

The research question guiding the qualitative data component of this dissertation was; how does mindfulness impact human beings? This research question evolved during the initial stage of data collection. Originally, the writer intended to examine the effects of mindfulness on various areas of human functioning, such as physical effects, emotional effects, psychological effects, spiritual effects, and social effects. As data were collected, a theme emerged in the manner in which the interview participants responded to the interview questions. Although, participants were reporting effects within the various areas of functioning, their primary focus was on changes in their perceptions and interpretations, which led to secondary changes in various area of functioning, like physical health or emotional states. Therefore, the process of how mindfulness impacts people became the primary focus and the effects of mindfulness on various areas of functioning became the secondary focus.

The method of data analysis used in this study was the modification of van Kaam's method of phenomenological analysis outlined by Moustakas (1994). Each transcribed interview underwent the thorough seven step process of extrapolation of meaning and essences. The process then concluded with the construction of one composite description of the common themes and meanings throughout the interview data.

Five themes emerged in the composite description of interview data; learning new coping skills, increased awareness, present moment living, learning about self, and improved interpersonal relationships. Within these themes, common elements or concepts emerged, such as acceptance, empowerment, respond verses react, increased joy and appreciation for life, fully experiencing life, internal locus of control, decreased fear, and the interconnectedness of life. Interview participants connected these concepts in various ways to the general themes, depending on their particular life situations, but it is within these themes and concepts that positive change occurred for the participants.

For example, participants who were originally seeking relief from physical pain, tended not to report experiencing any direct relief from physical pain. Rather, they reported that their relationship to their pain changed, the way they interpreted pain, thought about that pain, and experienced their

pain changed. Among the concepts they applied to their new interpretation of their physical problems were acceptance, internal locus of control, empowerment, and reduced fear. These concepts ultimately led participants to better manage and cope with pain, which reduced their suffering associated with the pain and improved their moods and self-confidence. This process of change did at times result in the actual reduction of pain, which was a secondary effect to their primary shift in perception.

Another example, relating to respondents dealing with psychological disorders, such as anxiety and depression, is as follows. Rather than report a primary change in mood, respondents more typically reported that mindfulness provided them with an opportunity to learn about their feelings of anxiety or depression. They were able to spend time being anxious, being depressed and learned they did not have to fear or avoid those feelings, but that they could instead choose to just feel what they feel. Participants reported a great deal of positive self-learning through this process, as well as increased self-confidence, feeling empowered and more in control of their thoughts and feelings. This ultimately led to a reduction in suffering from symptoms of anxiety and depression and at times led to the actual reduction of anxiety and depression.

A third example of the process of change being more significant than the outcome of change is seen in the participants' explanations' of the impact of stress in their lives after completing the course. Almost all of the participants stated that the stressors in their lives were not at all changed by the course. What they did say changed was their response to those stressors. They learned specific skills, such as breathing techniques or mindful walking, which again increased their sense of empowerment and shifted their locus of control from external to internal, which resulted in reduced suffering from those same stressors that used to affect them in negative ways.

These results indicate that the process of how mindfulness impacts human beings and effects change is highly complex. The results suggest that there exists an indirect path to symptom reduction and stress reduction that is highly effective towards influencing change in human beings. This indirect path is valuable in the sense that it has the power to reduce suffering and improve quality of life with or without a direct impact on symptoms.

The qualitative findings of this research identify the participants' self-perceived effects of the MBSR program as well as the process of how those effects influence change in various areas of their functioning. This process of how change occurs

must be explained in the context of a theoretical perspective in order for clinicians and researchers to fully understand the MBSR intervention and its underlying mechanisms of change. Although Buddhism is not a theory of human behavior, its assumptions and philosophical tenets provide some explanation for the findings generated by this dissertation.

The qualitative findings indicate that the MBSR participants experienced primary changes in their perception and interpretation of life events. These changes in perception, then, at times, led to secondary changes in mood, stress level, social relationships, and other various symptoms of functioning. This pattern can be explained and understood within the context of Buddhist philosophy and the Four Noble Truths.

The core elements of Buddhism are contained in the Four Noble Truths; the truth of suffering, attachments are the cause of suffering, suffering can end, and there is a way of living that leads to the end of suffering. The Four Noble Truths emphasize that suffering is caused by a person's attachments or perceptions of an event, rather than the event itself. The Four Noble Truths further suggest that the way to end suffering is not by eliminating negative life events, but to release attachments. In other words, the way to end suffering is to change the perceptions and expectations surrounding particular life events.

This philosophical perspective appears to be similar to the process of change that the participants of the MBSR intervention experienced. The MBSR intervention appears to teach participants ways of changing or widening their perceptions and interpretations of negative life events. Reportedly, these changes in perception of illness, emotions, and conflicts ultimately led to decreased suffering associated with various symptoms. Previous mindfulness research has minimized the impact of Buddhist philosophy on the MBSR intervention, however this relationship should not be ignored, but rather future research should further explore the relationships between Buddhist philosophy, the MBSR intervention, and effects on participants.

These findings also indicate support for the ideas set forth by Hayes and Wilson (2003) regarding problem definition and redefining treatment solutions. They state that mindfulness is "...not just a different way of treating traditionally conceptualized problems of depression or anxiety", but rather implies, "...a redefinition of the problem, the solution, and how both should be measured" (Hayes & Wilson, 2003, p. 165). Social workers in the fields of medicine and mental health traditionally define client problems as the illness or disorder with which they are diagnosed (A phenomenon also heavily encouraged by insurance providers and health maintenance organizations). However, this research on the effects of the

MBSR intervention suggests that the client's perceptions and interpretations of their diagnosis may also be a viable target for treatment intervention. Therefore, the MBSR intervention and its underlying theoretical foundation provide for additional treatment strategies that may enhance conventionally conceptualized treatments.

Limitations

Certain limitations exist within this study that must be taken into consideration when interpreting the results. One major limitation, due to the archival nature of the data, is that no data was available on the subjects who did not complete the course. It is therefore unknown if the course completers varied in any ways from the non-completers.

In addition, there also exist weaknesses in the internal validity of the study mainly due to the pre-experimental design used in the quantitative stage. Due to the lack of randomization and a control group, it is possible that the sample was affected by other extraneous variables, making it susceptible to threats of history, maturation, testing effects and regression towards the mean. The intervention lasted a relatively short period of time, eight weeks, limiting the possible effects of maturation and there were no known events that compromised history. The measures were administered only two times and the sample consisted of a non-clinical population, reducing the chance of

extreme outliers. Regardless of the relatively low risks to threats of internal validity, the requirements for causality have not been met.

More serious threats to external validity exist within this study. A major limitation is the lack of demographic data available to adequately describe the quantitative sample. Due to the archival nature of the data, the only demographic variable available was gender and therefore the degree to which the sample is representative of other populations is unknown. In addition, there existed some inconsistencies in the manner in which the six treatment groups were conducted. The fourth treatment group had an additional topic of weight management included in the curriculum as well as an additional instructor that provided information on nutrition. These differences also compromise the representativeness of the sample.

The extent to which these findings can be generalized is also limited in the qualitative component of the research. Although every effort was made to enhance the trustworthiness of the study, and the extent of credibility, dependability and confirmability is satisfactory, by the very nature of qualitative research, it lacks the ability to generalize. However, the qualitative findings were extremely useful in providing for further explanation of the quantitative findings

as well as point towards important elements of study for future research projects.

Future Research

Recently, the Mind Body Institute has successfully implemented a rigorous data collection protocol and computerized methods of managing data, which has improved the data collection process and minimized problems such as lost data. In addition, the MBI is now gathering data on a variety of demographic variables, including medical and psychiatric histories and other experience with CAM interventions. Two additional outcome measures have also been included during the pre-test and post-test observations, the Beck Anxiety Inventory and the Freiburg Mindfulness Inventory. In addition, practice tracking sheets are also compiled charting the frequency and duration of participants' daily practice exercises. These changes will greatly enhance future research conducted at the Mind Body Institute.

Other suggestions for future mindfulness studies are larger sample sizes and long-term follow up studies. Larger sample sizes are necessary to more closely examine the effects of mindfulness on various age, ethnic and gender populations. Follow up studies are necessary to determine if effects of the MBSR program are temporary or permanent. In addition, qualitative research is particularly suitable for studying the

complex nature of mindfulness and the process of how and why it effects change in individuals. Therefore, future qualitative studies would also enhance the knowledge base of research on mindfulness interventions. The qualitative data in this study indicated future dependent variables of interest are social relationships, locus of control, anger, fear, joy, acceptance, insight, and quality of life.

Implications for Practice

This dissertation explores the effects of an MBSR program on program participants from both a quantitative and qualitative perspective. Although additional research is necessary, social workers employed in medical, mental health, and private practice settings could benefit from utilizing the MBSR intervention as an additional resource for treatment options.

The qualitative findings revealed the complexity involved in the process of how mindfulness affects human beings. The data indicated that mindfulness did not directly influence symptoms or stress, but rather provided for a new way of interpreting symptoms. Rather than strive to simply eliminate distressful symptoms, participants seemed able to accept their symptoms and used them to learn about themselves and their bodies. This shift from the elimination of symptoms towards the acceptance of symptoms has important implications for the practice of social

work. It provides an alternate method for assisting clients in resolving emotional disorders and coping with physical ailments. A method that teaches clients how to accept and learn from their emotions, rather than fear and suppress their emotions. The MBSR intervention educates people about this process and provides them with techniques to practice these concepts in daily life.

The generalist perspective of social work requires social workers to be knowledgeable of various practice theories and interventions. Social workers must continue to search for treatment interventions that are applicable for use in diverse settings with a range of client populations. The MBSR intervention appears to be a viable treatment option for promoting personal empowerment and enhancing quality of life, which are the ultimate tasks of the social work profession.

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APPENDIX A
BECK DEPRESSION INVENTORY

Beck Depression Inventory

Read each item carefully and mark the square next to the answer that best describes how you have been feeling the past few days.

1.

- ☐ I do not feel sad.
- ☐ I feel sad.
- ☐ I am sad all the time and can't snap out of it.
- ☐ I am so sad or unhappy that I can't stand it.

2.

- ☐ I am not particularly discouraged about the future.
- ☐ I feel discouraged about the future.
- ☐ I feel I have nothing to look forward to.
- ☐ I feel that the future is hopeless and that things cannot improve.

3.

- ☐ I do not feel like a failure.
- ☐ I feel I have failed more than the average person.
- ☐ As I look back on my life, all I can see is a lot of failures.
- ☐ I feel I am a complete failure as a person.

4.

- ☐ I get as much satisfaction out of things as I used to.
- ☐ I don't enjoy things the way I used to.
- ☐ I don't get real satisfaction out of anything anymore.
- ☐ I am dissatisfied or bored with everything.

5.

- ☐ I do not feel particular guilty.
- ☐ I feel guilty a good part of the time.
- ☐ I feel guilty most of the time.
- ☐ I feel guilty all of the time.

6.

- ☐ I don't feel I am being punished.
- ☐ I feel I may be punished.
- ☐ I expect to be punished.
- ☐ I feel I am being punished.

7.

- ☐ I don't feel disappointed in myself.
- ☐ I am disappointed in myself.
- ☐ I am disgusted with myself.
- ☐ I hate myself.

8.

- ☐ I don't feel I am worse than anybody else.
- ☐ I am critical of myself for my weaknesses or mistakes.
- ☐ I blame myself all the time for my faults.
- ☐ I blame myself for everything bad that happens.

9.

- ☐ I don't have any thoughts of killing myself.
- ☐ I have thoughts of killing myself, but I would not carry them out.
- ☐ I would like to kill myself.
- ☐ I would kill myself if I had the chance.

10.

- ☐ I don't cry any more than usual.
- ☐ I cry more now than I used to.
- ☐ I cry all the time now.
- ☐ I used to be able to cry, but now I can't cry even though I want to.

11.

- ☐ I am no more irritated by things than I ever am.
- ☐ I am slightly more irritated now than usual.
- ☐ I am quite annoyed or irritated a good deal of the time.

☐ I feel irritated all the time now.

12.

☐ I have not lost interest in other people.

☐ I am less interested in other people than I used to be.

☐ I have lost most of my interest in other people.

☐ I have lost all of my interest in other people.

13.

☐ I make decisions about as well as I ever could.

☐ I put off making decisions more than I used to.

☐ I have greater difficulty in making decisions than before.

☐ I can't make decisions at all anymore.

14.

☐ I don't feel that I look any worse than I used to.

☐ I am worried that I am looking old or unattractive.

☐ I feel that there are permanent changes in my appearance that make me look unattractive.

☐ I believe that I look ugly.

15.

☐ I can work about as well as before.

☐ It takes an extra effort to get started at doing something.

☐ I have to push myself very hard to do anything.

☐ I can't do any work at all.

16.

☐ I can sleep as well as usual.

☐ I don't sleep as well as I used to.

☐ I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.

☐ I wake up several hours earlier than I used to and cannot get back to sleep.

17.

☐ I don't get tired more than usual.

- ☐ I get tired more easily than I used to.
- ☐ I get tired from doing almost anything.
- ☐ I am too tired to do anything.

18.

- ☐ My appetite is no worse than usual.
- ☐ My appetite is not as good as it used to be.
- ☐ My appetite is much worse now.
- ☐ I have no appetite at all anymore.

19.

- ☐ I haven't lost much weight, if any, lately.
- ☐ I have lost more than five pounds.
- ☐ I have lost more than ten pounds.
- ☐ I have lost more than fifteen pounds.

20.

- ☐ I am no more worried about my health than usual.
- ☐ I am worried about physical problems such as aches or pains, or upset stomach or constipation.
- ☐ I am very worried about physical problems and it's hard to think of much else.
- ☐ I am so worried about my physical problems that I cannot think about anything else.

21.

- ☐ I have not noticed any recent change in my interest in sex.
- ☐ I am less interested in sex than I used to be.
- ☐ I am much less interested in sex now.
- ☐ I have lost interest in sex completely.

APPENDIX B

RAND 36-Item Health Survey 1.0

RAND 36-Item Health Survey 1.0

1. In general, would you say your health is:	
Excellent	1
Very good	2
Good	3
Fair	4
Poor	5

2. Compared to one year ago , how would you rate your health in general now ?	
Much better now than one year ago	1
Somewhat better now than one year ago	2
About the same	3
Somewhat worse now than one year ago	4
Much worse now than one year ago	5

The following items are about activities you might do during a typical day. Does **your health now limit you** in these activities? If so, how much?

(Circle One Number on Each Line)

	Yes, Limited a Lot	Yes, Limited a Little	No, Not limited at All
3. Vigorous activities , such as running, lifting heavy objects, participating in strenuous sports	[1]	[2]	[3]
4. Moderate activities , such as	[1]	[2]	[3]

moving a table, pushing a vacuum cleaner, bowling, or playing golf			
5. Lifting or carrying groceries	[1]	[2]	[3]
6. Climbing several flights of stairs	[1]	[2]	[3]
7. Climbing one flight of stairs	[1]	[2]	[3]
8. Bending, kneeling, or stooping	[1]	[2]	[3]
9. Walking more than a mile	[1]	[2]	[3]
10. Walking several blocks	[1]	[2]	[3]
11. Walking one block	[1]	[2]	[3]
12. Bathing or dressing yourself	[1]	[2]	[3]

During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health?**

(Circle One Number on Each Line)

	Yes	No
13. Cut down the amount of time you spent on work or other activities	1	2
14. Accomplished less than you would like	1	2
15. Were limited in the kind of work or other activities	1	2
16. Had difficulty performing the work or other activities (for example, it took extra effort)	1	2

During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

(Circle One Number on Each Line)

	Yes	No
17. Cut down the amount of time you spent on work or other activities	1	2
18. Accomplished less than you would like	1	2
19. Didn't do work or other activities as carefully as usual	1	2

20. During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

(Circle One Number)

Not at all 1

Slightly 2

Moderately 3

Quite a bit 4

Extremely 5

21. How much **bodily** pain have you had during the **past 4 weeks**?

(Circle One Number)

None 1

Very mild 2

Mild 3

Moderate 4

Severe 5

Very severe 6

22. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

(Circle One Number)

Not at all 1

A little bit 2

Moderately 3

Quite a bit 4

Extremely 5

These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the **past 4 weeks** . . .

(Circle One Number on Each Line)

	All of the Time	Most of the Time	A Good Bit of the Time	Some of the Time	A Little of the Time	None of the Time
23. Did you feel full of pep?	1	2	3	4	5	6
24. Have you been a very nervous person?	1	2	3	4	5	6
25. Have you felt so down in the	1	2	3	4	5	6

dumps that nothing could cheer you up?						
26. Have you felt calm and peaceful?	1	2	3	4	5	6
27. Did you have a lot of energy?	1	2	3	4	5	6
28. Have you felt downhearted and blue?	1	2	3	4	5	6
29. Did you feel worn out?	1	2	3	4	5	6
30. Have you been a happy person?	1	2	3	4	5	6
31. Did you feel tired?	1	2	3	4	5	6

32. During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?

(Circle One Number)

All of the time 1

Most of the time 2

Some of the time 3

A little of the time 4

None of the time 5

How TRUE or FALSE is each of the following statements for you.

(Circle One Number on Each Line)

	Definitely True	Mostly True	Don't Know	Mostly False	Definitely False
33. I seem to get sick a little easier than other people	1	2	3	4	5
34. I am as healthy as anybody I know	1	2	3	4	5
35. I expect my health to get worse	1	2	3	4	5
36. My health is excellent	1	2	3	4	5

APPENDIX C
INTERVIEW RECRUITMENT LETTERS

October 1, 2003

Dear MBSR Participant:

I am writing to inform you of an opportunity to participate in a research project that is taking place through the University of Georgia, School of Social Work, headed by Krista L. Barker, LMSW. Ms. Barker is conducting dissertation research on the effects of the mindfulness-based stress reduction program. She would like to interview those of you who completed the MBSR course at the Mind Body Institute to gather knowledge about your personal experiences with the program and how the program affected your daily life. Any information collected from the interview would be kept strictly confidential. Individual interview data will not be shared with the Mind Body Institute or any other third party. Your participation in this project will help improve the future delivery of mindfulness-based services and contribute to the knowledge base of complementary medicine. If you are interested in participating in an interview or if you would like further information, please contact Krista L. Barker at 706-244-4832. Thank you for your consideration in this matter.

Sincerely,

Mind Body Institute Staff

December 1, 2003

Dear MBSR Participant:

A few weeks ago you received a letter about a research opportunity through the University of Georgia, School of Social Work, headed by Krista L. Barker, LMSW. Ms. Barker is conducting dissertation research on the effects of the mindfulness-based stress reduction program. Several participants responded to our initial request for interviewees, however, a need for participants still exists. Ms. Barker is looking for volunteers to participate in a 30-45 minute interview about your experience with the MBSR program. Whether or not you continue to practice the mindfulness techniques, your personal experience with the program is important to the study. She can meet you at a convenient location or the interview can take place at the Mind Body Institute.

Any information collected from the interview would be kept strictly confidential. Individual interview data will not be shared with the Mind Body Institute or any other third party. Your participation in this project will help improve the future delivery of mindfulness-based services and contribute to the knowledge base of complementary medicine. If you agree to participate in an interview, or if you would like further information, please contact Krista L. Barker at 706-244-4832. Thank you for your consideration in this matter.

Sincerely,

Mind Body Institute Staff

APPENDIX D

SEMI-STRUCTURED INTERVIEW GUIDE

Semi-Structured Interview Guide

Gender: Male/Female

Occupation: _____

Age: _____

Date & Time: _____

Race: _____

Location: _____

MBSR Course Date: September02/October02/February03/April03/August03/October03

1) Was the MBSR course at MBI your first experience with mindfulness or do you have previous experience with the practice of mindfulness techniques?

2) Did participating in the MBSR course influence your life in any way? If, yes, please explain.

3) Did participating in the MBSR course influence your physical health in any way? If yes, please explain.

4) Did participating in the MBSR course influence your emotions or your reactions to your emotions in any way? If yes, please explain.

5) Did participating in the MBSR course influence your psychological well-being (e.g. symptoms of depression/anxiety) in any way? If yes, please explain.

6) Did participating in the MBSR course influence your stress level in any way? If yes, please explain.

7) Do you think the course has a spiritual component to it? If yes, please explain. Did participating in the MBSR course influence your spiritual beliefs in any way? If yes, please explain.

8) Did participating in the MBSR course influence your social life (your relationships with others) in any way? If yes, please explain.

9) What techniques (yoga, breath work, meditation, mindful eating or other activities, body scans, walking meditation, etc.) from the program have you integrated into your life?

10) How often do you practice the techniques?

11) What techniques have been most helpful to you and in what way?

12) Have you experienced any other benefits or changes in your life since participating in the program that you contribute to the mindfulness techniques?

13) What is your definition of mindfulness? Why or what is it that is beneficial about mindfulness?

14) How would you describe the effects that mindfulness has had in your life?

15) Has your behavior changed in any way since you have participated in the MBSR program?

16) Have there been any negative effects or uncomfortable experiences as a result of participating in the MBSR course or practicing the techniques? If yes, please explain.

17) Would you recommend this program to others? If yes, what kinds of people do you think would benefit from the program? If no, please explain.

18) What are the 3 most important things you got out of the MBSR program?

19) How did the group setting effect your experience in the class? Were there positive benefits or the group and/or were there any negative aspects to the group?

20) Do you have any suggestions for improvements in the group or are there any other comments you would like to make?

APPENDIX E
INTERVIEW CONSENT FORM

INTERVIEW CONSENT FORM

I, _____, agree to participate in a research study titled "Assessing the Efficacy of a Mindfulness-Based Stress Reduction Program" conducted by Krista L. Barker from the School of Social Work at the University of Georgia 706-244-4832 under the direction of Dr. Ed Risler, School of Social Work, University of Georgia 706-542-5471. I understand that my participation is voluntary. I can stop taking part without giving any reason, and without penalty. I can ask to have all of the information about me returned to me, removed from the research records, or destroyed.

The reason for this study is to determine what immediate and long-term benefits were achieved from participation in the Mindfulness Based Stress Reduction Program. The informative you provide the researcher may help in the future development of programs and practices at the Mind Body Institute. This research will give me an opportunity to express my experiences both during and after participating in the Mindfulness Based Stress Reduction Program.

If I volunteer to take part in this study, I will be asked to participate in a personal interview with the researcher, which will take approximately one hour. The interview questions relate to my experiences during and after my participation in the MBSR course. I will be asked about the techniques learned during the MBSR class and how those techniques have influenced my life. The researcher will record on tape the entire interview and later transcribe the interview into written notes. The tapes and notes will be stored in a secure location and they will be destroyed one year after the study is completed. The interview tapes and notes will not be shared with any third parties, including the Mind Body Institute.

My participation in this research may lead to information that could improve the quality and components of the Mindfulness Based Stress Reduction Program and lead to increased knowledge of the effects of complimentary medical treatments such as the Mindfulness Based Stress Reduction Program.

No risks are expected. No discomforts or stressors are expected. I can skip any questions I feel uncomfortable answering.

All information about me will be kept confidential. No identifying information will be public, nor will it be shared with any third parties. If information about me is published it will be written in a way that cannot be recognized. Any identifying information will be destroyed one year post completion of the study.

The investigator will answer any further questions about the research, now or during the course of the project 706-244-4832.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Name of Researcher:

Krista L. Barker, LMSW

Telephone: 706-244-4832

Email: klbarker@uga.edu

Signature

Date

Name of Participant

Signature

Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu