The Effects of Reiki, a Complementary Alternative Medicine, on Depression and Anxiety in the Alzheimer's and Dementia Population

A thesis submitted to the faculty of
San Francisco State University
In partial fulfillment of
The requirements for
The degree

Master of Arts
In
Gerontology

by

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San Francisco, California
August, 2006

CERTIFICATION OF APPROVAL

I certify that I have read *The Effects of Reiki, a Complementary Alternative Medicine, on Depression and Anxiety in the Alzheimer's and Dementia Population* by M. Deborah Salach, and that in my opinion this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirements for the degree: Master of Arts in Gerontology at San Francisco State University

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The Effects of Reiki, a Complimentary Alternative Medicine, on Depression and Anxiety in the Alzheimer's and Dementia Population

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2006

This study explores the phenomenon of Reiki as a healing modality on older adults with Alzheimer's disease or dementia who experience depression and/or anxiety. Reiki is practiced in over 25 clinical settings in the United States.

Eight older adults who experience Alzheimer's Disease or dementia with depression and/or anxiety (1 male and 7 females) ages 58-89 were selected from the Institute on Aging (IOA) Adult Day Health Center (ADHC) in San Francisco, CA, serving dementia and Alzheimer participants. Four participants received Reiki sessions and four participants received mock Reiki of 30 minutes per session, once a week for eight weeks by a trained Reiki practitioner. Quantitative measures from similar studies were used. Positive results were found and evaluated by correlation of physiological response (blood pressure, heart rate) with standard pre-tests for depression and anxiety with the Geriatric Depression Scale (GDS) and Spielberger's State-Trait Anxiety Inventory for Children.

I certify that the Abstract is a correct representation of the content of this thesis.

_____ _____

Anabel Pelham, Ph.D. Date
Chair, Field Study Committee

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The Effects of Reiki, a Complimentary Alternative Medicine, on Depression and Anxiety in the Dementia and Alzheimer's Population

INTRODUCTION

Literature Review

The rapidly growing elderly population is experiencing exorbitant costs for medical care that have exceeded $200 billion in 1998 for our seniors who are living a longer life-span but with chronic health problems (Schneider, 2002). Medicare is predicted to go bankrupt by 2007 along with our population of seniors doubling by 2030, and exceeding 25% of the population (Schneider, 2002). How will a senior afford expensive health care costs, avoid chronic illnesses, and strive for healthy aging with a likely extended lifespan and the prediction of Medicare going bankrupt?

Research findings indicate that many middle age and older adults are taking charge of their health with alternative methods or complementary medicine, thus preventing and/or reducing the onset of illness and disease, reducing health care costs, and promoting healthy aging (McMahan, 2004). Some of these methods are known as Complimentary Alternative Medicine or CAM. Since 1992, the National Institute of Health (NIH) has studied CAM rigorously. Further credibility of CAM came with the establishment of the National Center for Complementary and Alternative Medicine (NCCAM) in 1998 by Congress. The NCCAM performs in-depth research and evaluations of alternative therapies to decide which therapies are best suited for which diseases. One in every three Americans is using CAM today (Cherniack, 2001).

A recent study, *Alternative Therapy Use Among the Young-Old,* was conducted in California on Medicare users including data from the National Survey of Midlife

Development in the United States (MIDUS). This research indicates that in California 41% of the reported subjects use alternative medicine. However, previous research indicates actually a higher percent of alternative medicine users in California between ages 65 to 74 (McMahan, 2004).

The most common types of alternative therapies/complementary medicine are chiropractic, acupuncture, massage, Tai Chi, Chi Qong, yoga, therapeutic touch, and meditation. These healing modalities not only promote successful aging and disease prevention – they are also cost effective and self-empowering (Schneider 2002) by reducing medical costs such as costly medications (Wister, 2002). Many of these therapies described earlier can be taught to our seniors who wish to age successfully (non-diseased) versus usual aging often marked by chronic illness (Schneider, 2002) by learning and practicing these therapies in a group or home setting.

This research study will focus on Reiki, a CAM that is often classified as an energy modality, complementary medicine, alternative therapy, or therapeutic touch therapy. "*Rei* meaning universal or highest and *Ki* meaning subtle energy like the Chinese *chi" (Miles, P., 2003).* Reiki therapy can help the elderly to feel empowered since they can administer Reiki on their own bodies, thus giving elders more control over their own health.

Many older adults experience a myriad of chronic illness problems from depression, anxiety, memory loss, chronic, and acute pain (McMahon & Lutz, 2004; Schneider; 2002; Miles, 2003). This study focuses on the healing effects of administering Reiki to older adults with dementia and Alzheimer's disease and also suffering from anxiety and/or depression.

According to empirical findings, Reiki means “Universal Energy or Life Force that connects the body’s innate power of healing to promote self-healing" (Engbreston, 2002). It has been shown to rebalance the biofield – the body’s energy field – thus strengthening the body’s ability to heal and increase systemic resistance to stress and stimulate self-healing by relaxation and, perhaps, by resetting the resting tone of the autonomic nervous system. Proponents believe that this might lead to enhancement of immune system function and increased endorphin production” (Miles, 2003).

To further understand this complementary medicine, we know that we are all living organisms and have biological energy fields, which are seen in Kirlian photography, for example. Just as acupuncture, it accesses nodes of the biological energy field. Reiki is found to access the same nodes or focal points or meridians in the body’s biological energy field. Reiki works in conjunction with the Reiki practitioner’s biological field and the patient’s biological field. Simply, Reiki balances the body’s energy through the practitioner’s hands (Wardell, 2001) as a conduit and directs the energy where it is needed most. Reiki is described as self-regulating and reciprocal so the recipient receives only the amount of healing energy that is needed. This “Life Force” is administered through a light touch of the practitioner’s hands, which are placed in twelve different positions along the body that is fully clothed. The treatments are cumulative and non-invasive with potential effects of "restoring balance and harmony to the body, mind and soul” (Wardell, 2001).

There are several levels of training where the “Reiki Master uses symbols and mantras to create higher vibrations to accelerate channeling of the Universal Life Energy” (Engerbreston, 2002). With each Reiki level there is an increase of this Universal Life

Force or power or healing energy (Wardell, 2001). Through intention, the practitioner commits to be a compassionate conduit for the Life Force for the highest good (Nield-Anderson, 2000).

In a news article titled *Reiki in Hospitals*, Reiki demonstrates positive results on its patients. Dr. Mehmen Oz, a noted cardiologist at Columbia University Medical Center in New York City, New York, states, "Reiki sessions cause patients to heal faster with less pain. Reiki accelerates recovery from surgery, improves mental attitude and reduces the negative effects of medication and other medical procedures". Julie Motz, a Reiki trained practitioner, who assists Dr. Oz during surgeries states, "Eleven heart patients treated with Reiki did not experience the usual postoperative depression, the bypass patients had no postoperative pain or leg weakness; and the transplant patients experienced no organ rejection". At the Reiki Clinic at Tucson Medical Clinic, Reiki treatments are administered with positive results to patients with cancer, pain, chronic conditions and post-operative surgery (Rand, 2005).

Reiki in San Francisco Bay Area Hospitals

Reiki is practiced in over 25 clinical settings across the U.S. by Reiki trained physicians, nurses, and support staff, including the three locations the interviewer/researcher has visited; Veterans Administration Hospital in Palo Alto, California Pacific Medical Center in San Francisco, and Marin Country Hospital in Marin County.

Reiki at the Veterans Health Administration Hospital of Palo Alto, CA

In an interview with Jeanne Toal, a certified massage therapist (CMT) and coordinator of massage therapy in hospice at the V.A. Hospital in Palo Alto, she stated

that the volunteer massage program was initiated approximately 23 years ago by Vickii Ellis, a Clinical Nurse Specialist, and Lee Erman, a certified massage therapist at the V.A. in Menlo Park, CA. Many years later, in 2000, the massage and hospice program moved from the Menlo Park V.A. to the Palo Alto V.A. In the same year, the V.A. initiated the paid-staff massage program in hospice, where Jeanne Toal is currently the coordinator. During their training program, Jeanne monitors the hospice massage volunteers (Toal, 2006).

Jeanne Toal is a second degree Reiki practitioner, a Jin Shin Jyutsu practitioner, and a CMT for ten years. Jeanne is part of an interdisciplinary team that works with hospice managing a group of volunteers in the Palo Alto V.A.'s Massage Program (Toal, 2006).

Today, the Palo Alto Division (PAD) of the V.A. is one of the most sophisticated health care centers in the entire Veterans Health Administration hiring only experienced hospital staff for massage, even if they do not have previous massage experience. Jeanne developed a structured and formal training program so that the CMTs – experienced or inexperienced – can work gently and with great care on their fragile hospice population. Jeanne's team averages four hospice massage volunteers who incorporate some form of energy work, or CAMs, with the gentle touch of massage such as Jin Shin Jyutsu, Polarity, and Reiki (Toal, 2006).

Mostly non-paid massage staff volunteer Reiki to the hospice patients and their families. As previously stated, Jeanne and other members of the paid-staff also practice Jin Shin Jyutsu and Polarity along with the gentle touch of massage therapy. Jin Shin and Polarity are both energy modalities similar to Reiki, in that they are very relaxing especially when used with the light touch of massage therapy, since these patients are

frail in this hospice stage (Toal, 2006).

When asked how Reiki became known at the V.A., Jeanne exclaimed that a paid-staff member in hospice introduced Reiki to the program in 2000. However, therapeutic touch, known as the Hospice Massage Program, was initiated 25 years ago at the Palo Alto V.A. (Toal, 2006).

Jeanne monitors the volunteer practitioners during their training session to be certain they are interfacing well with these frail hospice patients and observes their hands-on practice with therapeutic massage and other energy-based modalities, such as Reiki and Jin Shin Jyutsu. Patients initially receive approximately ten-minute sessions. Then the sessions increase to 15-minutes or even up to 20-minutes depending on their frailty. Each individual is treated according to what they can physically manage (Toal, 2006).

To date there has been no research or clinical observation of results of Reiki or any of the CAM modalities of therapeutic touch and energy work at the V.A. in Palo Alto. This requires both leadership and approval from the Stanford Internal Review Board. Given the frailty of most of their patients, the primary mission is to give comfort to their hospice patients (Toal, 2006).

Reiki at California Pacific Medical Center (CPMC), San Francisco, CA

"The Institute of Health and Healing, was founded in 1994, at California Pacific Medical Center in San Francisco, and is the largest integrative medical center in the nation with over 40 practitioners and doctors practicing more than 35 holistic therapies. They are a Sutter Health affiliate. It is a tertiary referral center, providing access to advanced medical care with a patient-centered focus" (Institute for Health & Healing, 2006).

This interviewer/researcher first read of Dr. Cantwell in an Internet article *Reiki in Hospitals.* Thus, the researcher followed up with a telephone interview with Michael F. Cantwell, M.D., MPH, where he stated that he was the lead physician at the Institute for Health and Healing Center at California Pacific Medical Center until four years ago (Cantwell, 2006). The Institute of Health and Healing (IHH) Center at CPMC offers in-hospital and out-patient services. "Doctors and practitioners work to combine conventional medical care with the most supportive complementary care modalities" such as, acupuncture, imagery, meditation, nutrition, supplements, Chinese herbal therapy, Feldenkrais, bodywork therapies like CranioSacral, massage, spiritual care, Yoga, acupuncture, Ayurveda, Chi Kung, gentle massage, and Reiki (Institute for Health & Healing). Dr. Cantwell states that Reiki needs to be incorporated with therapeutic massage when one is licensed to touch the patient as a doctor, nurse or certified massage therapist (Cantwell, 2006). In other words, bodywork practitioners need to be licensed in order to touch the patient.

When asked how Dr. Cantwell became interested in Reiki, he responded that he learned of this healing modality through a friend after he finished medical school in 1992.

He eventually became a Reiki Master in 1997. Dr. Cantwell is not an ordinary physician. He is a “pediatrician, an epidemiologist, a specialist in infectious disease, and a research scientist with a Master’s Degree in Public Health (Health & Healing Center Clinic, 2005). How Dr. Cantwell differs from the average physician is how he incorporates several integrative medicines/CAM into his practice such as, guided imagery (sub-hypnosis), homeopathy, flower essences, biofeedback, spiritual counseling, and Reiki. Dr. Cantwell is a Quaker and a researcher on prayer, which gives him a unique combination of abilities to assist healing his patients on many levels (Cantwell, 2006).

Dr. Cantwell states: "I have found Reiki to be useful in the treatment of acute illnesses such as musculoskeletal injury/pain, headache, acute infections, and asthma. Reiki is also useful for patients with chronic illnesses, especially those associated with chronic pain" (Rand, 2005).

When asked how he practices Reiki, Dr. Cantwell expressed that he uses distant Reiki, which is non-touch and at any distance from the patient for pre- and post-surgery and for chronic and acute illnesses. At one point, Dr. Cantwell was conducting clinical research with hopes to persuade insurance companies that Reiki could help reduce medical costs with improved recovery time. However, life changes took Dr. Cantwell into another direction, thus his research has lapsed (Cantwell, 2006).

Dr. Cantwell’s patients are comprised of one-third children and two-thirds adults (including seniors) with chronic and acute illnesses. “There are spiritual issues and diseases that go away with distant Reiki and guided imagery”, said Dr. Cantwell (Cantwell, 2006). Dr. Cantwell is one of many physicians at IHH/CPMC who utilize CAM in their practice such as acupuncture and the like. There are many body workers

doing Reiki at CPMC. However, it has to be incorporated with therapeutic massage. If a patient requests Reiki, then it can be given only with therapeutic massage. If a patient expresses an interest to learn Reiki, then Dr. Cantwell refers patient for Reiki training.

Initially, IHH offers a ten-minute free phone consultation with a nurse. Then the physician completes the in-take process and work with the patient to determine which complementary therapies would be best suited. The patient pays for in-patient and out-patient services received at IHH/CPMC (Cantwell, 2006).

Dr. Cantwell referred this researcher/interviewer to Antonia Creazzo, Clinical and Massage Program Supervisor, for further information on how Reiki is used at CPMC through the Institute of Health and Healing Center. This researcher had a personal interview with Antonia Creazzo, who was schooled in London and holds a Master's Degree in Therapeutic Body Work.

In 1985, Teddy Dunn initially instituted the massage program with 6 interns, but the program could not sustain itself. In 1999, Antonia Creazzo re-instituted the massage therapy program to integrate modalities into care to hospitalized patients at CPMC. This became sustainable by implementing patient fees for services to patients and fees for interns for internships. Free 20-minute massages are given, and then fees are incurred thereafter. Also, fees of $2,000 for student interns were implemented as part of the massage therapy program, which includes 500 hours of internship. The interns practice therapeutic touch and incorporate other modalities with the chronic and acutely ill patients – children and adults – including cancer, HIV and Alzheimer's disease patients (Creazzo, 2006).

Modalities incorporated with massage therapy are Reiki, Chi Qong, and Healing Touch, which Creazzo prefers. Healing touch is not massage, but the placement of healing hands on the charkas, that assist to balance the body's energy (Creazzo, 2006). This modality is similar to Reiki, minus the practitioner's attunements or the "Universal Life Force" that the Reiki practitioner naturally carries at all times. Creazzo teaches Skilled Touch – a gentle massage – for comfort care massage. Registered Nurses are enrolled in the massage program along with other body workers such as massage therapists**.** Reiki is not encouraged as a practice by itself and needs to be incorporated with massage therapy (Creazzo, 2006). Creazzo referred the interviewer/researcher to Marin General Hospital, also a Sutter Health affiliate, to meet their staff, as it is part of the overall program of IHH in San Francisco. It is located in Larkspur, CA.

Reiki at Marin General Hospital, Larkspur, CA

In March, of 2006, the researcher met with Susie Laurenson Shipley, MA and Program Manager and Pat Morgan, MA, CMT and Integrative Bodywork Coordinator for IHH at Marin General Hospital. The interviewer/researcher discovered that Reiki was almost frowned on and not really accepted in the hospital setting at Marin General Hospital. However, Pat Morgan, who coordinates the volunteer CMTs in Marin, has a few CMTs who are Reiki practitioners. They have applied Reiki quietly on a couple occasions over the years (Morgan, 2006). Nonetheless, one could assert that Reiki is actually being practiced as the practitioner always carries the Reiki energy when in contact with another living being. However, it is not practiced in an overt manner.

The IHH team at Marin General Hospital does not offer Reiki to the patients as it is an energy modality that is not researched, per Susie Shipley, and only hard evidence-based

modalities are accepted, i.e. Chi Qong, acupuncture, and acupressure (Shipley, 2006). The interviewer/researcher questioned this comment, as there is research on Reiki that may not be known to the team. Being respectful of the hospital environment and thus careful to incorporate modalities that the community is ready for, appears to be the sentiment of IHH at Marin General Hospital. The IHH team is sensitive to the hospital setting, physician's domain, and the patients' domain. Consequently, they currently employ alternative therapies under the guise of massage and bodywork until such time as the modality can be introduced on its own. They have received letters from the community criticizing the use of alternative therapies at Marin General Hospital. Awareness of the community is important, as well as to know when to come forth with groundbreaking complementary alternative medicines, such as Reiki (Shipley, 2006).

The practice of Reiki in the San Francisco Bay Area hospitals is in the pioneering stages of health and healing. IHH at CPMC is by far the most progressive program offering Reiki, and many other energy modalities, more openly than any other hospital setting found in the San Francisco Bay Area.

There are Reiki programs on the east coast such as Portsmouth Regional Hospital in Portsmouth, New Hampshire that has offered Reiki sessions since 1995 and provides Reiki to their patients seven days a week with a "Reiki Satisfaction Survey". Over two thousand Reiki sessions per year are administered at Portsmouth Regional Hospital (Miles, 2006). Reiki is sorely needed in the western healing arts, but with little exposure in the U.S., it may take longer to truly see the benefits of this powerful but subtle and non-invasive energy modality.

The Unique Properties of Reiki and how it may assist Dementia and Alzheimer's Population

In 1992, Wirth conducted a randomized control study group whereby the treatment group experienced a statistically significant decrease of pain in degree and intensity from Reiki (Miles, 2003).

Many older adults experience a myriad of chronic problems from depression, anxiety, memory loss, chronic, and acute pain (McMahon & Lutz, 2004; Schneider, 2002; Miles, 2003). Furthermore, in a study on *The Effect of Therapeutic Touch on Agitated Behavior and Cortisol in Persons with Alzheimer's disease*, it was found that older adults, ages 71 to 84, had a significant decrease in agitated behavior and specific behaviors of vocalization and pacing. The results of therapeutic touch of massage were measured noting a decrease in salivary and urine cortisol levels in older adults (Wood, 2002). By utilizing this "Universal Life Force" energy, Reiki may have even greater effects on dementia and Alzheimer's disease with further reduction of agitated behavior (Engbreston, 2002) and "resetting the resting tone of the autonomic nervous system" stated earlier in Miles' study on pain and anxiety (Miles, 2003).

Again, Reiki is practiced on the younger population in over 25 clinical care settings across the U.S. There is virtually no research on this healing modality and the effectiveness on older adults generally, and with the dementia and Alzheimer's population specifically. This gap combined with the widespread use of CAM suggests the importance of exploratory research concerning the effectiveness of Reiki on older adults diagnosed with dementia and Alzheimer's disease, which leads to the following research questions:

1. What are the effects of moderate-term use of Reiki among older adults with dementia and Alzheimer's suffering from depression and anxiety?
2. Can we see cumulative effects from Reiki treatments over a period of time?

METHODOLOGY

Method Design

This study is quantitative utilizing the Quasi-experimental method held in a field setting with a pre- and post- repeated measures design on the effects of Reiki on a single group of dementia and Alzheimer's population suffering from anxiety and depression. Since Reiki is an energy modality that can work through administered treatments on or slightly above the body, all treatments will be non-invasive with Reiki hands conducted 1-4 inches above a fully clothed body addressing three head points and the thymus area. Pre- and post-tests will be conducted utilizing measurements from similar studies.

This researcher is trying to replicate results from previous research with the dementia and Alzheimer population vs. the general population. Measures of the effects of Reiki on eight older adults suffering from depression and/or anxiety were given in a series of eight individual sessions of 30 minutes per session, weekly for eight weeks, totaling eight sessions per subject.

There were a total of eight participants in two groups with four participants in each group. One group, the control group, received mock-Reiki (with Reiki hands 12 inches away) using the same outcome measurements. The experimental group were administered Reiki as described above.

To assure reliability, the same instruments of measurement will be used from previous and similar studies to analyze data and gather pre- and post-tests with non-

invasive instruments and measure the following: the heart rate, blood pressure, a simplified Geriatric Depression Scale (GDS), and a simplified Spielberger's State-Trait Anxiety Inventory for Children (STAIC) test.

There may be threats to validity to take into consideration with the analysis. The Hawthorne Effect may be a threat to internal validity because of the committed attention from the Reiki practitioner and the two (alternating) nurses with each subject. This may cause the dependent variables of declining depression and anxiety measurements to decline further. Or perhaps the practitioner did not relate well to some of the eight subjects causing data to be unreliable. Maturation may possibly be another threat to validity since this study took three months from the first treatment to the final post-test due to the dependant variable – declining depression – over time according to research. Other threats to internal validity could be new drugs administered during the 12 weeks for depression and/or anxiety or other forms of therapy. History may also be a threat to internal validity if there are events that affect the subjects' anxiety and/or depression levels. Social and/or financial changes during the 12-week study may be variables that cause rival plausible explanations for changes that affect the subjects' anxiety levels in the psychosocial test and/or depression levels in the GDS scale.

To reduce rival plausible explanations, this researcher/Reiki practitioner asked the subjects each week how they were feeling and what was new in their lives. Also, the director, social workers, and the two nurses of the IOA's Adult Day Health Center informed the researcher/Reiki practitioner of any known outside events that may have altered the measurements of depression and anxiety.

To assure reliability, pre- and post-tests were administered with every treatment. To further reduce the threat to internal validity, it was necessary to eliminate potential candidates who suffered from depression and anxiety that are cognitively impaired from other sources other than dementia and Alzheimer's disease such as strokes, heart attacks, cancer, arthritis, etc. Another measure to assure reliability and reduce threat to validity was to have consistency by having the same (alternating) two nurses assist the practitioner with the pre- and post- measurements to maintain the rapport and comfort level of the subjects. Further reliability issues may be due to the small size of this research study.

Sample Population

The Director of the IOA's Adult Day Health Center chose a list of potential participants to review with this researcher. The selected sample population had to have been medically diagnosed with dementia or Alzheimer's disease and suffer from common chronic illness complaints of anxiety and depression. Family members and/or subjects had previously given permission for the patient/subject to participate in IOA research activities.

This sample consists of multi-cultural and English speaking human participants from several cultures from the United States and the Caribbean. Subjects involved are a single population of eight older adults (one African-American male, two African-American females, one African-Caribbean female, one Hispanic female, and three American Caucasian females) ages 58 to 89 at the Institute on Aging Adult Day Services, San Francisco, California. Educational levels range from grade school to high school graduates, both male and female. Economic levels were not determined. None of the

subjects had experienced Reiki treatments previously. This researcher, who is also the Reiki practitioner, knows none of the participants.

Inclusions/exclusions:

The sample excluded all other types of participants such as older adults with bi-polar disease, schizophrenia and other mental illnesses. This study was inclusive of elderly with early to mid-stage, rather than late stage dementia or Alzheimer's disease. This assures reliability when collecting data from the clients that are cognitively able to articulate their answers, thus reducing threats of validity.

This researcher met individually with this selected pool of potential participants with dementia or Alzheimer's disease at IOA Adult Day Health Center. If the participant was not able to fully make his or her own decisions and sign the consent form, then this researcher met with a family member or conservator to invite the potential participate to join the research study. This was accomplished by visiting the family member in his/her home and by telephone and fax utilizing a Recruitment Script to the Family of the Participant (See Appendix D). This researcher discussed the Verbal Consent for the IOA Client form (See Appendix E) with the client that could fully make his/her own decisions. If the clients were able to make their own decisions fully, then they signed the Informed Consent Form (See Appendix F). The consent form informed the family and the participant of all the parameters of the research study including: purpose of the study, background on Reiki procedures, possible risks for participation (there were none), privacy and confidentiality of the client/participant, no direct benefits, no costs or compensation to the participant, and how to address questions that may come up after the consent form is signed. A Surrogate Informed Consent for the Family Member to

Participate in a Research Study form (See Appendix G) was given to the potential participant's family member to read and sign if the participant was not able to fully make his/her own decisions.

Most importantly, this researcher stressed that the participant could stop the Reiki session at any time they wish and it would be stopped if they showed signs of discomfort or upset, the session would be stopped. The participant was informed that he/she could resume the session at a later time or another day or stop completely with no consequences. These research participants were volunteers.

All details of the research project were discussed fully with both the potential participant and/or the family member. Once the consent form was signed, a copy was given to the family or the participant, depending upon the requirements outlined for each participant in the IOA's client file.

Measurement

Eight individual sessions of 30 minutes per session were given weekly for eight weeks totaling eight sessions per subject suffering from depression and/or anxiety. Pre- and post-test measurements used in previous studies measuring the effects of Reiki on the younger population with anxiety and depression (Miles & True, 2003; Wardel & Engebreston, 2001) were used in this study on the older population**.** Measurements taken were pre- and post-tests of the heart rate (increase and decrease) and blood pressure (measuring the systolic). Measurements were taken for pre-tests only: Geriatric Depression Scale (GDS) (See Appendix A) and Spielberger's State-Trait Anxiety Inventory for Children (STAIC) psychosocial test for anxiety (See Appendix B). Both tests were administered before each Reiki session during the eight weeks and again 30

days later with no Reiki session to see if Reiki had a lasting effect on the participants' depression and anxiety.

Since most studies cited agree there are relaxing effects from Reiki treatments on the younger population, their were no post-tests administered with the Geriatric Depression Scale (GDS) and the Spielberger's State-Trait Anxiety Inventory for Children (STAIC) as this may disrupt the relaxing effects of Reiki that the participant may be receiving. Thus these two measurements, GDS and STAIC, were administered as pre-tests with each Reiki session. However, all five measurements were administered 30 days later with no Reiki treatments during the prior 30 days for further observation of the cumulative effects of Reiki.

Data Collection

Again, this study is quantitative utilizing a quasi-experimental method held in a field setting. There were pre-treatment and post-treatment measures applied designed to assess the effects of Reiki on a single group of older adults diagnosed with dementia or Alzheimer's disease suffering from anxiety and depression. This energy modality, Reiki, is administered through a light touch of the practitioner's hands placed on or above the body within 4 inches at different positions along a fully clothed body. For this study, all treatments were non-invasive addressing three head points and the thymus area.

There were a total of eight participants in two groups with four participants in each group, one group being a control group receiving mock-Reiki with the same measurements. To assure confidentiality and privacy, each participant selected a fictitious name of a famous person that they admired such as the following: Ingrid Bergman, Judy Garland, Barbara Streisand, Eartha Kitt, Whitney Houston, Lena Horn and Chris Rock.

The two alternating nurses on staff at IOA's Adult Day Services administered the heart rate and blood pressure tests on each participant immediately before and after each of the eight Reiki sessions. The Reiki practitioner administered Reiki immediately after the nurse had completed the measurements for pre-tests for all eight Reiki sessions. Similarly, the practitioner administered mock-Reiki on the four participants in the control group immediately after the nurse has completed the measurements for pre-tests on all eight Reiki treatments.

The practitioner administered a simplified STAIC test for anxiety along with a simplified GDS for depression, but only in the pre-tests for each Reiki treatment and each mock-Reiki treatment. The final measurements of heart rate, blood pressure, STAIC, and GDS were administered as post-tests one month after all eight Reiki treatments and mock-Reiki treatments were completed. These final post-tests will evaluate the effects of Reiki and mock-Reiki over a period of time.

It was promised by this researcher/Reiki practitioner that if sessions prove to be successful in the Reiki Group, then the practitioner would administer Reiki on the control group of participants, if desired.

The research time with each participant took approximately 40 - 60 minutes (depending on the cognitive impairment level of the participant) including pre- and post-tests every week for eight weeks. Again, we administered all five post-tests on the eight participants individually one month later with no Reiki treatment, which took approximately 15 minutes, per participant.

The research took place in a fairly quiet room next to the nurse's station. The participant sat in a comfortable armchair with soft music in the background to lessen the

background noise from the adjoining room. The location was at IOA's Adult Day Health Center at 3600 Geary Street, San Francisco, California. The Reiki Sessions were administered for 30 minutes between the hours of 10:00 AM to 2:00 PM during the weekdays over a period of eight consecutive weeks and again one month later for post-tests for 15 minutes. If the participant was absent, then the Reiki practitioner rescheduled with the participant on a different day that same week, if participant was able. Non-participants – the nurse – left after the pre-tests and returned in 30 minutes for the post-tests.

RESULTS

Data Analysis by Composite Groups – Reiki Group and Control Group

Data was gathered from eight participants with four in the Reiki Group and four in the Control Group. Results of the final selection of participants are demonstrated below in Table A: by group, gender, age and ethnicity. There was only one male participant or 12.5% in the entire study and who was in the Control Group. The rest of the participants comprised of seven females or 87.5%. There were three American Caucasian females in the Reiki Group and one African American female in the Reiki Group. In the Control Group there was one Caucasian American female, one African American male, one African American female, and one African Caribbean female. The mean age of the Reiki Group was 75 and the mean age of the Control Group was 77.5. The mean age of the total participants in the two groups was 76.25.

Table A: Participants by Group, Age, Gender, and Ethnicity

Participant Group	Age	Gender	Ethnicity
Reiki Group	89	Female	Caucasian American
Reiki Group	87	Female	Caucasian American
Reiki Group	58	Female	Caucasian American
Reiki Group	66	Female	African American
Control Group	84	Female	Caucasian American
Control Group	64	Male	African American
Control Group	80	Female	African Caribbean
Control Group	82	Female	African American

Table B below demonstrates the participants by diagnosis and medications. In the Reiki Group we had three participants medically diagnosed with Vascular Dementia and one with Alzheimer's disease. In the Control Group there were two participants medically diagnosed with Vascular Dementia, one with dementia, and one with Alzheimer's disease. Each group had an even distribution of three participants diagnosed with some form of dementia –mostly vascular dementia – and each group had one participant diagnosed with Alzheimer's disease.

In the Reiki Group, the secondary diagnosis was three participants with depression and three with anxiety with one of the participants diagnosed with both depression and anxiety. However, the results of the study later showed that in the composite group many suffered from depression and anxiety, though not medically diagnosed. In the Control Group, three participants were medically diagnosed with anxiety and only one with depression. Again, the measurements differ from the medical diagnosis later demonstrated in the composite charts and the individual charts.

Table B identifies the medications for blood pressure and depressants by participant, since the study measured blood pressure, pulse and Spielberger's State-Trait Anxiety

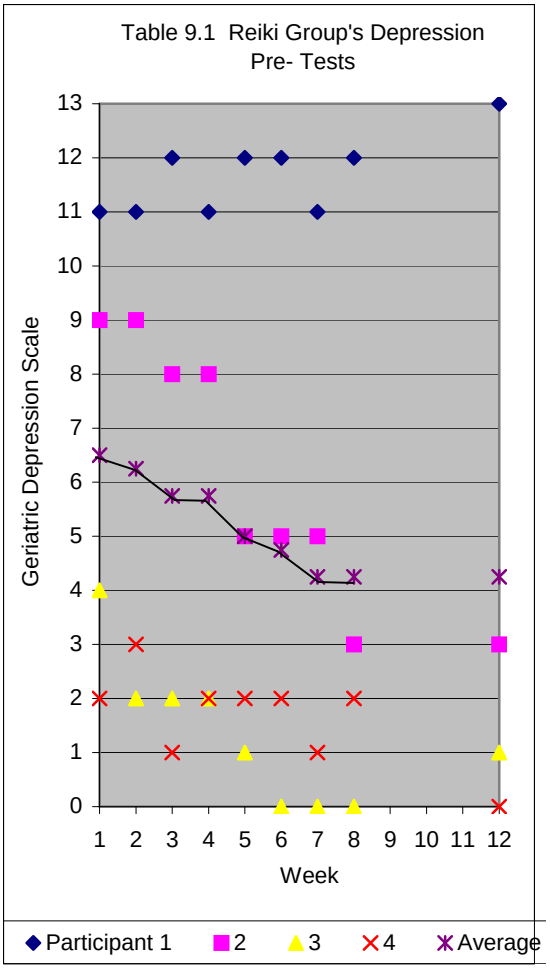
Scale for anxiety, and administered the Geriatric Depression Scale for depression. Thus it is important to know if the participants were on blood pressure medication/s and/or anti-depressants during the duration of the study.

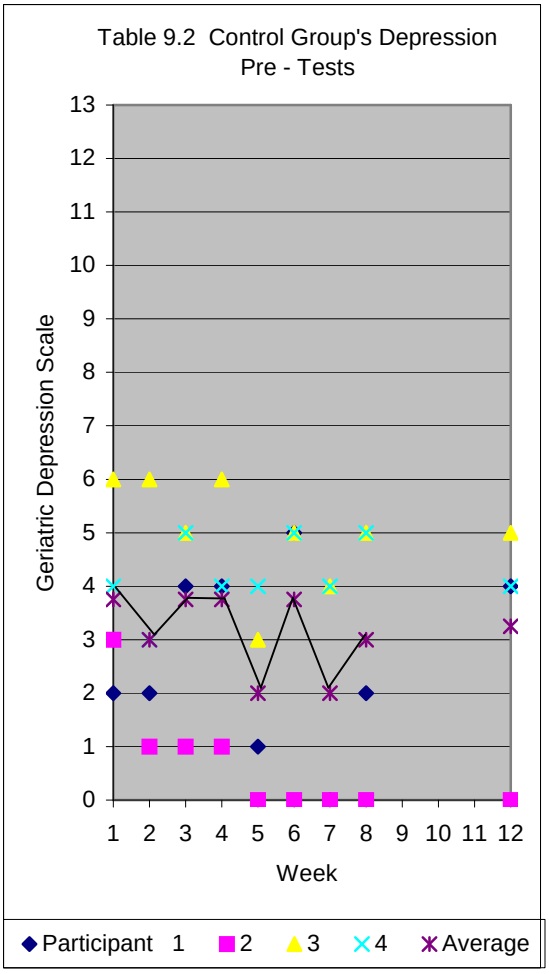
Table B also demonstrates that the Reiki Group only had two participants on blood pressure medication and two participants that had no blood pressure medication during the duration of the study. Three of the four participants in the Reiki Group were on anti-depressants during the duration of the study. The Control Group demonstrates that three participants were medically diagnosed with anxiety and only one with depression. Three in the four Control Group participants were on blood pressure medication during the duration of the study. Three of the four participants in the Control Group were on anti-depressants during of the duration of the study. Two of the participants took multiple anti-depressants during the study. Again, the medical diagnosis differs from the measurements discussed later in the individual and composite charts of the study.

Table B: Participants by Diagnosis and Medications

Participant Group	Primary Diagnosis	Secondary Diagnosis	B.P. Meds	Anti-Dep. Meds
Reiki Group	Vascular Dementia	Depression & Anxiety	Yes	Yes
Reiki Group	Vascular Dementia	Depression	No	Yes
Reiki Group	Alzheimer's Disease	Depression	Yes	Yes
Reiki Group	Vascular Dementia	Anxiety	No	No
Control Group	Vascular Dementia	Anxiety	No	Yes - (2)
Control Group	Vascular Dementia	Depression	Yes - (2)	Yes
Control Group	Dementia	Anxiety	Yes	Yes - (2)
Control Group	Alzheimer's Disease	Anxiety	Yes	No

Table 9.1 and Table 9.2 on the next page demonstrates a composite graph of depression among the Reiki Group and the Control Group Pre-tests using the Geriatric Depression Scale administered each week for 8 weeks and again 30 days later in the 12th week with no Reiki sessions to see if the Reiki had lasting effects. The results were positive in that Reiki demonstrated a significant decline in a smooth downward trend from an average score of 6.5 to 4.25 in the depression of the Reiki Group along with lasting effects in the 12th week at a score of 4.25. In Table 9.2 the Control Group showed a small zigzag decline from an average depression score of 3.75 to 3.25 and had lasting effects in the 12th week with a score of 3.25. Note that depression starts at a score of five. Both groups of participants had two participants with scores of five and greater, thus there was an equal distribution of depressed participants in each group.

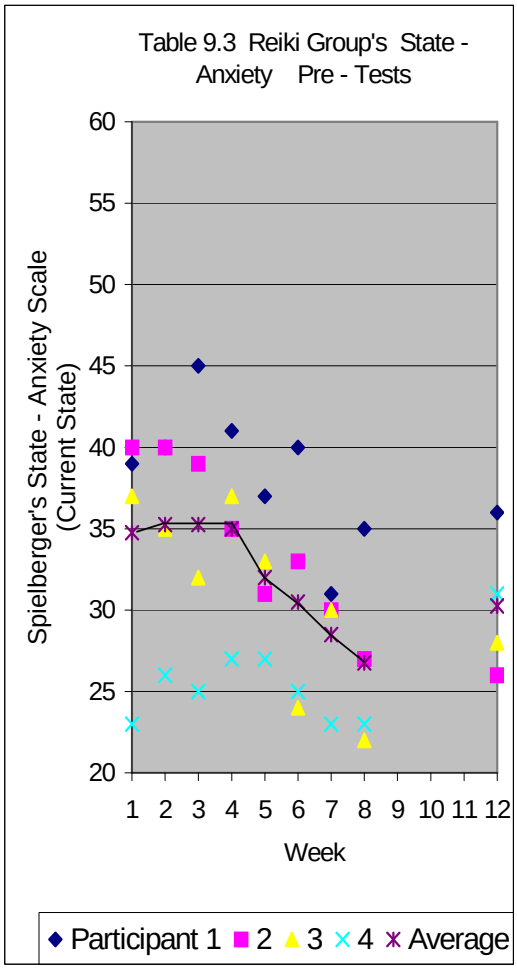




Note: Depression = 5 and greater

Table 9.3 and Table 9.4 on the next page demonstrates a composite graph of the current state of anxiety among the Reiki Group and the Control Group's pre-tests of Spielberger's Anxiety State-Trait Inventory for Children (STAIC) administered each week for eight weeks and again 30 days later in the 12th week with no Reiki sessions to see if the Reiki had lasting effects. The results in Table 9.3 demonstrate a significant decline in a smooth downward trend from an average anxiety – state score of 34.8 to 26.8. In the 12th week the results increased to 30.35, which suggests that ongoing Reiki treatments would be beneficial for the participants.

Whereas in Table 9.4, the Control Group shows a smaller zigzag decline from an anxiety – state score of 31 to 25.5 and an increase to 29.75 in the 12th week, thus no significant change. Note that the best score for the STAIC is 20 and the worst score is 60. Both groups of participants had two participants with scores in the 30s and 40s and both groups had one participant that showed little to no anxiety with scores in the 20s, thus there was an equal distribution of anxious participants in each group.



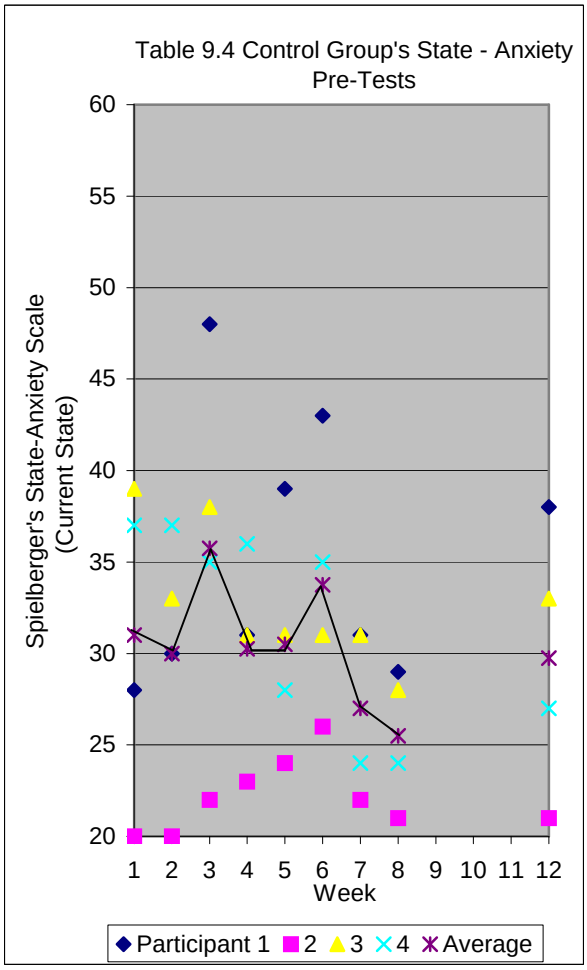
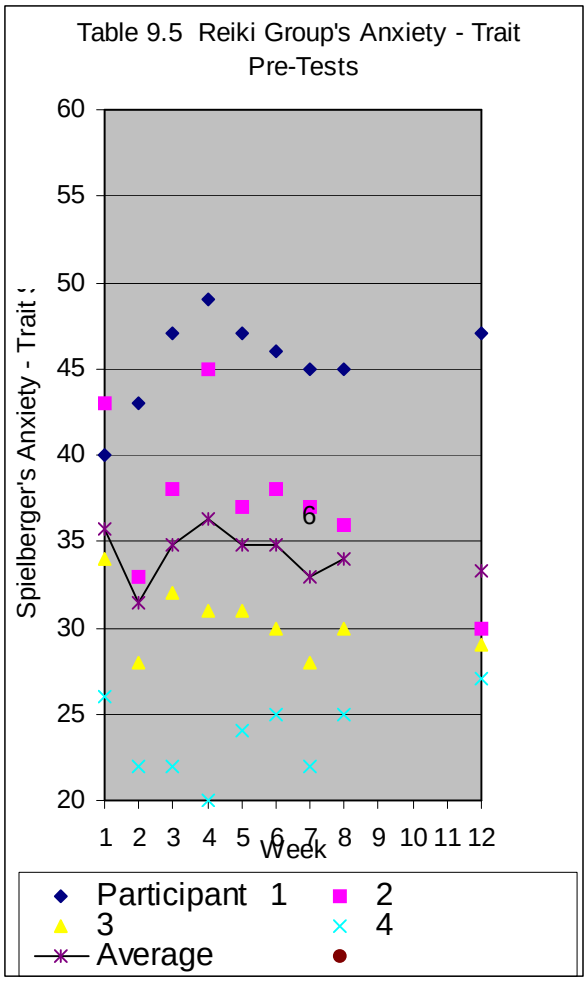


Table 9.5 and Table 9.6 on the next page demonstrates a composite graph of the trait (history of anxiety vs. current state of anxiety) among the Reiki Group and the Control Group's pre-tests of STAIC administered each week for eight weeks and again 30 days

later in the 12th week with no Reiki sessions to see if the Reiki had lasting effects. The results demonstrated that the Reiki treatments did not have a significant effect in the Reiki Group with a beginning score of 35.75 and an ending score of 34 in the 8th session. There was a slight decline with a score of 33.25 in the 12th week with no Reiki sessions for 30 days. The overall anxiety – trait scores for the Reiki Group may have been affected by an anomaly that occurred with one of the participants who recently experienced a caregiver striking her and having an eye infection. This anomaly is clearly identified in the Individual Table Index – Table 1.1 – Virginia's Anxiety Trait scores – in the third and fourth week.

The Control Group in Table 9.6 showed more of a decline during the first eight weeks with a beginning anxiety – trait score of 38.5 and an ending score of 32.5 in the eighth week but an increase to 36.5 in the 12-week, thus only a 2 point difference. During the 12-week study both groups had reduced their trait scores by only 2 points.



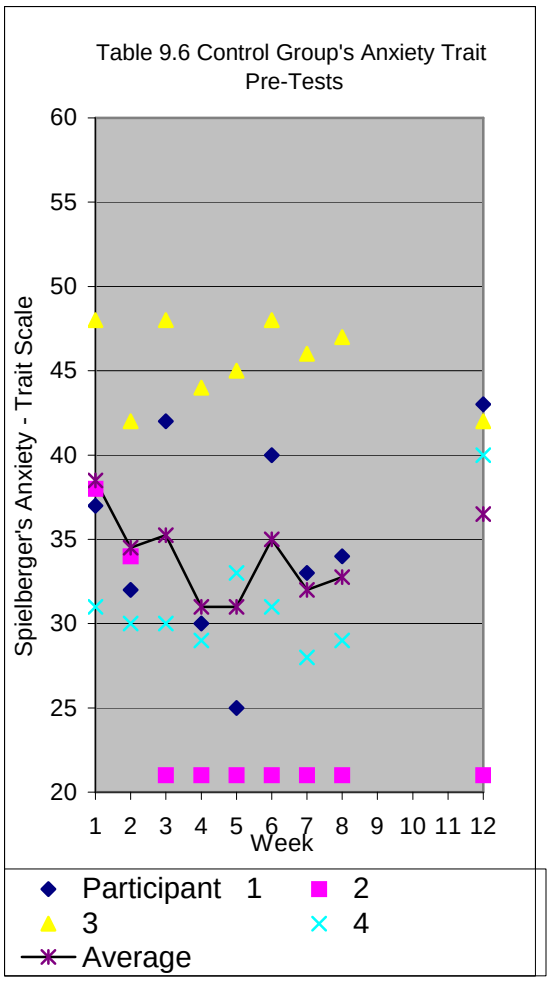
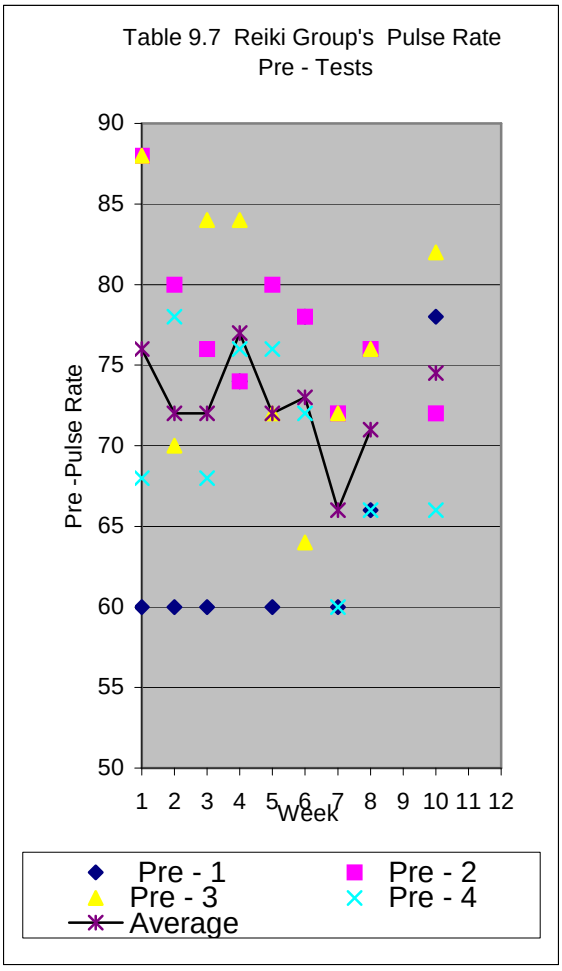


Table 9.7 and Table 9.8 on the next page demonstrates a composite graph of the average heart rate amongst the Reiki Group for both the pre- and post-tests measuring the pulse rate immediately before and immediately after each Reiki session for eight weeks and again 30 days later in the 12th week with no Reiki sessions to see if the Reiki had lasting effects. The results demonstrate a significant decline in a downward trend for both the pre- and the post-pulse rate. Table 9.7 demonstrates a decline in the pulse rate pre-tests with a downward trend from an average pre-pulse rate of 75 to 71 at the end of the eighth week. However the results increased to 74.5 in the 12th week with no Reiki treatments. This suggests that ongoing Reiki treatments would be beneficial for the

participants. Similarly, the pulse rate post-tests in Table 9.8 demonstrates a decline in a downward trend from an average pulse rate of 71.5 to 65.5

These positive results are inclusive of two anomalies with two participants. The first anomaly is clearly displayed in the Individual Tables Index – Table 1.5 – Virginia's Pre- and Post-Pulse Rate, when Virginia disclosed to the practitioner and the nurse that she was struck by her caregiver in the board and care home where she resides. The second anomaly is clearly displayed in Table 2.5 – Barbara's Pre- and Post-Pulse Rate – when the participant disclosed to the practitioner that her daughter was now her son.



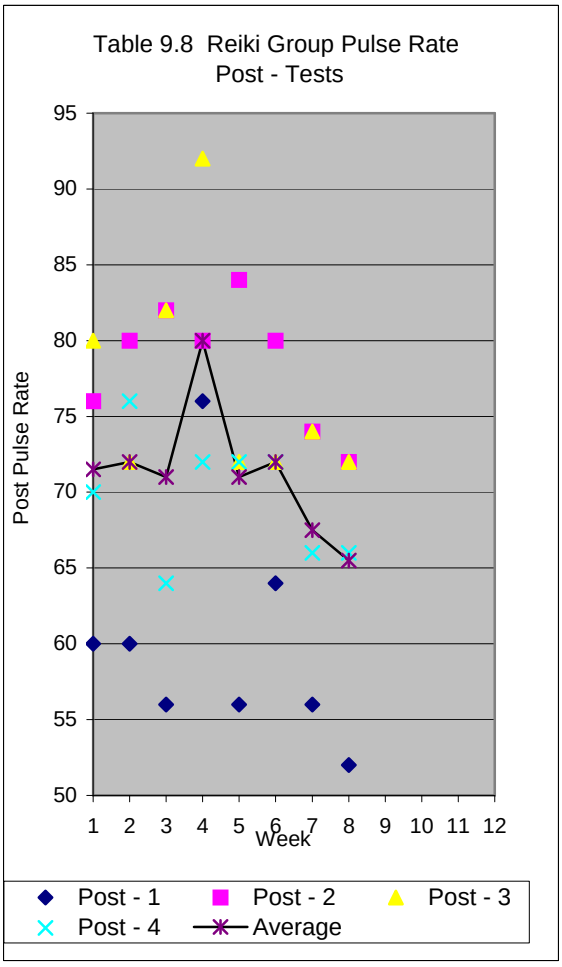
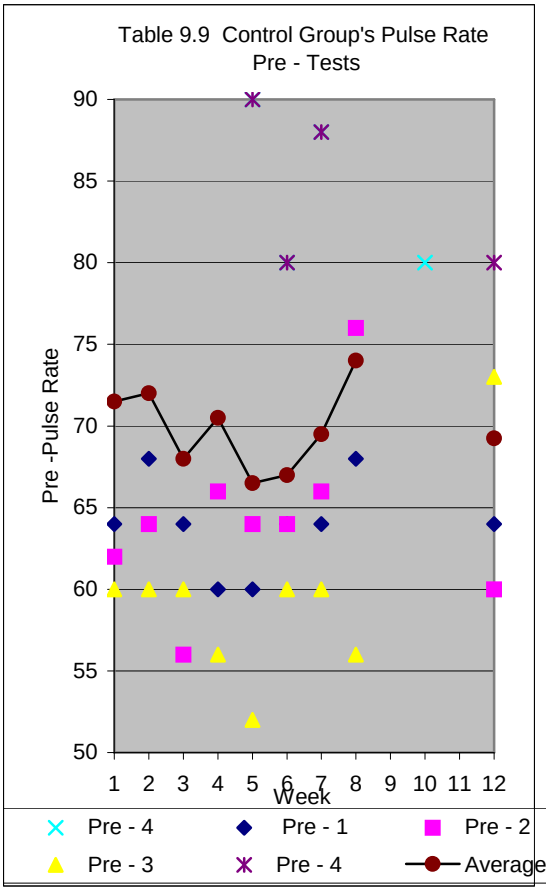


Table 9.9 and Table 10.1 on the next page demonstrates a composite graph of the average heart rate amongst the Control Group for both the pre- and post-tests measuring the pulse rate immediately before and immediately after each mock-Reiki session for eight weeks and again 30 days later in the 12th week with no mock-Reiki sessions. The results demonstrated a significant increase in a zigzag for the pre- pulse rate. The pre-tests average pulse rate of 71.5 to a pulse rate of 74 at the end of the eighth week. However the results decreased to 69.25 in the 12th week with no mock-Reiki treatments. Similarly in Table 10.1 the pulse post-tests demonstrate an increase in a fairly steady upward trend from an average pulse rate of 68 to pulse rate of 72. Thus it appears that the mock-Reiki had no effect on the pulse rate for the Control Group.

These results are inclusive of one anomaly clearly displayed in the Individual Tables Index – Table8.5– Eartha's Pre- and Post-Pulse Rate, when Eartha had a medical emergency the day before the Reiki session in the seventh week. Eartha fell on her head and fractured her leg.



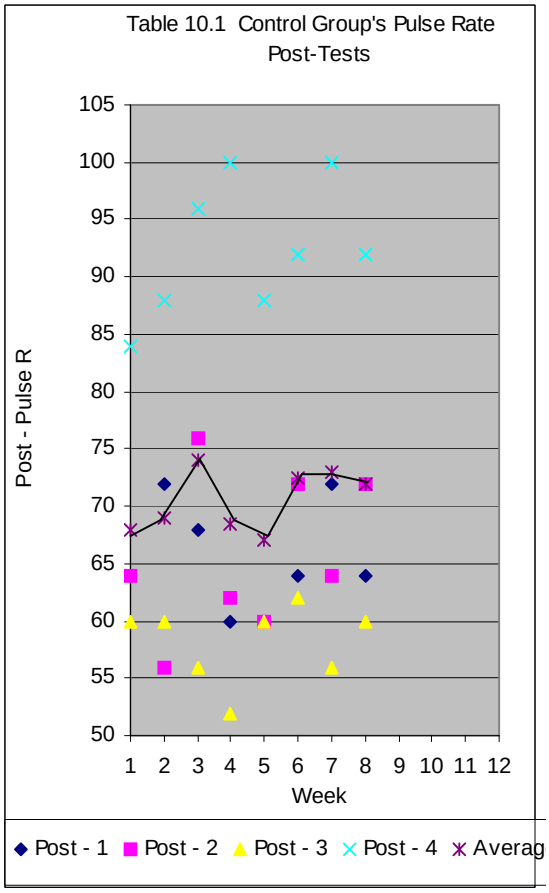
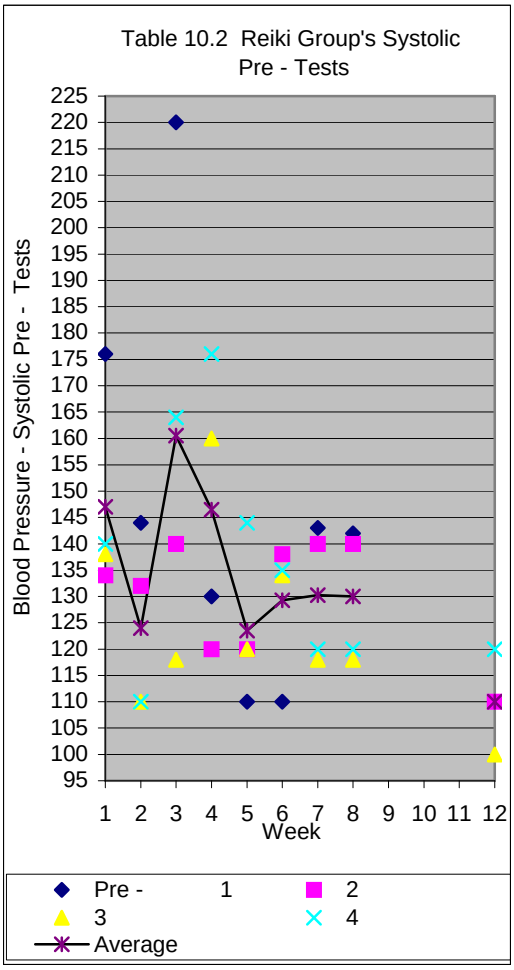


Table 10.2 and Table 10.3 on the next page demonstrates a composite graph of the average blood pressure systolic measurement for pre- and post-tests for the Reiki Group that was administered immediately before and after each Reiki session for eight weeks and again, 30 days later in the 12th week with no Reiki sessions to see if the Reiki had lasting effects. The results in Table 10.2 for the pre-test systolic pressure demonstrates a significant decline in a zigzag but downward trend starting from an average systolic pre-test pressure of 147 and ending at 130 in the eighth week and declining further 30 days later in the twelfth week to an average systolic pressure of 110 with no Reiki sessions. This suggests that Reiki may have on-going effects on the systolic blood pressure on the Reiki Group. This is inclusive of the two anomalies mentioned previously that are clearly

displayed in the List of Tables for Individual Subjects – Table 1.3 Virginia's Pre - Systolic pressure demonstrated in the third week and Table 3.3 Barbara's Systolic Pre- and Post- pressure demonstrated in the third and fourth week.

The results in Table 10.3 for the post-test systolic pressure demonstrates a significant decline in a zigzag but downward trend starting from an average systolic post-test pressure of 142.5 and ending at a systolic pressure of 128 in the eighth week. Again, this suggests that Reiki may have on-going effects on the systolic blood pressure on the Reiki Group.



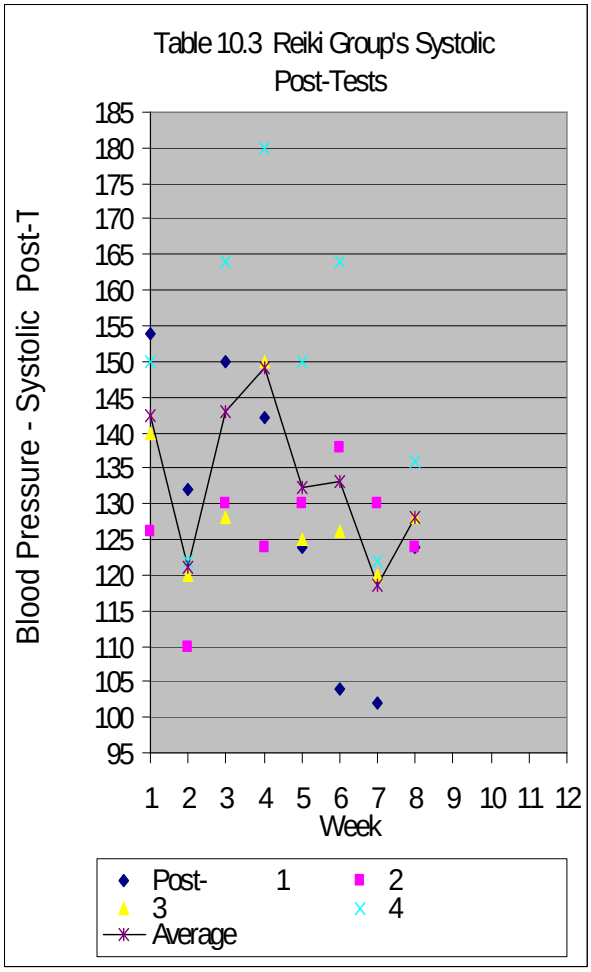
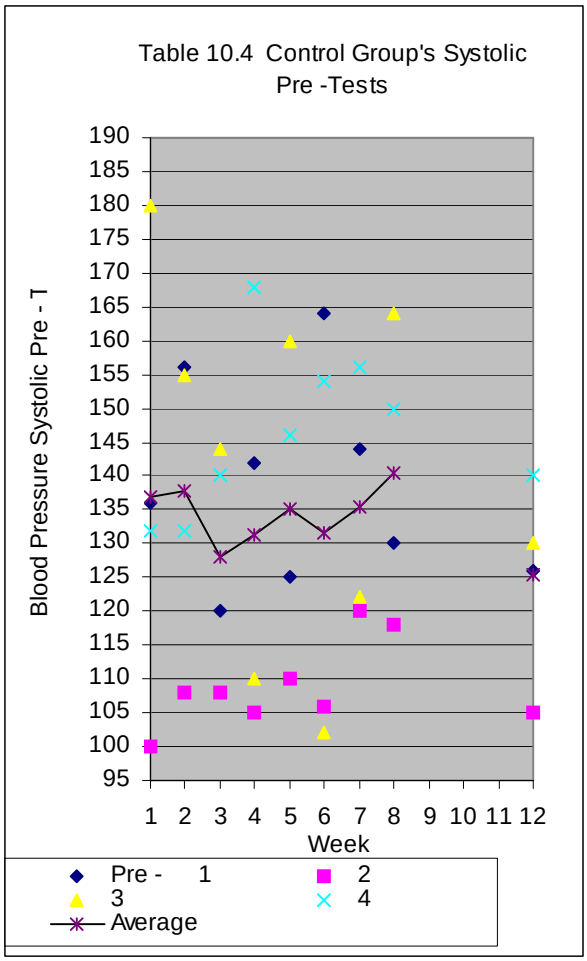


Table 10.4 and Table 10.5 on the next page demonstrates a composite graph of the average blood pressure systolic measurement for pre- and post-tests for the Control Group that was administered immediately before and immediately after each mock-Reiki session for eight weeks and 30 days later in the twelfth week with no mock-Reiki sessions to see if the Reiki had lasting effects. The results in Table 10.4 demonstrate a small increase in a zigzag and upward trend for the average pre-test systolic rate of 137 and ending at 140.5 in the eighth week. However, the average systolic rate declined in a downward trend 30 days later in the twelfth week to an average systolic rate of 125.5 with no Reiki sessions.

The results in Table 10.5 for the average post-test systolic pressure demonstrates a significant decline in a zigzag but downward trend starting from an average systolic post-test pressure of 130.5 and ending at a systolic pressure of 122 in the eighth week. This suggests that mock-Reiki may have a positive/placebo effect on the systolic blood pressure on the Control Reiki Group.



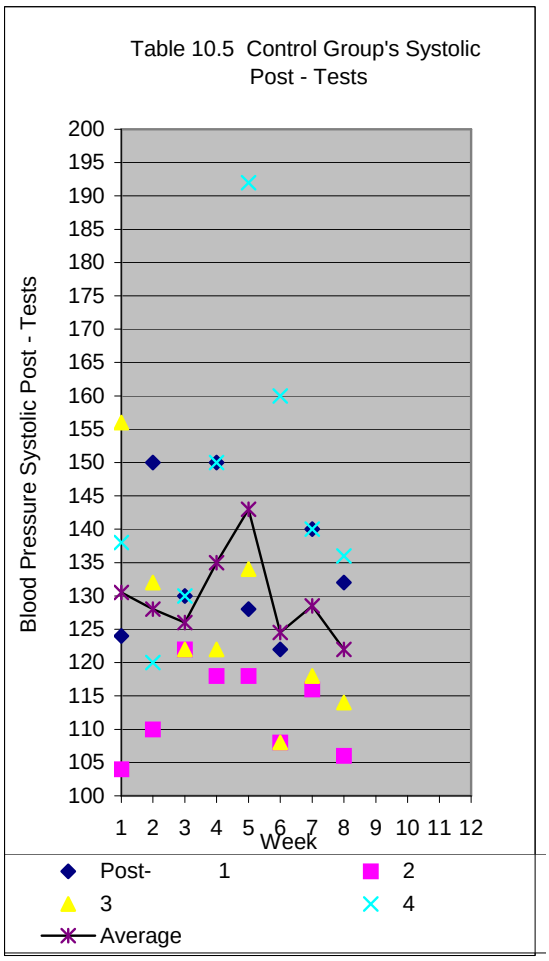
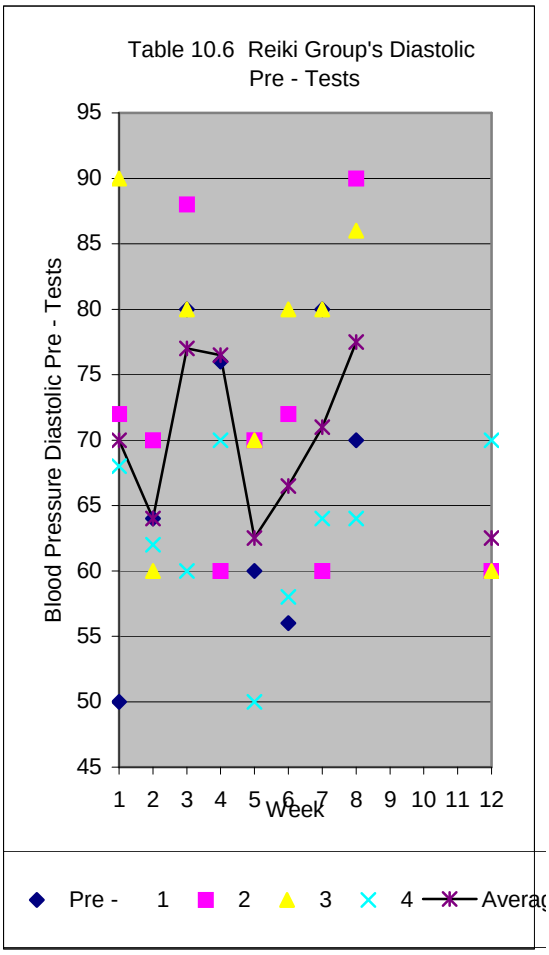


Table 10.6 and Table 10.7 on the next page demonstrates a composite graph of the average diastolic blood pressure measurement for pre- and post-tests for the Reiki Group that was administered immediately before and after each Reiki session for eight weeks and 30 days later in the 12th week with no Reiki sessions to see if the Reiki had lasting effects. The results in Table 10.6 for the average pre-test diastolic pressure demonstrates a significant increase with a zigzag but upward trend starting from an average systolic pre-test pressure of 70 and ending at 77.5 in the eighth week. However, the average diastolic pressure had a significant decline 30 days later in the twelfth week to an average diastolic pressure of 62.5 with no Reiki sessions. This suggests that Reiki may have

positive ongoing effects after the Reiki sessions. This is inclusive of the anomaly previously mentioned that is clearly displayed in the List of Tables for Individual Subjects – Table 1.4 Virginia's Pre -Diastolic pressure – demonstrated in the third week.

The results in Table 10.7 for the post-test diastolic pressure demonstrates a significant decline in a zigzag but downward trend starting from an average diastolic post-test pressure of 75 and ending at a diastolic pressure of 67 in the eighth week. This suggests that Reiki may have a positive effect on the diastolic blood pressure on the Reiki Group.



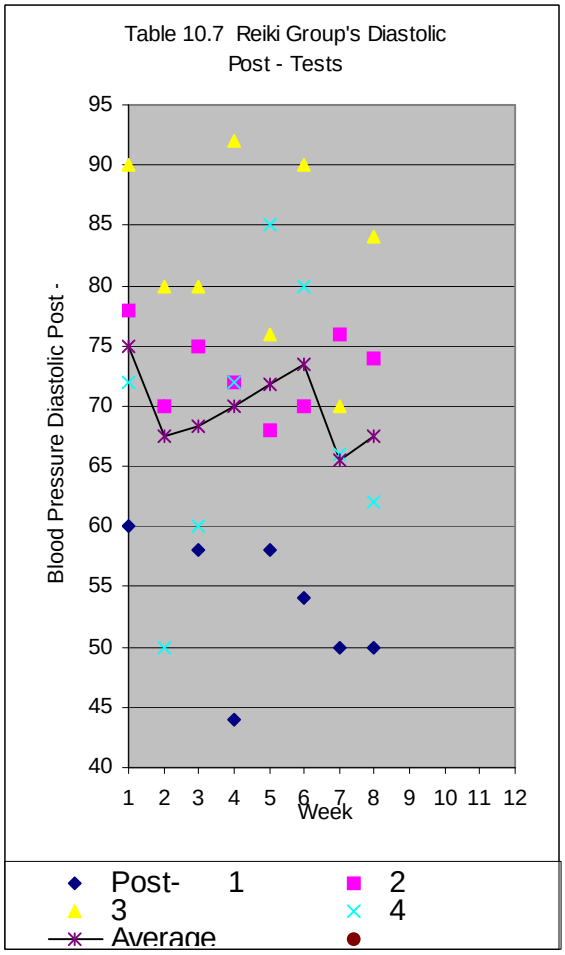
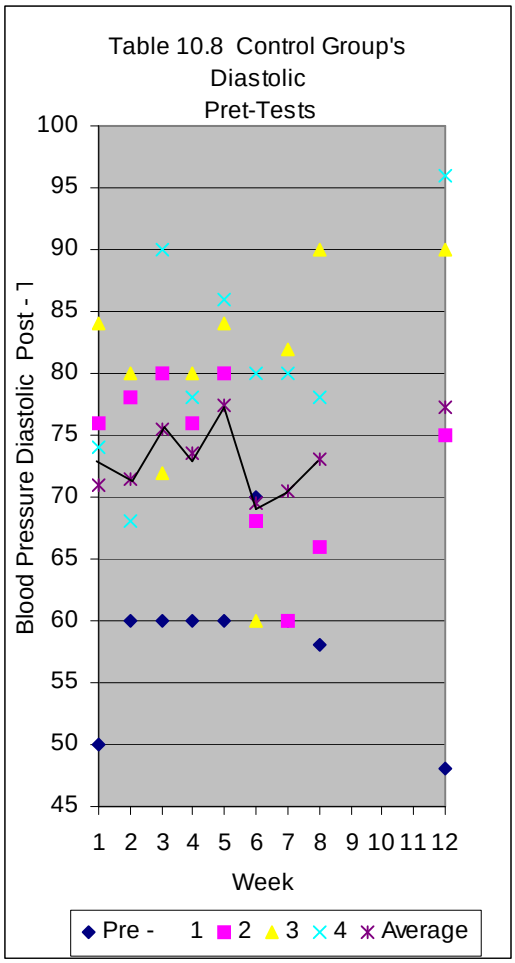


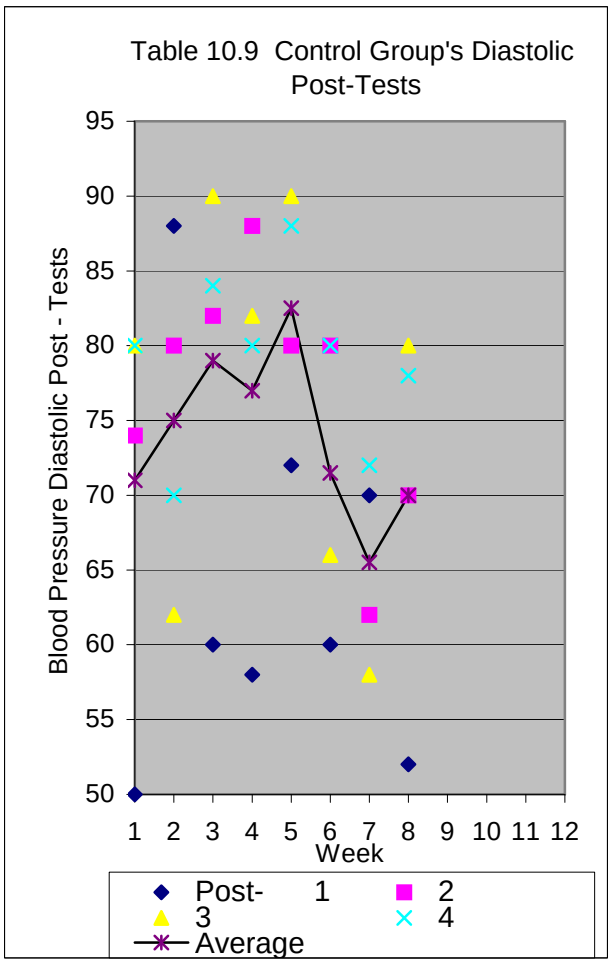
Table 10.8 and Table 10.9 on the next page demonstrates a composite graph of the average diastolic blood pressure measurement for pre- and post-tests for the Control

Group that was administered immediately before and after each Reiki session for eight weeks and 30 days later in the 12th week with no mock-Reiki sessions to see if the mock-Reiki had lasting effects. The results in Table 10.8 for the average pre-test diastolic pressure demonstrate no significant changes along a zigzag trend starting from an average diastolic pre-test pressure of 71 and ending at 73 in the eighth week and escalating to an average diastolic pressure of 77 in the 12th week or 30 days later with no mock-Reiki sessions. This suggests that mock-Reiki had no effect on the diastolic blood pressure pre-test on the Control Group.

Similarly, the results in Table 10.9 for the diastolic blood pressure post-test for the Control Group demonstrate no significant change with a zigzag trend starting from an average diastolic post-test pressure of 71 and ending at a diastolic pressure of 70 in the eighth week. This suggests that mock-Reiki may have no effect on the diastolic blood pressure post-test on the Control Group.

This researcher was present for all blood pressure and pulse pre- and post-tests. However, the researcher could not decipher the results of these measurements until the study was completed when the researcher graphed the individual results and the composite results. The trends were clearly realized by the researcher, thus this may strengthen the study and assures reliability and demonstrate that there was little or no Hawthorne effect.





There were a total of 18 composite charts of data/measurements. Each group of participants was submitted to five measurements and two of the measurements were taken before and after each treatment. For a more detailed view of the results per participant, see the List of Tables on individual charts (five charts for each individual) of the Reiki Group and of the Control Group.

Summary of Results

In summary, this quasi-experimental study demonstrates the stated hypothesis that Reiki has positive effects on depression and anxiety in this population diagnosed with dementia and Alzheimer's disease. The intent of this study was to explore the effects of

Reiki on the population studied. The observation was the relaxing effects of the treatments given to the participants in the Reiki Group that was recognized and noted by the practitioner as well as by the staff at IOA including the nurses, physical therapist, the social workers, and the volunteers.

The goal was to help this sample population and the presumption was that Reiki would do so. This goal was achieved in that Reiki reduced depression and/or anxiety in the Reiki Group. Furthermore, the Control Group was observed for a placebo effect with the mock-Reiki. There was little placebo effect in this group.

The study examined data from the five measurements administered on the participants with Reiki and with mock-Reiki. The data was analyzed by measurement on each individual displayed in the individual graphs in the form of line charts. Each group was analyzed by measurement and displayed in the composite graphs in the form of scattered line charts with an average line.

The results showed that Reiki had a significant effect in almost all the measurements taken within the Reiki Group except in the pre-test measurement for the diastolic blood pressure, that may be questionable, and in Spielberger's Anxiety – Trait measurement, which may be due to the anomalies with two of the participants described earlier.

The results showed that mock-Reiki administered in the Control Group had little change, or placebo effect, in the measurements. The only positive effects were the pulse post-test and the blood pressure systolic post-test. Thus the majority of the measurements demonstrated no significant changes throughout the study for the Control Group.

In addition, Reiki appears to have cumulative effects over time in most measurements with equal or greater results in all measurements, except for the pulse

measurement. Thus, we can say that moderate-term use of this therapeutic touch modality on this sample of older adults diagnosed with dementia and Alzheimer's disease demonstrated positive effects with a significant reduction of depression and anxiety.

DISCUSSION

Implications of the Study

This study indicates that Reiki had relaxing effects on each participant and had lasting effects. Another implication of this study is that if Reiki had positive effects on this sample of a dementia and Alzheimer's population, then it is likely that Reiki may have a significant effect in depression and anxiety in the greater population of dementia and Alzheimer's. In addition, Reiki may support healthy aging among the elderly by reducing chronic illness complaints by a significant decline of depression and anxiety, associated with illness and disease, such as strokes, heart attacks, cancer, Parkinson disease and arthritis.

Limitations/ Strengths and Weaknesses of the Study

A limitation and weakness of this study was size of the study sample. It was found that two of the participants (one in each group) no longer suffered from depression and/or anxiety, although they were diagnosed with depression and/or anxiety. However, though the study was small, there was an even distribution in the independent variables of depression and anxiety in both groups. Another limitation was the duration of the study. It could be strengthened by an extension for six months or longer. Budget was another limitation for more sophisticated evaluations.

Another weakness of the study was that the participants were in the midst of other physical and emotional challenges throughout the study demonstrated with at least three

separate excursions. Further weakness was that the researcher had to repeat the questions in the STAIC with subjects who were not cognitively capable of understanding the first time. The level of cognition was a weakness with this measurement. However, only one participant had this problem of understanding so the researcher learned to question the participant in multiple ways to be sure she understood each question.

Administering the oral/written measurements of the STAIC and the GDS to the participant would strengthen the study to confirm that the charted diagnosis was accurate. Perhaps longer sessions of 60 minutes for 12 months covering all 12 of the body's meridians vs. only the three head points and the thymus area would be more effective to the study along with a larger group of participants.

Administering Reiki to the three head points and the thymus area could be viewed as a strength as these points specifically combat anxiety and depression. Another strength was the comfortable environment and room location of the study, which was next to the nurses' station. This allowed the subjects to feel safe with this new and different treatment. Consistency with the nurses and the practitioner administering the measurements was another strength in validity of the data and comfort level of the participant.

Future Research Suggestions

Further research measurements used in similar studies are suggested such as: IgA in saliva measuring stress response, Galvanic Skin Response (GSR) to measure anxiety, and EMG measurements for anxiety and depression. Also, qualitative measurements such as in-depth interviews with families would enhance future studies and assist in eliminating

threats to validity. However, depending on the level of cognition, in-depth interviews may not work with this population but would with families and caregivers.

References

Cantwell, Michael. Telephone interview. 17 March, 2006

Cherniack, E.P.(2001). Correlates of Use of Alternative Medicine by the Elderly in an Urban Population. *Journal of Alternative & Complementary Medicine,* Vol. (7)2, pp.277-281. Retrieved March 21, 2005 from AltHealthWatch (EBSCOhost) database.

Creazzo,Toni. Personal interview. 23 March, 2006

Engerbreston, J .& Wardell-Wind, D., (2002). Experience of a Reiki Session. *Alternative Therapies in Health and Medicine,* Vol. (8)2, pp.48-52.

Gaylord, S. (1999). Alternative Therapies and Empowerment of Older Women. *J. Women Aging,* Vol.(11)2, pp29-47. Retrieved March 21, 2005 from PubMed database.

Institute for Health & Healing. (2006). Retrieved from http://www.cpmc.org/services/ihh/about/ March 7, 2006.

McMahan, S. & Lutz, R., (2004). Alternative Therapy Use Among the Young-Old (Ages 65 to 74): An Evaluation of the MIDUS Database, *The Journal of Applied Gerontology,* Vol.(23)2, pp.91-103.

Miles, P. (2003). Preliminary Report on the Use of Reiki for HIV-Related Pain and Anxiety. *Alternative Therapies in Health and Medicine,* Vol.(9)2, pp.36.

Miles, P. & True, G., (2003). Reiki – Review of a Biofield Therapy History, Theory, Practice, and Research. *Alternative Therapies in Health and Medicine,* Vol.(9)2, pp.62-72.

Miles, P., *Reiki – A Comprehensive Guide,* New York: Penguin Group, 2006.

Morgan, Pat. Personal Interview. 5 April 2006

Nield-Anderson, L. & Ameling, A., (2000). The Empowering Nature of Reiki as a Complementary Therapy. *Holistic Nursing Practice,* Vol.(14)3, pp.21-29. Retrieved March 28, 2005 from Ovid database. http://gateway.ut.ovid.com/gw2/ovidweb.cgi
Rand, W.J., (2005), Reiki News Articles. *Reiki In Hospitals*. Retrieved May 1, 2005. http://www.reiki.org/Healing/reiki_in_hospitals.html

Sawyer, J., (1998). The First Reiki Practitioner in our OR. *A RN Online,* Vol.76(3), pp.674-677. Retrieved March 28, 2005 from Ovid database. http://gateway.ut.ovid.com/gw2/ovidweb.cgi

Schiller, R., (2003). Reiki: A Starting Point for Integrative Medicine. *Alternative Therapies in Health and Medicine,* Vol.(9)2, pp. 20-21.

Schneider, R., Alexander, C., Salerno, J.,Robinson, D., Fields, J., & Nidich, S.I. (2002). Disease Prevention and Health Promotion in the Aging With a Traditional System of Natural Medicine: Maharishi Vedic Medicine, *Journal of Aging and Health,* Vol.(14)1, pp.57-78.

Shipley, Susie. Personal Interview. 5 April, 2006.

Toal, Jeanne. Personal interview. 23 February, 2006

Wardell, D. & Engebretson, J., (2001). Biological correlates of Reiki Touch sm healing,*Journal of Advanced Nursing,* Vol.33(4), pp.439-445. Retrieved March 28, 2005 from Ovid database. http:// gateway.ut.ovid.com/gw2/ovidweb.cgi

Whelan, K. & Wishnia, G., (2003). Reiki Therapy: The Benefits to a Nurse/Reiki Practitioner, *Holistic Nursing Practice,* Vol.17(4), pp. 209-217. . Retrieved March 28, 2005 from Ovid database. http:// gateway.ut.ovid.com/gw2/ovidweb.cgi

Wister, A.V., Chittenden, M., McCoy, B., Wilson, K., Allen, T., & Wong, M. (2002). Using Alternative Therapies to Manage Chronic Illness Among Older Adults, *Canadian Journal on Aging,* (Vol.(21)1, pp. 47-62 from PsychInfo database.

Woods, D.L., & Dimond, M. (2002). The Effect of Therapeutic Touch on Agitated Behavior and Cortisol in Persons with Alzheimer's Disease, *Biological Registered Nuring,*Vol.(4)2, pp. 104-114. Retrieved April 4, 2005 from PubMed database.

Woods, D.L., Craven, R.F., & Whitney, J. (2005). The Effect of Theraputic Touch on Behavioral Symptoms of Persons with Dementia, *Alternative Therapies of Health and Medicine,* Vol.(11)1, pp. 66-74. Retrieved April 4, 2005 from PubMed database.