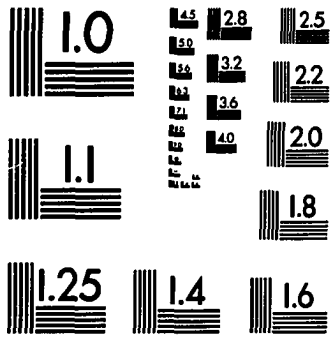
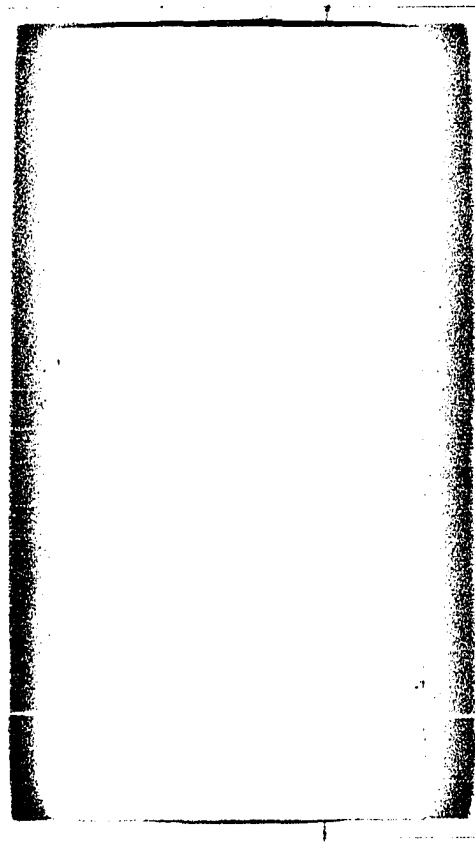
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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

MIND-BODY INTEGRATION AS AN ADJUNCT TO CHEMICAL DEPENDENCY TREATMENT

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

BY

MICHAEL ALLAN GUTTMAN

Norman, Oklahoma

1986

MIND-BODY INTEGRATION AS AN ADJUNCT

TO CHEMICAL DEPENDENCY TREATMENT

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I wish to acknowledge the assistance, support, encouragement, love and tolerance of my wife Mary Ann, my children and my parents that permitted me the opportunity to achieve this goal.

DEDICATION

This study is dedicated to Mary Ann, Michael, and Sean, my greatest supporters. I also wish to dedicate this work to the chemically dependent, who struggle on one day at a time.

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ABSTRACT

MIND-BODY INTEGRATION AS AN ADJUNCT
TO CHEMICAL DEPENDENCY TREATMENT

BY: MICHAEL ALLAN GUTTMAN

MAJOR PROFESSORS:

Dr. Don Udell, Ph.D. and Dr. Paula Englander-Golden, Ph.D.

The effect of introducing a stress management and coping skills package as an adjunct to the chemical dependency treatment process was studied, using eight subjects in two residential treatment centers using a randomly selected two group pre-post test design. The skills training was provided in addition to the standard treatment program, using pre and posttest scores on the Institute for Personality and Ability Testing Anxiety Scale Questionnaire. The t-tests for paired observations on the Anxiety Scale Questionnaire were significant at the .05 level for the experimental group but not for the control group. It was concluded that Mind-Body Integration had a significant impact in reducing stress in this population.

MIND-BODY INTEGRATION AS AN ADJUNCT TO CHEMICAL DEPENDENCY TREATMENT

CHAPTER I

Introduction

Chemical dependency in the United States has developed into an epidemic among our youth and adult populations. Trends in substance abuse indicate that as of nineteen seventy-eight, six percent of all high school seniors drank alcohol daily, ten percent of all high school seniors smoked marijuana daily, use of barbiturates, amphetamines, inhalants, cocaine, and hallucinogens were on the rise among our youth (Cohen, 1981). Chemical dependency is an international concern. In the Federal Republic of Germany alcoholism is at epidemic levels among the youth. The problem of treating the chemically dependent is a central issue in international relations. The First Lady of the United States is currently speaking out against the use of psychoactive substances. This major health problem is a multi-million dollar business in the United States. The field of chemical dependency treatment is a relatively new specialization in the helping professions.

The field of chemical dependency treatment rose initially from the creation in the nineteen thirties of a

group called Alcoholics Anonymous. This was a group of people who gathered together to assist each other in becoming sober and maintaining sobriety. The basic philosophy of this group was that they were powerless to control their use of alcohol. The premise of this group based on their collective experiences was that alcoholism affects all aspects of their lives (Alcoholic Anonymous, 1976). During the early nineteen sixties psychoactive chemical use gained popularity among the youth of that era. The chemical dependency treatment concept started to gain popularity during this period. These centers were restricted to metropolitan areas and they were often operated under the auspices of the free clinic concept. The Johnson Institute was and is one of the trend setters in the field of chemical dependency treatment.

The model prescribed by the Johnson Institute is a three part model consisting of an intervention, a period of treatment, and aftercare (Mendellson and Mello, 1979). The part of the model that this study was concerned with was the treatment period. Treatment in an inpatient setting may vary in length from twenty-eight days to one year. Length of treatment depends on the philosophy of the care-giving organization and the treatment programs provided in the inpatient setting. Treatment modalities may vary from modeling (Caudell and Marlott, 1975), to biofeedback (Steen, 1978), to aversion therapy (Lovibond and Caddy,

1970). Most treatment centers use a variety of modalities that include, but are not limited, to the following, group and individual psychotherapy, education, stress, management, alcoholics anonymous, narcotics anonymous, encounter groups, family therapy, family reconstruction, reality therapy, rational emotive therapy, behavior modification, leisure time planning, daily living skills, occupational therapy, and community reintegration. The desirable end-product of the above modalities is abstinence. The chemically dependent person can only maintain the gains made in treatment by abstaining from the use of any psychoactive substances. The use of self-help groups, coupled with the abstinence oriented program are the mainstay of the treatment community.

At the present time the focus in the treatment community has shifted to a more systems oriented program format. The introduction of treating the entire family for chemical dependency was a model that gained acceptance rapidly in the treatment community. The families often exhibit stress in a variety of ways (Wegscheider, 1981). During the treatment program chemically dependent persons exhibit symptoms of stress i.e., anxiety, depression, eating or sleeping disturbances, fatigue, hypervigilance, and emotional instability (Selye, 1978). Behavioral therapy has focused on the aversion therapy model. The

current programs in the behavioral area focus on aversive conditioning coupled with shaping alternative behaviors (Armor, Polich, and Stambul, 1976). The research results of these behavioral programs have been disputed due to the lack of consistency in the experimental designs.

Need for the Study

The lifestyle of an addict or alcoholic is extremely stressful, and distress is produced in all facets of the persons' life. Stress during treatment and innovative alternatives for coping with stress during treatment were the primary foci of this study. The innovative alternatives are packaged under the name of Mind-Body Integration. This package incorporates relaxation techniques, and meditative and self-care techniques for stress reduction. There is a need for research in this area.

Statement of the Problem

Does the inclusion of Mind-Body Integration as an adjunct to the treatment process have any effect on stress as measured by the Anxiety Scale Questionnaire.

H_1 The introduction of Mind-Body Integration to the treatment process will have a significant effect on stress as measured by the Anxiety Scale Questionnaire, and this effect will be a reduction in stress as measured by the Anxiety Scale Questionnaire.

Significance of the Study

This study will contribute to the knowledge in this area of the literature, and it will add to the innovative techniques that are currently available in this area. The information in areas related to stress management and anxiety with chemically dependent populations is extremely limited in scope and quantity.

Operational Definitions

Chemically Dependent: A person or persons that are physically or psychologically dependent on psychoactive substances to the point of experiencing disruption in one or more areas of daily living.

Treatment Modalities: The method or model selected by the care giving organization for use with the clients in that center.

Treatment: The process that a chemically dependent person goes through in a care giver facility. For the purposes of this study treatment was an inpatient process.

Care Giver Organization: The profit or non-profit business that operates a treatment facility.

Psychoactive Substance: Those substances which alter our perception of reality, or produce some detrimental change in our physiology. For the purposes of this study these substances consist of opiates, sedative-narcotics,

amphetamines, sedative hypnotics, hallucinogens, inhalants, and alchohol.

Mind-Body Integration: For the purposes of this study mind-body integration was a program for stress management and self-care that was introduced to a treatment process as an adjunct modality. Mind-body integration consists of several distinct techniques. These techniques include meditation, aikido, tai chi chuan, psychoacoustics, acupressure, and autogenic relaxation techniques.

Modality: A method or technique of delivery of treatment.

Limitations

For the purpose of this study the following assumptions were made:

It was assumed that the subjects in two Oklahoma treatment facilities were representative of subjects in other treatment programs within the State of Oklahoma.

It was also assumed that the two treatment programs were representative of treatment programs within the State of Oklahoma.

It was assumed that these subjects and treatment programs were representative of subjects and programs outside the State of Oklahoma.

Organization of the Study

The Introduction/Problem is presented in Chapter I. The Review of the Literature is presented in Chapter II. The Research Methodology is presented in Chapter III. The Results are presented in Chapter IV. The Summary, Conclusions, and Recommendations are presented in Chapter V. The Bibliography, letters, outlines, and Data Tables are presented in the Appendices.

CHAPTER II

Review of the Literature

The problem of the study was: does the inclusion of Mind-Body Integration in the treatment process have any effect on stress as measured by the Anxiety Scale Questionnaire. This chapter is organized into sections under the headings of, history, concepts and theoretical framework, recent research, and a summary.

History

Stress is a term coined in this century. It is a term with many applications, from people to metals. The term stress as it applies to people involves the interaction of the mind and the body, and may permit inference that there is a state of interaction operating when a person is stressed. In the seventeenth century the philosopher Descartes proposed a dichotomy between the mind and the body. This view seemed to dominate in philosophical thought for several years. Spinoza was the first to suggest that there was indeed a relationship between mind and body (Ohmori, 1960). In the classic work on stress, Dr. Hans Selye defined stress as, "the non-specific response of the body to any demand" (Selye, 1957). In his treatise Dr. Selye presents the physiological and

psychological symptoms and effects of stress. Dr. Selye discusses several symptoms of stress two of these are anxiety, and abuse of drugs and alcohol (Selye, 1956). He also discusses the changes that occur with high stress levels physiologically and psychologically over an extended period of time. In the latter nineteen-fifties, psychologists and doctors started using the words anxiety and stress synonymously. This practice continues today, however in the nineteen-seventies Dr. Rollo May took exception to this practice. Dr. May describes stress as including the state of anxiety, however, anxiety does not include stress. He states, "Anxiety is how the individual relates to stress, accepts and interprets it. Stress is a halfway station on the way to anxiety. Anxiety is how we handle stress" (May, 1970, p. 98) (Meichenbaum and Jaremko, 1983).

Alvin Toffler discusses decision stress in our society as the result of overbombardment of the senses (Toffler, 1970). The pressure to make a continuous stream of decisions results in anxiety and psychological maladaptation. In nineteen-sixty nine, a study was performed on the transactional model of stress. The conclusion of this study was that a person will experience stress when he/she is relatively incapable of responding effectively to the demands placed on him or her by his/her

environment (Lehman, 1972). The reasons for seeking relaxation are problems of great magnitude in today's society. Prominent among the theories for drug abuse are anxiety, alienation, peer pressure, and the need to relax (Brown, 1974). In nineteen seventy-four, a study was published using autogenic biofeedback training for anxiety reduction. In this study anxiety was reduced as measured by biofeedback machines (Green, Green, and Walters, 1974).

Stress can effectively be reduced according to Herbert de Vries, if the person incorporates a physical and psychological union for relaxation. He discusses the psychological and emotive benefits of physical exercise (de Vries, 1979). Morrissey and Schuckit found in their study that female alcoholics related stressful life events as the precipitating factor in thirty per cent of the cases (Morrissey and Schuckit, 1978). Mendelson and Mello in their book on alcoholism describe anxiety as a natural consequence in treatment, and they state that a multivariate style of treatment may produce anxiety in the client (Mendelson and Mello, 1979).

Pearlin and Radabaugh concluded in an article printed in the American Journal of Sociology, that a large number of alcoholics abuse alcohol in an effort to reduce distress. In his reanalysis of Pearlin and Radabaugh's data, Dr. Roman of Tulane University states, "In Light of the methodological problems evident in the research,

caution should be exercised in applying the research." In nineteen-eighty, a study was conducted to examine the role of coping behavior in the recovery process of alcoholics. The results of this study indicated that coping responses do play a role in the recovery process, and that the alcoholics who did not have adequate coping skills were good candidates for relapse (Billings and Moos, 1980).

Conceptual Framework

The mind-body relationship was first explored by Descartes in the sixteen-hundreds. Descartes halved the world by dividing all things elements of a dichotomy. This dichotomized view separated the person into a being composed of mind, and of body. However, these parts were separated and did not interact with each other (Descartes, 1641). This dichotomy later was referred to as dualism. In sixteen seventy-seven, Spinoza developed the hypothesis that mind and body are textures of one substance, this substance being "God". This alteration introduced the concept of God as a mediator between the parts of Descartes' dualist concepts. This view was lauded as a progressive move towards monism. Monoisitic philosophy was the mainstay of great philosophers such as Kant, Comte, Spencer, Mach, and Kohler. In the nineteen-sixties, Ohmori tried to eliminate the problems surrounding Kohler's monistic theory. Kohler's theory of causal monoism

contains three parts. The parts of Kohler's theory interact as follows: (a) stimuli from physical objects reach the brain after passing through the nervous system, (b) the state of the brain as the result of (a) corresponds to the content of percept in one-to-one, (c) there is no interaction between the content of the percept and the state of the brain (Harada, 1968, p. 96-97). Ohmori eliminated the problem of projection, and changed the relation between physical things and percepts into that between percepts only (Ohmori, 1960). According to this monoistic theory, the relationship between mind-body is explained by the proposition that the representation corresponding to the cerebral process is just another name for the cerebral process itself (Harada, 1968). Akishige stood on the concept that the relationship between mind and body is that of representation, and what connects the two is the concept of information. This conceptual framework has been labeled neutral monoism (Akishige, 1965). This movement to monoism and the conceptual foundations of Selye's work provide the theoretical foundations for this study. The movement from the dichotomy proposed by Descartes to the monistic view adopted by Akishige, is the foundation for the conceptual proposition that there is a direct link between the mind and body.

This study took a programmed process in stress reduction, and incorporated self-care techniques to present some alternatives to people involved in treatment. The Mind-Body integration program is comprised of several parts. These are meditation, acupressure, tai chi chuan, aikido, psychoacoustics, and autogenic relaxation techniques. Each technique will be presented with it's historical and conceptual frameworks.

Meditation is defined as a means to engage in contemplation or reflection. Meditation has survived thousands of years of evolution, and has been highly respected by various civilizations down through the years. Meditation is viewed as an altered state of consciousness (Broomfield and Kory, 1976). The Chinese focus of meditation is to develop concentration through non-concentration, or one-pointedness of mind (Minick, 1974). Transcendental Meditation made it's American debut in the nineteen-sixties, and has been one of the popular methods of learning meditation (Broomfield and Kory, 1976). Meditation is still considered by many people to be exclusively related to religious activities. The style of meditation incorporated in mind-body integration is derived from the martial arts of China (Minick, 1974). This style concentrates on imagery exercises similar to those incorporated in other stress management packages (Tart, 1971). Monahan used Transcendental Meditation with drug

abusers in a federal treatment program. The results were significant in that these abusers reported a reduction of any craving for drugs, and remained abstinent (Monahan, 1975). The meditation styles incorporated in Mind-Body Integration are similar to the style used by Monahan with one major difference. This difference is that the participants were not given a sound (mantra) to repeat. For the purpose of this project psychoacoustic music/sound was played on audio equipment external to the subjects.

Acupressure is defined as the application of pressure to certain neural receptor points on the body to reduce pain, fatigue, or as a self-care massage technique. Tien-An and Shiatsu, are the two styles of acupressure from the Chinese and Japanese cultures respectively (Chan, 1974). These techniques are provided as part of the mind-body integration in an effort to provide some opportunities for the subjects to practice pain relief without having to rely on drugs. Acupressure also provides the subject with some immediate reinforcement of positive self-care. Acupressure has been used in the orient for centuries as a part of the home based health care system. In his definitive book on acupressure, Chan states, "The use of acupressure can and should be used in conjunction with other therapies" (Chan, 1974). Shultz in his book on Shiatsu discussed the

importance of acupressure in relieving pain without drugs (Shultz, 1976).

Tai Chi Chuan, and Aikido are martial art styles with movement meditation and balancing components. These two styles were introduced to the Chinese and Japanese cultures respectively through adaptations to the martial arts practiced by the priest and samurai classes in the middle ages. Tai Chi was introduced as a daily exercise regimen to enhance the functioning of the body through the rhythmic circulation of parts of the body as the body progresses through the systematic movements. This particular system is still practiced daily in China (Tegner, 1981). Tai Chi will promote a feeling of good health however, as one feels better it is advisable that he/she engage in other aerobic exercises. Aikido contains the aerobic exercises to compliment the Tai Chi practice. The movements of Aikido produce a rise in heart rate, and produce a calming effect in the practitioner. Aikido means the way of harmony, and all students of this style learn harmony and peace in movement prior to learning the self-defense movements. The meditation movements used in mind-body integration also produce a doubling effect since the portion to Aikido selected is one that pairs people, and has each of them follow the other through a series of movements. This doubling effect refers to the enhancement of sensation and tactile adaptation that occurs in each pair of subjects.

If practiced correctly, Aikido may produce a calming effect and an altered state of consciousness for the partners. Aikido also produces a calming effect by promoting relaxation in the body during the exercises.

The next major area is Psychoacoustics. Psychoacoustics is defined as the tonal responses that are harmonic with the electro-chemical reactions on the surface of the brain. These sounds fall into several categories. Some of these categories are, environmental sounds, music, and sound effects. In researching the mantra response of Transcendental Meditation, Dr. Bernard Gleuck concluded that the resonance quality of the mantra dampens limbic activity, and breaks down the repression barrier promoting interhemispheric communication in the brain (Gleuck, 1976). Dr. Tartchanoff in his studies on the effects of sound stimuli upon the skeletal muscles, discovered music exercises a powerful influence on muscular activitiy. This activity increases or diminishes according to the character of the music employed (Tame, 1984). One of the better known experiments was performed by Dr. Lee Salk. In this experiment the normal heartbeat was amplified and played in a nursery of newborn babies and most of the newborns in the nursery were soothed to sleep (Tame, 1984). The research in this area is limited in quantity. The current advances being made in the areas of technology related to body/brain

function suggests that there may be some research breakthroughs in this area over the next few years (Tame, 1984).

The next major area is autogenic relaxation. Autogenic relaxation is the hallmark of the specialty called biofeedback. Biofeedback is defined as the return of information about the subjects' physical responses to the subject as they are measured by a machine. This feeding back is usually done with flashing lights, or tones from the machine. The field of biofeedback measures various body responses such as, muscle tension, heart rate, galvanic skin response, or alpha brain wave patterns (Brown, 1975). Progressive muscle relaxation, breathing exercises, and heart rate exercises fall in the realm of biofeedback, and in the realm of general stress management. Autogenic training is one area that has been applied to research in chemical dependency. This method relies heavily on the information being fed back from external sources. In Mind-Body Integration the focus is on learning individual internal responses to stress and learning to reduce that stress or cope with it.

Recent Research

In analyzing the recent research there is a lack of any current research articles or papers incorporating all the facets of the mind-body relationship as outlined in the

Mind-Body Integration format. However, there are several recent studies that have been performed in periphral areas. A study involving incarcerated alcoholics incorporating stress management techniques reported a reduction in the recidivism rate after two years post release (Ziegler and Kohutek, 1978). In Science Vol. 167, November 1970, it was reported that a research project investigating the effects of transcendental meditation concluded that transcendental meditation reduced muscle and physical tension (Wallace, 1970). In a dissertation written at the University of Kansas, Steen conducted a study of stress reduction using theta brain wave feedback with male alcoholics. The conclusion of this study was that there were no significant changes in the pre and post readings (Steen, 1978).

In nineteen seventy-six, Speilberger proposed that the term "stress" indicate the objective stimulus properties of a situation and that the term "threat" refer to the person's perception of a situation as being potentially dangerous for him/her (Spielbergr, 1976). In nineteen seventy-nine Spielberger concluded that "stress can be defined as transactions between the person and the environment in which stressors are linked to anxiety reactions by the perception of a threat" (p. 47). In nineteen eighty, Endler proposed an interactional model of anxiety. The interactional model with it's emphasis on both person determinants and situational determinants and

on the continuing process, appears to have some promise in resolving some of the confusion that has arisen in the study of stress and anxiety (Endler, 1980). Michenbaum and Jaremko in nineteen eighty emphasized the need for cognitive restructuring, on the premise that the person's distress results from a faulty way of construing troubling events and relationships (Lazarus and Folkman, 1984). In a book published in nineteen eight-five, the editor suggested that research continue in the area of meditation as an effective self-control strategy for the clinical management of stress (Burchfield, 1985).

The above research would suggest that there is a movement towards developing multimodal management techniques in the area of clinical stress management.

Summary

To summarize the literature available in this area, there is a link between stress and anxiety. There are several studies that were performed to measure the effect of meditation on several populations. There is a direct link between the mind and the body, and there appears to be a link between the use of relaxation techniques in some programs, and the ability to cope with daily life post treatment. The melding of several techniques into one adjunct modality may affect the stress levels of subjects as measured by anxiety. If a person is provided with new

skills that are beneficial to him/her in reducing stress, and anxiety, it is possible that he/she may choose to use these skills to cope or reduce the stress. The Mind-Body Integration model was designed to provide a number of positive alternatives for coping with stressful situations without using chemicals.

CHAPTER III

METHODOLOGY

Subjects

Experimental Group. The experimental group with forty subjects was selected randomly from volunteers in two chemical dependency treatment centers in the Oklahoma City area. Out of the eighty four subjects undergoing treatment at these two sites, eighty subjects participated in the study. The subjects signed an informed consent participant form, and for those subjects under eighteen years old, a parental or guardian permission form was obtained. A copy of the participant agreement form may be found in Appendix B. The experimental group received the Mind-Body Integration training program in addition to the standard treatment program provided by the treatment center.

Control Group. The control group with forty subjects was composed of those subjects not selected for the experimental group. This group received the standard treatment program provided by the treatment center. The control group had a group meeting (part of the standard treatment conducted by treatment center staff) during the time the experimental group received the Mind-Body Integration training.

The age range for the subjects was from twelve years old to forty nine-years old. Subjects for this study included fifty-six males and twenty-four females from various ethnic, cultural, and socioeconomic groups.

Procedure

Mind-Body Integration training was conducted over a six week period, meeting one night each week for two hours at each site. Class size averaged fifteen to twenty subjects at each site. The training was conducted by the researcher, in a large group room at one site, and a small gymnasium at the other site. The researcher applied for and received permission to conduct this research from the Institutional Review Board of the University of Oklahoma. The letters and correspondence related to approval of this project are enclosed in Appendix B.

One week prior to the project starting date the researcher presented an orientation at each site. During these orientations the researcher presented the project to all prospective subjects. The researcher also presented the Agreement to Participate Form. The researcher also explained to all of the prospective subjects that those subjects who were selected for the control group would receive the Mind-Body Integration Training after the project was concluded. The researcher asked that those volunteers who were selectd for the experimental group not

reveal any of the exercises or group information for the duration of the project. The researcher then asked for volunteers from the prospective subjects, and had these volunteers complete the Agreement to Participate Form. The volunteers were then asked to complete the Anxiety Scale Questionnaire. The researcher then coded the questionnaires from 001-080. The researcher then used a random number generator to select the subjects for the experimental group.

Mind-Body Integration training-experimental group. In the first session the researcher presented a lecture on stress and stressors. The researcher provided information on physiological and psychological symptoms of stress, recognizing stressors, and designing a program for coping with stress. The researcher used small temperature sensitive biodots to illustrate the connections between the mind and body. The researcher then presented information on negative addictions. The researcher then presented information on positive addictions for stress reduction. Some of the positive addictions that were discussed were running, weight lifting, swimming, dancing, and aerobics. The researcher then presented three breathing exercises. The first exercise is called the continuous breath. In this exercise, the subject inhales as deeply as possible

through the nose and exhales through the mouth in a fluid manner for one to two minutes.

The second exercise is called Shi-Nay, in this exercise the subjects learn to inhale and exhale in equal parts. The breath is inhaled in one part and then exhaled in one part, then the breath is inhaled and exhaled in two parts. The parts are increased by one part on each breath, until the breath is inhaled and exhaled in ten equal parts. The third breathing exercise is the explosive breath. In this exercise, the subject takes in a deep breath, and forces it out quickly. These exercises assist the subject by oxygenating the body, and focusing concentration on breathing. This focus on breathing promotes a reduction in anxiety, and a feeling of relaxation.

The final part of the first session was spent on progressive muscle relaxation. The researcher verbally led the subjects through a progressive relaxation exercise. During this exercise, the subjects learned to relax sixteen major muscle groups. The researcher asked the group members to practice the breathing exercises two or three times during the week prior to the next session.

In session two, the researcher asked for feedback on the homework, and reviewed the exercises covered in the previous session. The subjects discussed several situations in which they used the breathing exercises, and they reported a noticeable reduction in anxiety when they

practiced these exercises. The researcher presented a lecture on nutrition and stress, with a focus on foods that may increase anxiety. Coffee, tea, carbonated beverages, sugar, and salt were discussed. The researcher then presented the tiger playing with ball exercise from the Tai Chi Chuan. He then verbally directed the subjects through this exercise. The subjects were then permitted to practice the exercise until they felt comfortable with the movements. This exercise provides balancing and meditative components. The researcher then discussed and demonstrated Ging Kong. Ging Kong is a dynamic tension exercise with both breathing and movement components. In this exercise, the subject moves through a series of motions while he/she imagines himself/herself moving a mountain. The researcher then led the group verbally through this exercise. The researcher asked the subjects to practice the exercise they learned in this session once or twice in the next week, and continue to practice the breathing exercises on a daily basis.

The third session started with a review of the skills learned in the previous session, and feedback on the homework. Several of the subjects discussed the difficulty in practicing the exercises due to the agreement to maintain confidentiality until the project was complete. The researcher discussed alternatives with the subjects,

and they agreed to try practicing the exercises in a group room early in the morning. The researcher supported this decision and gave the subjects positive verbal support for their proposed solution. The researcher presented a lecture on psychoacoustics. The researcher played a variety of psychoacoustic selections on the tape system he provided for the training. The researcher then presented a lecture on imagery and meditation. The researcher then verbally directed the subjects through a deep muscle relaxation exercise and relaxation imagery exercise. The researcher then requested that the subjects practice the exercise once in the following week. During the imagery exercise, two subjects reported having images of a negative situation that they experienced previously. The reseacher encouraged them to discuss the imagery with their counselor, and the researcher gave positive reinforcement to these subjects.

In the fourth session, the researcher reviewed the skills learned in the previous session, and requested feedback on the exercises. Several of the subjects reported success with leading themselves through the imagery exercise. The researcher then presented a lecture on the recognition of stress and giving permission to self for reducing stress. The researcher discussed having a positive self-image to enhance results from stress reduction exercises. The researcher then asked group

members to review and practice the Ging Kong exercise. The researcher provided feedback to the subjects for enhancement of the exercise. The researcher presented a lecture on the origin and practice of the Rising Sun Meditation from the martial arts of Japan. The researcher then verbally directed the group members in practicing the meditation. The researcher asked the subjects to practice the meditation during the next week.

In the fifth session, the researcher asked for feedback on the meditation homework. The subjects reported varying degrees of success with the exercise from mild relaxation to deep relaxation when they practiced the meditation. The researcher gave positive support for all levels, and proposed some techniques for enhancing the meditation exercise. The researhcer reviewed the previous session and answered questions on the information that was presented. The researcher then presented and demonstrated the Aikido push hands exercise. In this exercise the subjects pair off with a partner and stand facing each other. The subjects then extend their arms in front of them, with palms touching. The subjects then take turns leading each other through a series of circular movements. This exercise provides balancing and centering components as well as tactile sensation enhancement. The researcher then presented a seashore imagery exercise, and verbally

led the group through this imagery exercise. The researcher provided a verbal anchor for this imagery technique. This anchor reduced the time needed by the subjects to reenter the imagery at a later time. The researcher asked the group mewmbers to practice these techniques over the next week.

In the final session, the researcher reviewed the homework and the skills learned in the previous session. The researcher then presented a lecture on self-care and acupressure. The researcher then demonstrated the four acupressure points for headaches, and muscle soreness. The researcher then reviewed the Tiger Playing with Ball exercise for the group members. The researcher then opened the group for a question and answer session, and a verbal critique session was held. After the session was completed all of the volunteers from the experimental and control groups were gathered into groups at each site, and the Anxiety Scale Questionnaire was administered for the posttest.

The researcher returned to both sites two weeks after the completion of the project, and trained all of the control group members in Mind-Body Intergration. At that time, the researcher was available to all group members to provide feedback on the testing that had been administered, and the overall results of the study.

Apparatus

The dependent measure for this study was the Anxeity Scale Questionnaire (ASQ), developed by the Institute for Personality and Ability Testing. This questionnaire was developd in 1957 as a means of obtaining a global measurement of anxiety reflecting primarily the ego involving dimension (Goldberger and Breznitz, 1982). The Anxiety Scale Questionnaire provides clinical anxiety information in a rapid, objective and standard manner (Krug, Scheier, and Cattell, 1976).

The questionnaire may be administered in a group setting, or individually. The questionnaire consists of forty items with three possible answers scored 0, 1, or 2 with the highest number reflecting high anxiety (Krug, Scheier, and Cattell, 1976). The questionnaire yields covert (cryptic), and overt (manifest) anxiety subscores, which when they are added together yield a total raw score (pure anxiety factor). This raw score can be compared to the norms provided in the manual to yield an overall anxiety score (Krug, Scheier, and Cattell, 1976). The total raw scores for pretests and posttests were used in this study. To preserve anonymity the subjects were assigned identification numbers which were the same for pre and posttests. A copy of the questionnaire is included in Appendix C.

Buros provides a review of the validity and reliability for the Anxiety Scale Questionnaire. The reviewer states, "Reliability coefficients for the total anxiety score range from .80 to .93, an adequate level for most purposes" (Buros, 1970 p. 1061). The reviewer states, "construct validity coefficients in the range .85 to .90 are claimed. These are multiple correlation functions of factor loadings and therefore are probably overstated. Nevertheless they are high enough" (Buros, 1970 p. 1061). In conclusion, the reviewer states, "the IPAT Anxiety Scale's impressive systematic research background commends it for use as an overall measure. No competing test can compete in this crucial regard. For a quick measure of anxiety level in literate adolescents and adults for screening purposes, it has no peer" (Buros, 1970 p. 1061).

Based on the review by Buros, and the use of the Anxiety Scale Questionnaire in a meditation experiment (Krug, Scheier, and Cattell, 1976) this instrument appeared to be the logical choice for obtaining valid global anxiety scores in this study.

CHAPTER IV

RESULTS

Dependent Measure

The movement toward a reduction in stress as measured by anxiety was analyzed by means of t-tests for paired observations which compared the scores obtained prior to the training with the scores obtained after completion of the training.

Although eighty subjects participated in the project, data analysis on the questionnaire is based on fifty-seven subjects. Twenty three subjects were dropped from analysis because they lacked the post-test and thus did not have paired observations. Nine subjects were dropped from the experimental group, and fourteen subjects were dropped from the control group.

The raw data tables may be found in Appendix A. The tables on the following pages illustrate clearly the results obtained in this study. Table 4.1 illustrates equivalence of the experimental and control groups on the dependent measure pretest for all eighty subjects.

TABLE 4.1

Mean Anxiety Scale Questionnaire values for experimental and control groups, standard deviation, t-test, and significance levels on pretest.

Experimental		Control	
(N)	40	(N)	40
Mean	42.85	Mean	43.02
SD	10.97	SD	15.31

t-test for Independent Samples
t = .0587
df = 78
p = N.S.

As can be seen in the above table, the experimental group and the control group were equivalent on the pretest.

Table 4.2 shows the results of t-tests for paired observations for both experimental and control groups.

TABLE 4.2

Mean ASQ values, standard deviations, pre and post paired observations, t-tests and significance levels for paired observations.

	Pretest		Posttest				
	N	Mean	SD	Mean	SD	t	df	p
Exp.	31	43.90	10.43	35.06	14.17	4.09	30	.000
Con.	26	42.58	15.13	42.85	11.03	.11	25	N.S.

As can be seen in the above table the experimental group shifted significantly toward lower anxiety scores

after the Mind-Body Integration training. Such a shift was not observed in the control group.

A t-test for independent observations was performed on the posttest scores of the experimental and control groups, the result of the t-test was:

$$t = 2.329$$

$$df = 55$$

$$p = \text{less than } .05$$

As can be seen in the tables on the preceding pages the experimental hypothesis was supported. The experimental group did experience a significant reduction in stress as measured by their scores on the Anxiety Scale Questionnaire. The control group did not experience such a shift. Furthermore, the experimental and control groups were equivalent on the pretest, they were not equivalent on the posttest. The experimental group had significantly lower anxiety scores compared to the control group on the posttest.

CHAPTER V

Summary, Conclusions, and Recommendations

The problem in this study was: does the inclusion of Mind-Body Integration as an adjunct to the treatment process have any effect on stress as measured by the Anxiety Scale Questionnaire? This chapter is organized into sections under the headings of The Summary of the Study, Conclusions, and Recommendations.

The Summary of the Study

The need for this study was founded on the scarcity of research in this area. The field of chemical dependency is a relatively new speciality in the social sciences.

In reviewing the literature, I found several theorists that recognized the link between stress and anxiety. This link was first recognized by Spinoza in the sixteenth century, when he postulated that there was indeed a relationship between mind and body (Ohmori, 1960). Dr. Hans Selye suggests that anxiety and drug/alcohol abuse are symptoms of stress. Dr. Rollo May stated, "Anxiety is how we handle stress" (May, 1970, p. 98).

Stress reduction is an area of great interest in our society. One of the prominent theories for chemical abuse in our society suggests that abuse of chemicals may occur

due to anxiety, alienation, and peer pressure. Mendelson and Mello found that anxiety is a natural consequence in the treatment process (Mendelson and Mello, 1979). In one doctoral dissertation the researcher used biofeedback training in an effort to enhance the coping skills of male alcoholics, the results of this study were not statistically significant (Steen, 1978).

In this study a skills training program incorporating standard stress management skills coupled with oriental meditative and movement techniques was presented as an adjunctive modality in two residential chemical dependency treatment centers in the greater Oklahoma City area over a six week period. The project experienced an eighteen point three percent mortality rate. It was determined that this mortality rate was due to the subjects leaving the treatment facilities for a variety of reasons. There were fifty seven subjects posttested out of the original eighty volunteers.

The tests were scored and coded, and the data were treated with both descriptive and inferential statistics. The results of the data treatment were that a t-test was performed on the posttest scores of the treatment and control groups. The results corroborated the hypothesis that the Mind-Body Integration training reduces anxiety.

Conclusions

The conclusion in this study is that Mind-Body Integration does have a significant impact on stress as measured by anxiety when it is introduced as an adjunctive modality to treatment. This impact was evident in the reduction of mean anxiety scores in the experimental group, while the mean anxiety scores in the control group did not evidence any significant change. Based on this conclusion the Null Hypothesis can be rejected. The Experimental Hypothesis was supported by the significant reduction of the mean anxiety score for the experimental group.

The mortality rate for the project was within acceptable limits. The treatment staff at one site suggested that mortality for the project may exceed thirty percent. Out of the twenty three subjects dropped due to non-completion of the posttest, nineteen subjects left the treatment facilities against the advice of the treatment staff. The four subjects that remained at the treatment facilities did not complete the posttest due to non-completion of at least four sessions of the experimental training (arbitrary cutoff).

Recommendations

The findings obtained in this study are very encouraging. The significant reduction in anxiety found in the experimental group warrants further investigation to

examine how such reduction in anxiety is demonstrated at the behavioral level.

The findings of this study can be used by chemical dependency professionals to enhance the treatment process in their centers, and to provide the clients with important survival skills post treatment. It is essential that the treatment field develops modalities to provide survival skills, and adopt a synthesized holistic approach to treatment. Each client has the right to expect that the treatment center they are in will provide a complete and varied program of services. Mind-Body Integration is just one of the new genre in treatment adjuncts. The researcher hopes the centers providing these needed services to all people suffering the pain of chemical dependency will continue the search for new ways to help their clients.

The researcher would recommend that additional studies be conducted in the area of anxiety and stress reduction not only in the chemical dependency field, but in all mental health fields.

The limitations of this study were the geographic location, and the type of subjects used; however, the Mind-Body Integration skills training format can be adapted to inpatient/outpatient mental health setting, business and industry, and the medical field.

The researcher plans to continue development and research of the uses of Mind-Body Integration. The

researcher is currently evaluating the possible uses of Mind-Body Integration in incarcerated populations.

REFERENCES

Akishige, Y. (1965). Perceptual constancy and the law of conservation of perceptual information. Bulletin of Faculty Literature, 9, 1-48.

Alcoholics anonymous. (1976). New York: Alcoholics Anonymous World Services.

Allison, J. (1970, April 18). Respiratory changes during transcendental meditation, The Lancet, 833-834.

Armor, D., Polich, J., & Stambul H. (1976). Alcoholism and treatment. Santa Monica, CA: Rand.

Berk, W. (Ed.). (1979). Chinese healing arts. Los Angeles: Peace Press.

Billings, A., & Moos, R. (1980). Recovering from alcoholism: The role of coping with stressful events. Paper presented at the 88th annual convention of the American Psychological Association.

Broomfield, H., & Kory, R. (1976). Happiness. New York: Simon and Schuster.

Brown, B. (1974). New mind, new body. New York: Bantam Books.

Brown, B. (1977). Stress and the art of biofeedback. New York: Harper and Row.

Burchfield, S. R. (Ed.). (1985). Stress psychological and physiological interactions. New York: Hemisphere.

Buros, O. K. (Ed.). (1970). Personality tests and reviews. New Jersey: Plenum Press.

Caudill, R., & Marlott, G. (1975). Modeling influences in social drinking: An experimental analogue. Journal of Consulting Psychology, 43, 405-415.

Chan, P. (1974). Finger acupressure. New York: Ballantine Books.

Cohen, S. (1980). The substance abuse problems. New York: The Haworth Press.

Culligan, M., & Sedlacek, K. (1976). How to kill stress before it kills you. New York: Grosset & Dunlap.

Dean, S. (Ed.). (1975). Psychiatry & mysticism. Chicago: Nelson Hall.

Descartes, R. (1641). Meditationes de prima philosophia.

de Vries, H. (1979). Health science, a positive approach. Santa Monica, CA: Goodyear.

Endler, N. S., King, P. R., Kucyzynski, M., & Edwards, J. (1980). Examination induced anxiety: An empirical test of the interactional model. York University. Department of Psychology Report Number 97. Toronto.

Fromm, E. (1959). Psychoanalysis and Zen. Psychologia. 2, 79-99.

Gleuck, B. (1976). Biofeedback and meditation in the treatment of psychiatric illness. Comprehensive Psychiatry, 16, 314-316.

Green, A., Green, E., & Walters, E. (1974). Biofeedback training for anxiety tension reduction. In F. A. Seixas, R. Cadoret, & Eggleston (Eds.). The Person with Alcoholism. Annals of the New York Academy of Sciences.

Goldberger, L., & Breznitz, S., (Eds.). (1982). Handbook of stress theoretical and clinical aspects. New York: Wiley.

Harrada, T. (1968). Psychological study of the mind body relation. Bungakubu Staff Journal, 11, 91-103.

Holmes, D. (1984, January). Meditation and somatic arousal reduction. American Psychologist, 1-9.

Kirk, R. (1982). Experimental design. Monterey, CA. Brooks, 100-101.

Krug, S., Scheier, I., & Cattell, R. (1976). Handbook for the IPAT anxiety scale. Champaign, IL. Institute for personality and ability testing.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.

Lehman, E. (1972, Fall). An empirical note on the transactional model of pyschological stress. The Sociological Quarterly, 484-495.

Lovinbond, S., & Caddy, G. (1970). Discriminated aversion control in the moderation of alcoholics' drinking behavior. Behavior Therapy, 1, 437-444.

Maupin, E. (1962). Zen Buddhism, Journal of Consulting Psychology, 4, 362-378.

May, R. (1970). The meaning of anxiety. New York: Washington Square Press.

Meichenbaum, D., & Jaremko, M. E., (Eds.). (1983). Stress reduction and prevention. New York: Plenum Press.

Mendellson, J., & Mello, N. (1979). The diagnosis and treatment of alcoholism. New York: McGraw-Hill.

Minick, M. (1974). The Kung Fu exercise book. New York: Simon and Schuster.

Monahan, R. (1975). Impressions of the transcendental meditation technique in an out-patient drug rehabilitation clinic. Paper presented at the 1st Conference on Psychology and the Science of Creative Intelligence. Fairfield, IA.

Morrissey, E., & Schuckit, M. (1978). Stressful life events and alcohol problems among women seen at a detoxification center. Journal of Studies on Alcohol, 39(9), 1559-1577.

Nishiyama, H., & Brown, R. (1959). Karate. Rutland, VT: Charles E. Tuttle.

Ohmori, S. (1960). The investigation of the causal theory of perception. Bulletin of the Japanese Philosophical Association.

Poley, W., Lea, G., & Vibe, G. (1979). Alcoholism, a treatment manual. New York: Gardner Press.

Publication manual of the American psychological association. (1983). Washington, D.C.: American Psychological Association.

Roman, P. (1977). Possible side effects of using alcohol to control distress: A reanalysis of Pearlin and

Radabaugh's data. American Journal of Sociology, 83, 987-995.

Schultz, W. (1976). Shiatsu. New York: Bell.

Selye, H. (1956). The stress of life. New York: McGraw-Hill.

Selye, H. (1974). Stress without distress. New York: Signet Books.

Shafii, M., Lavely, R., & Jaffe, R. (1975). Meditation and the prevention of alcohol abuse. American Journal of Psychiatry, 132(9), 942-945.

Spielberger, C. D., & Sarason, I. G. (Eds.). (1976). Stress and anxiety, Volumes 2 & 3. New York: Wiley.

Spielberger, C. D. (1979). Stress and anxiety. New York: Harper and Row.

Spinoza, B. (1677). Ethica, ordine geometrico demonstrata.

Steen, A. (1978). Characteristics of alcoholic patients as predictors of response to theta brain-wave biofeedback training. (Doctoral Dissertation, University of Kansas, 1978).

Stevens, J., & Shirata, R. (1984). Aikido. London: Shambala.

Strunk, W., & White, E. (1979). The elements of style. New York: Macmillan.

Tame, D. (1984). The secret power of music. New York: Destiny Books.

Tart, C. (Ed.). (1972). Altered states of consciousness. New York: Doubleday.

Tart, C. (1971). A psychologist's experience with trancendental meditation. The Journal of Transpersonal Psychology, 3, 135-140.

Tegner, B. (1981). Kung Fu and Tai Chi. Ventura, CA: Thor.

Toffler, A. (1970). Future shock. New York: Bantam Books.

Urdang, L. (Ed.). (1982). Thesaurus. New York: Random House.

Webster's new world dictionary. (1977). New York: Simon and Schuster.

Wegscheider, S. (1981). Another chance. Palo Alto, CA: Science and Behavior Books.

Weil, A. (1972). The natural mind. Boston: Houghton Mifflin.

Williams, B. (Ed.). (1975). Martial arts of the Orient. London: Hamlyn.

Willis, C. (1983, June 6). Stress, can we cope? Time. 48-54.

Yogi, M. (1966). The science of being and the art of living. London: International SRM Publications.

Ziegler, R., & Kohutek, K. (1978). A multimodal treatment approach for incarcerated alcoholics. Journal of Clinical Psychology, 34, 1005-1008.

APPENDIX A

Data Tables

Experimental Group

Code	Pre	Post
001	39	-
002	50	-
003	45	32
004	58	52
005	34	31
006	50	56
007	48	18
008	49	46
009	26	31
010	22	-
011	52	52
012	38	33
013	50	23
014	30	19
015	38	51
016	26	-
017	53	35
018	24	-
019	48	-
020	55	-
021	45	34
022	48	55
023	61	49
	45	

Data Tables (cont'd.)

Code	Pre	Post
024	38	-
025	62	24
026	43	24
027	36	10
028	51	-
029	42	45
030	41	41
031	48	48
032	61	58
033	48	36
034	44	41
035	25	21
036	23	17
037	41	17
038	37	13
039	32	27
040	53	48
041	25	29
042	41	53
043	24	29
044	53	52
045	39	35
046	43	46
047	45	-

Data Tables (cont'd.)

Code	Pre	Post
048	59	60
049	61	-
050	17	-
051	46	-
052	45	27
053	48	47
054	37	38
055	29	28
056	67	-
057	68	35
058	16	-
059	51	49
060	10	20
061	33	47
062	39	47
063	43	48
064	38	32
065	62	44
066	61	57
067	43	41
068	25	-
069	57	-
070	58	49
071	10	43

Data Tables (cont'd.)

Code	Pre	Post
072	60	62
073	54	56
074	50	-
075	37	-
076	62	-
077	40	-
078	38	-
079	53	-
080	34	40

APPENDIX B

UNIVERSITY OF OKLAHOMA
AGREEMENT TO PARTICIPATE

PROJECT TITLE: Mind-Body Integration as an Adjunct to Chemical Dependency Treatment

Investigator: Michael A. Guttman M.H.R. CADC, a Doctoral Candidate in the Adult/Community Education Department of the Graduate College, work phone (405) 321-4211, ext. 472, home phone (405) 360-5437.

This study is designed to train the members of a residential chemical dependency treatment center in a relaxation and stress management skills course. This training will be conducted in addition to the standard treatment methods currently being employed in the center. This skills package is composed of western stress management and relaxation training coupled with eastern balancing and meditation exercise methods. There will be a pencil and paper test administered both before and after the training, this test is a standard test which will take 5-10 minutes to complete.

I,_____, hereby agree to participate (give permission for my child or legal ward to participate) as a volunteer in the above named research project, which has been fully explained to me.

I, understand that I (my child or legal ward) is free to refuse to participate in any procedure or to refuse to answer any question at any time without prejudice to me (him/her). I further understand that I am free to withdraw my consent and to withdraw (my child, legal ward) from the research project at any time without prejudice to me.

I understand that by agreeing (for my child, legal ward) to participate in this research and signing this form I do not waive any of my legal rights.

_____ _____
Date Subject or Parent/
Guardian Signature

DRUG RECOVERY, INC.
1501 NE 11TH STREET
OKLAHOMA CITY, OKLAHOMA 73117
(405) 424-4347

December 3, 1984

Mike Guttman
1713 Southcrest Drive
Norman, Oklahoma 73071

TO WHOM IT MAY CONCERN:

DRI is willing to sponsor the Mind-Body Intergration project as proposed by Mike Guttman.

Paul Woodward
Clinical Director

January 22, 1986

TO: Dr. E. C. Smith
Chairperson, I.R.B.
University of Oklahoma

FROM: Michael A. Guttman

RE: Proposed Ph.D. dissertation project

I am writing this letter in reply to the instructions I received from your office on this date. Please note that I have attached a detailed outline of the proposed project to this letter. I believe that you will find this outline to reflect the information contained in my original application to the IRB. This outline reflects every facet of the proposed project, and I do not believe that there is any portion of this project that will place the subjects in any danger or stress additional to the stress incurred in daily life.

In reply to the request for some examples of my qualifications to teach certain acupressure points, I am currently a United States Karate Association Instructor with an international black belt certification, no. Europe F-361-78. The styles of Karate that I learned and later gained USKA certification in are as follows:

Kempo-Shorin 1st black belt 1970, San Bernardino, California, Instructor Mickey Gineck.

Goju-Ryu 1st black belt 1975, Wurzburg, Federal Republic of Germany, Instructor Thomas F. Sergeant.

Semi Mantis Semi Fist Goju-Ryu 1977, Wertheim, Federal Republic of Germany, Instructor Sifu Robert Segarra.

I had to demonstrate expertise in both Tien-An and Shiatsu, as well as proficiency in certain aspects of Chinese herbal medicine to receive my black belt under Sifu Segarra. In the practice of Martial arts since age twelve I have studied a variety of styles that include the afore mentioned as well as Aikido, Tai Chi Chuan, Judo, Jiu Jitsu, White Crane Kung Fu, Tae Kwon Do, and Kendo. My USKA certification allows me to teach anywhere in the free world. This particular package that I am proposing to use has been used in drug and alcohol treatment centers previous to this project. Currently, one person that I trained as a Trainer is using this package at the Lake Country Drug and Alcohol Rehabilitation program in Tallequah, Oklahoma. The counselor's name is Mr. Terry Simpson CADC. This package has also been presented in a shortened version at Valley Hope in Cushing, Oklahoma. I do not plan to do acupressure on the subjects, I plan to verbally instruct them and demonstrate the points on

myself. I found that groups can and do find these particular points with little difficulty. I hope that this letter with the attached outline will help you in approving this project. If I can be of further assistance, please call me at work or home. Thank you for your assistance in this matter.

Cordially,

Michael A. Guttman

APPENDIX C

The University of Oklahoma

GRADUATE COLLEGE AND
OFFICE OF RESEARCH ADMINISTRATION
1000 Asp Avenue, Rooms 313-314
Norman, Oklahoma 73019
(405) 325-3811 or 4757

January 25, 1985

Mr. Michael A. Guttman
Adult/Community Education
University of Oklahoma

SUBJECT: IRB-NC Review of Proposal

Dear Mr. Guttman:

Dean Eddie C. Smith, Chair of the Institutional Review Board-Norman Campus has reviewed and approved the additional material you submitted in regard to your research, "Mind-Body Integration As An Adjunct to Chemical Dependency Treatment." Thus, the use of human subjects in this project is now fully approved.

This approval is for a period of 12 months from this date, provided that the research procedures are not changed significantly from those described in your "Summary of Research Involving Human Subjects" and attachments. Should you wish to deviate significantly from the described subject procedures, you must notify me and obtain prior approval from the Board for changes. If the research extends beyond 12 months, you must resubmit the project to the Board for review prior to the end of the approval period.

At the end of the research, you must submit a short report describing your use of human subjects in the research and the results obtained.

If you have questions, please contact me.

Sincerely yours,

Karen Petry

Karen Petry
Administrative Officer

KP/pha

cc. Dean E. C. Smith
Dr. Don Udell