REIKI AND RELAXATION:

A PRACTICAL LOOK AT REIKI AND STRESS REDUCTION IN A NON-MEDICAL SETTING

by

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INTRODUCTION TO ELECTRONIC EDITION

For a ten year body of classwork plus this dissertation I was awarded a Ph.D. in Natural Health by the now-closed Clayton College of Natural Health. Established in 1980, CCNH was a pioneer in remote study programs, far in advance of the many such colleges and degree programs we see advertised today. Now, in the age of the Internet, remote study programs like these are commonplace and widely accepted. In the days of paper, photocopiers, mail and phone calls, programs like CCNH were often viewed with suspicion and derision. Their accreditation, though valid at the time I enrolled, has been called into question in the years since. Although the school closed for financial reasons in 2011, I know from first hand experience that the work done through those years and in those papers is on par with my traditional-campus Bachelor of Science degree. The coursework, reading, projects, and phone conversations with my professor-advisor were all very real and worthwhile, no matter their documentation. Whatever your opinion of CCNH or remote education programs past or present, please read “Reiki and Relaxation” with a fair and open mind. Allow this writing to speak for itself, standing in witness to the time, effort and professional guidance that went into creating it.

I’ve made some superficial cosmetic changes in formatting in order to make the book more readable in an electronic format. The page numbers apply to the print version as the Table of Contents was left unchanged. Otherwise, the content of this e-book is that of the original 2011 print dissertation.

Pittsburgh PA
December 2016

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There are not enough words to express my gratitude to my husband, Jon, and to my daughter, Nicole. I can't thank you enough for your love, support, and unending patience. I love you both.

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May there be there be health, happiness, peace and prosperity for everyone.

Pittsburgh, PA
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ABSTRACT

Past scientific studies about Reiki are small in number but show a wide range of methodologies. This study utilized a minimalist approach, and a very basic mixed experimental research design in an attempt to understand one specific aspect of Reiki, namely its ability to facilitate relaxation. Reiki was evaluated for its ability to reduce stress in the present moment and retrospectively over six months. Both holistic health and mainstream scientific medicine acknowledge that psychological stress can contribute to disease, while stress reduction offers many benefits. Although the exact mechanism of action remains unknown, stress reduction is one paradigm by which both holistic and allopathic healers can understand and utilize Reiki. This study examined the effect of the most basic chair-type of Reiki session on perceived stress as measured by a 1 to 10 Likert-type rating scale. Palm surface temperature was used as an adjunctive, objective measure. The sessions were offered to the general adult population in a non-medical setting, excluding expectant mothers and persons with a history of fainting. The literature review and National Institute of Health sources do not report any significant adverse effects associated with Reiki use. A basic assumption of the study is that if a chair-type session proves effective then longer traditional sessions and/or repeated sessions over time would be equally effective, likely more so. Another key assumption is that Reiki is immediately effective in relieving stress. The greatest limitation of this study is, as with most Reiki studies to date, the small sample size.

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ABBREVIATIONS

ADA - American Diabetic Association

AHA - American Heart Association

^{o}C - degrees Celsius or Centigrade

CAD - coronary artery disease

^{o}F - degrees Fahrenheit

NCCAM - National Center for Complementary and Alternative Medicine

NIH - National Institutes of Health

NLM - National Library of Medicine

JAMA - Journal of the American Medical Association

USFDA - United States Food and Drug Administration

CHAPTER ONE
A THIN PATCHWORK

Reiki is a thoroughly holistic discipline, and can not easily be understood through the single perspective of de rigueur scientific study. So much effort has gone into devising scientific controls, blinding protocols, placebo procedures and objective measures with which to study Reiki that the body of knowledge as a whole is just a thin patchwork of dissimilar studies unable to demonstrate a clear, overarching result. This is not to say that scientific and ethical standards should be lessened or abandoned. The scattered, inconsistent quality of Reiki research over the past decade is a call to simplicity and clarity, rather than a condemnation of the Reiki technique. Indeed, the majority of these past studies find some degree of value in Reiki. While the exact pathway of its effectiveness remains unknown, Reiki has shown the potential to benefit healthy lifestyles and healing disciplines. A good next step in understanding Reiki's mechanism of action would be to understand more precisely the situations where Reiki is, or is not, effective. Stress reduction has wide application and significant potential benefit, therefore this study focused solely on Reiki's ability to reduce perceived (psychological) stress in adults.

History of the Problem

Many past investigations emphasize objective measures of an individual's response to Reiki. Subjective measures of stress, relaxation or mood tended to be secondary, either part of a melange of other measurements or part of uncontrolled descriptive studies. The nature of scientific study also tends to apply Reiki in an allopathic-like way, using Reiki either to modify the physical signs of psychological stress or to alleviate a particular disease process. While psychological stress is a well-known risk factor and exacerbating factor for many common diseases, perceived stress is, by definition, subjective. Studying Reiki through physical measures or in clinical

settings gives an incomplete picture of Reiki's total stress reducing potential. Used as a reliable, safe and effective means of ameliorating stress (and the various negative mental states the term stress can encompass), Reiki could in turn improve physical well being and quality of life through the stress-reduction mechanism alone. If Reiki proves to be ineffective toward this single, subjective condition, then doubt is fairly cast on Reiki's effectiveness in a physical healing capacity as well.

The experience of physical examination in a clinical, medical or academic setting is, in itself, stressful for some individuals. This stress response to clinical evaluation is sometimes called "white coat syndrome". If blood pressure is elevated during professional examination, but not in other situations, it is referred to as "white coat hypertension" (Pickering et al, 1988). This makes sense as a loose parallel with the quantum physics phenomenon where the observer affects the experiment through the act of observation itself (Weizmann Institute of Science, 1998). While white coat hypertension is sometimes used as a predictor for sustained disease, white coat syndrome itself is difficult to predict. One European study estimates the prevalence of white coat phenomenon in office patients with mildly increased blood pressure to be between 15% and 50% (Celis, 2004).

Purpose of the Study

It is unknown if examination related anxiety is a factor in past Reiki studies. It seems reasonable to consider that white coat syndrome could have some degree of influence on study results, particularly those studies conducted in clinical locations or that utilize technical medical measurements. This phenomenon underlines the need for additional Reiki studies in non-medical environments. By selecting a community setting, adopting a basic but controlled study method, and focusing on a single aspect of Reiki's effectiveness, this study takes a step toward clarity while avoiding the examination anxiety that may be a part of more technical scientific

studies. This study strives to contribute to the overall understanding of what Reiki can do and how it accomplishes its tasks.

The core purpose of this study is to observe if Reiki reduces subjective stress, or not. A secondary purpose is to develop a simplified, replicable, controlled study structure in a non-clinical setting. If there is clear effect at this pilot level, then other studies could later be developed to evaluate stress reduction with Reiki with greater complexity. In addition, an austere study in a community setting would require relatively few resources compared to technical clinical studies. A practical approach such as this could potentially be continued beyond the scope of this dissertation, and be expanded to include other Reiki practitioners in order to capture a larger sample size, thus addressing one of the most common shortfalls of Reiki research to date.

Significance of the Study

A study of this design and magnitude is only one small piece of the overall understanding of Reiki. Yet, if done well, even small pieces of knowledge can carry some of the weight and significance of the whole. Should Reiki prove ineffective with straightforward study design and a large sample size, then it can fairly be set aside from mainstream medical use in favor of more proven techniques (rather than simply disregarded on the basis of bias and preconceived notions alone). However, proven efficacy is another step is taken toward understanding Reiki's mechanism of action, applying it more widely across healing disciplines, and allowing more people to enjoy its benefits.

The role stress plays in disease is well established. Two of the most prevalent illnesses in the United States are associated with stress. The Centers for Disease Control estimates that 1 in 3 American adults have high blood pressure, and that

23.5 million Americans have diabetes (all types) between the ages of 20 and 49 with another 12.2 million diabetics over the age of 60 (Centers for Disease Control, 2007). Be it through human touch or through some energy-field mechanism as yet undiscovered, stress-reduction alone provides a well-known pathway by which Reiki can improve physical health, support mental well being and maintain emotional quality of life. If proven effective in relieving stress, and implemented as some part of standard treatment, Reiki could conceivably make a contribution to the national health landscape.

A study of Reiki and relaxation could arguably build common ground between holistic and allopathic healing disciplines. Stress reduction is a paradigm shared by both holistic health and allopathic medicine. Our common goal is to help ease the suffering and improve the quality of life of those under our guidance. Safe and effective stress reduction through means such as Reiki is common ground that can help both disciplines meet that goal.

The Research Question

With a theme of simplicity, this study seeks to address one straightforward question. This study only evaluated Reiki's ability to decrease perceived stress. Subjective stress was evaluated from two perspectives, stress in the present moment and a retrospective perception of overall stress over the prior six months. Palm surface temperatures were measured as a physical marker of stress reduction and increased relaxation. Perceptions of participants with past Reiki experience will be compared with the stress ratings of those experiencing Reiki for the first time in an attempt to learn more about what impact prior expectations might have on the stress reduction process. Reiki and relaxation (stress reduction) will be the primary focus throughout the study.

Hypothesis

This study offers a hypothesis in the affirmative: Reiki reduces perceived stress. The hypothesis was tested in three ways: perceived stress in the present moment, retrospective perception of general stress feelings over the past 6 months, and palm surface temperature. All three measures were taken before and after a basic Reiki session, or a waiting period for the control group. The rating scales were structured so that smaller numbers reflect less stress. Palm temperature measurement were included based on known sympathetic and parasympathetic nervous function. As stress reduces, sympathetic tone reduces and parasympathetic activity increases resulting in increased blood flow to the extremities (Harvard Health Publications, 2008). Consequently, an increased palm surface temperature would be expected as both relaxation and peripheral blood flow increases. Put simply, rating scores follow the level of stress while palm temperatures follow the level of relaxation. Reduced rating scale scores and/or increased palm surface temperatures following a Reiki session would support the hypothesis. No change or converse results would negate the hypothesis.

Scope, Delimitations, and Limitations

This study limited its focus to the participant's subjective perception of stress with minimal use of physical measurements in order to avoid, if possible, inducing stress through the act of examination. The prevalence of white coat syndrome in the general population is unknown. Evaluation for white coat phenomenon through repeated sessions and multiple settings is outside the scope of this study. Medical diagnosis was not a basis for inclusion or exclusion during the enrollment process. In order to avoid inadvertent bias, or a leading interview style, subjective stress measures will be limited to quantified ten point rating scales. At the end of the study process, after the controlled, quantified measurements have been

completed, all participants will be offered the opportunity to give unstructured descriptive comments. Small sample size is the strongest limitation in this study, as it has been in many other studies. This was addressed by using a modified chair type of Reiki session that lasted only ten minutes, rather than the traditional supine session which can last an hour or more. This reduced the time demands placed on the participants, in an attempt to encourage enrollment. The smaller amount of time per session also allowed a greater number of participants to be seen by a single, consistent practitioner. Reiki theory allows that chair sessions are an effective form of Reiki application. An additional limitation to the study is that it does not differentiate between stress reduction from Reiki and any stress reduction that may be inherent to human touch. Sham procedures, and comparisons with non-touch relaxation measures are outside of this study's resources.

There are two additional rationales for choosing chair sessions over traditional sessions in this study. First is the assumption that if a basic chair session is effective, then a longer traditional session or repeated sessions (of either type) would be equally effective, probably more so. Second, many practitioners have incorporated other relaxation techniques into the full supine sessions such as aromatherapy and music. These elements are generally less expected with chair sessions and can be excluded from the study with no effect on participant expectations.

Definition of Special Terms

Key concepts in this study were drawn both from Reiki theory and from mainstream scientific medical studies. Helpful terms and concepts from Reiki and Allopathy are as follows:

Allopathic medicine - A health care theory and method predicated on the idea that

signs and symptoms of illness are manifestations of the disease process, and by opposing or eliminating those signs and symptoms the disease can be treated or cured.

Autonomic nervous system - A branch of the nervous system governing cardiac muscle, smooth muscle and glands (Dorland's Illustrated Medical Dictionary, 1974).

Chair session - A Reiki session where the participant remains seated and fewer hand positions are used compared to a traditional session. Chair sessions allow front and back hand positions to be given simultaneously rather than sequentially. Reiki theory and practice allows that this is an effective form of Reiki session.

Chakra - A term from Eastern healing and yogic disciplines referring to spots in the body where subtle energy is gathered and regulated. There are seven major chakras along the midline of the body that are often used to describe Reiki hand positions; sacral, root, solar plexus, heart, throat, third eye and crown. Because of their energy functions, chakras are sometimes compared to a capacitor in electronics (Beardshaw, 1999).

Cortisols - The steroid type hormones secreted from the cortex area of the adrenal gland which are involved in regulating many body functions.

Distance Reiki - Reiki energy or Reiki session delivered from a significant distance, not in the presence of the person receiving the Reiki. This type of session is done by intermediate to advanced practitioners.

Endocrine system - Organs within the body that secrete into the blood or lymphatic system. The hormones they produce control other organs and body functions (Dorland's Illustrated Medical Dictionary, 1974).

Flight or fight response - Associated with sympathetic nervous system activation, "flight or fight" is a common description of the physical changes in response to real or perceived danger that prepare the body to either escape or combat that danger.

Hand positions - Locations on the body where the hands touch lightly (or hover over) during a Reiki session. The hand positions used in this study were the shoulders, top of head (crown chakra), sides of head, upper chest (heart chakra)

and upper abdomen (solar plexus chakra). This is fewer positions than is found in a typical chair session. The hand positions often correlate with major and minor energy centers, and several glands within the body (Lubeck, The Complete Reiki Handbook, 1997).

Healing crisis - A term from holistic and naturopathic health practices referring to a worsening of the complaint for which help was initially sought. This worsening is temporary, and followed by improvement compared to the original, baseline presentation.

Hypertension - A medical term for chronically elevated blood pressure.

Infrared Surface Thermometer - A device that senses infrared energy to measure the temperature of a surface from a short distance.

Orthostatic - A term for a condition pertaining to or caused by standing erect (Dorland's Illustrated Medical Dictionary, 1974).

Parasympathetic nervous system - One of two branches of the autonomic nervous system. Parasympathetic activation is associated with relaxation. Parasympathetic nerve action slows pulse and breathing, widens the blood vessels increasing blood flow to the extremities, and increases digestive secretions (National Center for Complementary and Alternative Medicine, 2010).

Pituitary gland - A small gland located at the base of the brain that produces important hormones that regulate other endocrine glands (Dorland's Illustrated Medical Dictionary, 1974).

Psychoneuroimmunology - A field of medical study examining the relationship between the immune system, the endocrine system, and the nervous system (Taber's, n.d.).

Reiki - Pronounced "ray-key", this is a system of health and healing developed in Japan by Mikeo Usui. The system is based on "universal life force energy". Light touch at specific points on the body is believed to facilitate the recipient's connection with that ubiquitous life energy to improve wellness in mind, body and spirit. This improved energy connection and internal mind-body balance is then

believed to facilitate innate natural healing. Reiki energy is 'given' by light touch to a fully clothed person who may be either seated or supine. The positions where the hands are placed on the body are believed to correlate with major glands and energy centers of the body. Light touch is not required and the same effect is believed possible over short distances (hovering just above the hand positions). This can be accomplished at basic levels. Similar effect can be accomplished over long distances with intermediate and advanced Reiki training (Lubeck, The Complete Reiki Handbook, 1997).

Reiki session - The application of Reiki energy.

Rule of thirds - concept from mainstream medicine where, in the natural course of an illness, one third will improve, one third will worsen, and one third will remain the same for an extended amount of time.

Stress - Mental or physical conditions that cause the body to behave as if it were under attack (American Diabetes Association, nd). Associated with sympathetic nervous system activation.

Sympathetic nervous system - A division of the autonomic nervous system associated with stress and the "flight of fight" response which mobilizes the body systems for physical action. Sympathetic activity increases pulse and breathing rate, narrows peripheral blood vessels, restricting blood flow.

Traditional (or "full") Reiki session - Reiki sessions as traditionally taught and most commonly practiced where the recipient lies supine during the session. Hand positions encompass major locations along the midline of the body plus minor energy centers in the extremities as well. Hand positions in the front of the body and then the back are done in sequence, rather than front and back simultaneously as is found in a chair session. Traditional sessions often incorporate other healing and relaxation techniques such as music and aromatherapy, although these are not required.

Universal Life Force Energy - another way of expressing the idea of vital force, the essence of life and animate beings as opposed to inanimate objects. Often Western

thought understands it as an extant energy field or as a special energy transmission. In Eastern cultures, this life force is a part of normal body functioning unless it becomes blocked or unbalanced, leading to disease. The idea is similar to Indian prana, and chi in Mandarin, which is also the Chinese word for energy (as in the popular martial art, Tai Chi). The Japanese word for energy is ki*,* thus Rei*ki.*

White Coat Syndrome - when a symptom, such as elevated blood pressure, is repeatedly found in the clinical setting or under the evaluation of health professionals, but is absent at home or non-clinical settings (Pickering, 1988).

Summary

Reiki is a holistic technique with subtlety that makes it challenging to study in a strict scientific manner. Due to the nature of scientific study, Reiki is often applied in an allopathic way, studying the effect of Reiki on specific disease processes or on specific physical markers of stress and relaxation. This study evaluated subjective response to Reiki in a non-clinical environment with limited physical evaluation. A community setting was selected in order to better understand Reiki's effect on perceived stress while minimizing any potential stressors inherent to a clinical setting or physical measurements.

CHAPTER TWO
COMMON GROUND

Literature and Reiki

Many libraries no longer have physical card catalogs, and have lessened their reference sources in favor of Internet access. Google Scholar, PubMed, NCCAM, and ecam.oxfordjournals.com electronic databases were searched using the terms Reiki, perceived stress, psychological stress, and relaxation, in various combinations.

Articles were screened for relevance, accessibility, and content using the following criteria:

- The article is in English.
- The article is in a professional journal, accessible online.
- The subjects were adult humans.
- The article was published in 2005 or after.
- The Reiki was administered hands-on by another person .
- Perceived (psychological) stress was part of the study.
- Stress was measured before and after Reiki.
- The study included a control group.

Self-administered Reiki studies were excluded. Some Reiki teachers acknowledge that a newly initiated individual develops Reiki skill at a unique pace, sometimes varying from 7 to 21 days (Mellon, 1996). Also, there are widely varying opinions about the amount of time one should wait between the different levels of Reiki training. It is not clear what effect, if any, the level of training and amount of experience may have on the self-administered Reiki used in some studies. If each

person’s Reiki skill progresses at a unique pace, then it becomes impractical to fairly compare the participant’s results within such a study.

Light touch, therapeutic touch, Jorei, religious healing practices, and various other biofield techniques were excluded as their application methods, assumptions, and theoretical underpinnings differ somewhat from Reiki. Distance Reiki was excluded due to the abundance of potential confounding factors, especially the participant's environment. Studies where stress was one of multiple processes under evaluation were allowed, provided the stress component had its own unique data (by either questionnaire or physical measurement) before and after Reiki was applied.

140 PubMed and 60 Google Scholar search items were screened. Of these, six articles met all of the above criteria. There were substantial differences in methods and measurements among all of them. Three measured subjective stress through single group descriptive interview and report. Three measured subjective stress through quantified rating scales of various types including 1 to 10 subjective rating.

One study focused solely on Reiki’s effect on stress (Richeson, 2010). Other studies gathered information on stress levels, but focused on physical responses to Reiki such as medication use in fibromyalgia, salivary cortisol levels, heart rate variability in coronary artery disease (CAD) and so forth.

The conclusions of the studies were as mixed as the methods employed. Asafi et al (2008) showed no improvement in pain, medication use, or physician visits in a fibromyalgia population. However, all six studies reported either reduction in subjective stress, or acknowledged anecdotal evidence of reduced stress to the extent that all judged Reiki to warrant further study.

Single group descriptive studies focused more directly on stress and mood than did

the controlled studies. It is noted that these studies strongly support the hypothesis that Reiki reduces perceived stress.

Older studies, excluded from the first screening on the basis of publication date alone, were revisited. Three additional studies were found that studied only Reiki and included measurements of subjective stress. One was primarily focused on objective physical measurements, but concurred there was more relaxation for the Reiki group than the control group (Wardell, 2001). Another was nearly unique in its focus on longer term benefits of energy healing (Shore, 2004). The third study showed no functional benefits after ischemic stroke, but allows for limited mood improvements (Shiflett, 2002). The remaining older search items were excluded as they were animal studies, pediatric studies, or evaluated a mixture of biofield disciplines.

Other literature reviews confirm the poverty of studies about Reiki as a stress management modality. Lee et al (2008) canvassed 23 databases from their respective beginnings through January 2008. The reviewers found 205 potentially relevant studies, and drew the conclusion that “the evidence is insufficient to suggest that reiki is an effective treatment for any condition” (Lee, 2008. p.947). The objection to this sweeping condemnation is that the studies under review were widely disparate in their content. The studies focused on a variety of conditions such as pain, anxiety, hopelessness, depression, physical functioning, and specific diseases, to which the researchers concede that “the trial data for any one condition is scarce” (Lee, 2008. p.947). A slightly earlier review found only 16 peer-reviewed articles regarding Reiki and its clinical use dated between 1980 and 2006 (Vitale, 2007).

Despite the diversity of quality and methodology, studies in this and other reviews show two consistent elements. First there no notable adverse effects from Reiki

use. Second, mood or perceived stress improved in varying degrees even when physical measures showed no response to the Reiki intervention. Studies that focused on Reiki's effect primarily through objective measures tended to describe the mood/stress change as nominal or modest. Descriptive, single group, non-controlled studies seemed to have a much more robust affirmation of the relaxation effect.

Stress and Disease: A Cursory Look at Recent Literature

PubMed was searched with the following terms alone and in combination: stress, disease, benefits, relaxation, stress management, and psychological stress.

Articles were screened using the following criteria:

- Article was in English
- Article appeared in a professional journal and is online.
- Article focused on psychological stress and its relationship to a specific disease.
- Informational web pages from reputable organizations were allowed in addition to published studies.
- Animal studies were excluded.

The relationship between perceived stress and physical disease is well established within mainstream health care. As early as 1955, an article appeared in The Laryngoscope entitled "Stress and Disease" (Selye, 1955). In the 1960s Thomas Holmes and Richard Rahe developed a psychological scale relating stressful life changes to the chance of developing illness. One source cites the risk of disease to be as much as 80% among those with the highest Holmes-Rahe stress scores (University of Florida, nd).

Current thinking maintains this relationship between stress and physical illness. Both the American Heart Association (AHA) and the American Diabetes Association (ADA) acknowledge the role stress can play in these two common diseases. In diabetes, stress appears to play a greater role in type 2 diabetes than in type 1, although stress has been associated with both. The ADA information suggests this may be due to two factors: stress reduces insulin production (insulin production is already absent in type 1), and there may be an increased sensitivity to stress hormones in type 2 diabetic individuals(American Diabetes Association, n.d.). MedlinePlus, in an Internet posting entitled *Stress*, explicitly states "long-term stress can increase the risk of diseases like depression, heart disease and a variety of other problems." (National Library of Medicine, nd) Ho et al (2010) find the relationship between acute and chronic psychological stress and the onset and progression of CAD to be consistent through time and quite convincing.

The relationship between stress and both diabetes and high blood pressure has tacit acknowledgement on a biochemical level. Adrenocorticotropic hormone (ACTH) and corticotropin releasing factor (CRF) are pituitary hormones that play a part in regulating the adrenal gland, which in turn is involved with regulating a variety of body functions including blood pressure and blood sugar levels. Harrison's Principles of Internal Medicine, a respected medical textbook, states " Three major factors control CRF and ACTH release: plasma free cortisol concentration, stress, and the sleep-wake cycle" (Petersdorf, 1983, p.636). This would correlate with a study by Bowden et al (2010) that measured saliva cortisol levels before and after Reiki. While the blinding procedures in that study raise the question of confounding factors through the use of distance Reiki and mixed relaxation techniques, the salivary cortisols were reduced in a manner consistent with relaxation in the Reiki group greater than in the control group. Stress affects ACTH, which regulates adrenal function and, in turn, the physiologic functions under adrenal control. This hormone-related chain of events gives a plausible

pathway by which Reiki can augment physical health, but it is predicated upon Reiki's efficacy in reducing stress.

There are an abundance of studies showing improvement in specific disease processes with conventional stress management strategies. Glycosolated hemoglobin showed improved glucose control in persons with both type 1(Attari, 2006) and type 2 (Summit, 2002) diabetes in conjunction with stress reduction. Asthma has shown improved control with stress reduction (Sun, 2010). Montero et al (2009) suggests a similar relationship between stress and allergic processes. These are just a few recent examples.

Contemporary Theoretical Perspectives

Contemporary Reiki theory is changing and expanding. Over the past 10 to 15 years greater cultural understanding about Reiki and its origins has emerged in the West. There are new English translations of Japanese manuscripts, expanded understanding of traditional training, as well as newly evolving, specialized applications of the technique (Reiki for First Aid, Lubeck, 1995). These numerous developments are reported in the various works of Frank Arjava Petter and Walter Lubeck listed in the references for this document.

Another emerging dynamic is a peripheral awareness of modern medical information that simply was not available to early Reiki Masters. Granted, medical information is neither sought nor applied in actual Reiki practice due to the fundamental premise that the body directs the energy to where it is most needed, no matter how we might intellectually label the dysfunction. As in any holistic discipline, Reiki holds that mental, emotional and spiritual needs are as important to quality of life as physical healing. A medical diagnosis is unnecessary for the Reiki practitioner to be able to offer care and comfort. Greater mutual understanding

between mainstream medicine and the Reiki community appears to be underway. One example is the now-common understanding that the major hand positions used in Reiki sessions correlate with several of the major hormone producing glands (Lubeck, The Complete Reiki Handbook, 1997). This includes positions near the pituitary, where ACTH and CRF are produced. The thyroid gland is near the "throat chakra" hand position. Interestingly, severe thyroid dysfunction (thyrotoxicosis) can produce anxiety (Petersdorf, 1983) furthering the idea of a bi-directional relationship between stress and disease. The "heart chakra" hand position coincides with the thymus gland, which plays an important role in immunity and is specifically involved with the formation of important disease fighting T-helper cells (Petersdorf, 1983). The "solar plexus" hand position correlates with the pancreas, where insulin is produced. Insulin production can be affected by stress as previously discussed.

Relationship of Current Literature to Present Study

The current literature indicates a need for Reiki study based on the small amount written so far. Stress and disease have been found to be strongly interrelated by the new field of psychoneuroimmunology (Taber's, n.d.). The literature confirms that stress reduction is beneficial. The literature also warrants that stress reduction is possible with Reiki. This study further bridges those two concepts by clarifying Reiki's stress reducing ability and adding to the overall body of scientific knowledge about Reiki.

Summary

While Reiki studies are few and varied, the role of stress in physical illness is well established within mainstream medicine. There continues to be uncertainty regarding the exact pathway by which stress contributes to disease, much the same

as the exact mechanism of Reiki's effect remains unknown. While few believe stress directly causes disease, it is widely accepted that stress can contribute to unhealthy lifestyle choices, may increase susceptibility to disease, worsen the course of an illness, or act as a trigger for sudden adverse disease events. The relationship between stress and disease is accepted to the extent that psychoneuroimmunology has emerged as an extant field of research. Both Reiki theory and conventional medical studies support the plausibility of Reiki as a means to decrease stress with all the attendant physical benefits thereof.

CHAPTER THREE
SIMPLICITY AS A WAY TO CLARITY

Introduction

This study was rooted in a philosophy of respect for the individual's subjective experience of stress and relaxation. Each participant's rating of their perceived stress was accepted as valid and accurate. Through the use of a mixed experimental research design, the correlation between subjective perception of stress and a single Reiki chair-type session in a non-medical setting was observed.

Participants

Study participants were recruited through classified advertising and on-site signs. Persons below the age of 18, above the age of 65, pregnant women, those with a history of fainting, those unable to give informed consent, and those too ill to sit upright for 30 minutes were excluded. Participants were enrolled between January 17, 2011 and February 10, 2011. Participants were enrolled and immediately began the study process on a first come, first served basis. Group assignment alternated, with the first participant being assigned to the experimental Reiki group, the second to the control group and so forth. Participants completed the study process one at a time, in the order in which they contacted the study.

Methodology

During the enrollment process, participants were informed of the following:

- This is a volunteer study and no compensation is given.
- This is a study concerned with their feelings, and an honest answers are most

helpful.

- A brief definition of Reiki and a description of the chair session.
- The chance of feeling dizzy upon arising or having an increase in stress feelings is extremely remote, but to report any discomfort or problems to the researcher immediately.

As the final step in the enrollment process, the participant reviewed and signed the consent form that was approved by Clayton College of Natural Health Internal Review Board in December 2010.

The study itself was conducted in two quiet community locations with little noise or distraction. One location was the reference room of a public library, the other was a lounge area for reading and refreshments within a small food market.

After enrollment, the participants:

- Completed the initial interview.
- Assigned a numerical rating to their perceived stress levels.
- Had their palm surface temperatures measured.
- If they were in the Reiki group, they received a ten minute chair session.
- If they were in the control group, they waited, seated comfortably, for ten minutes.
- Immediately afterward, stress ratings were again assessed and the palm temperature was measured a second time.

After completing the above study process, control group participants could elect to receive a ten minute Reiki session identical to the one given to the experimental group. The chair sessions in this study were structured to equal the ten minute time allotted to the control group. To meet this time requirement, two hand

positions were omitted from a typical chair session. All control participants elected to receive Reiki. After completing the above process, and after the optional Reiki for the control group, all participants were asked to give comments about their experience. These comments were prompted by a single, neutral question: “What do you think?”

Data Collection

A data sheet was created for each participant that held no personally identifiable information. Each data sheet was completed by the researcher to ensure consistency in the documentation. An example of the data sheet is found in the appendix. Each participant was provided with the researcher’s business card to allow for later communication if needed. The consent forms are stored separately from the data sheets to ensure maximum privacy. The only instrumentation involved with the study was a USFDA approved Thermofocus no-touch infrared thermometer, which was operated by the researcher only.

Data Analysis and Assumptions

The data was compiled and analyzed to determine:

- Mean baseline stress for the entire group, Reiki vs control. This was calculated for both current and overall stress.
- Mean ending stress for the entire group, Reiki vs control. This was calculated for both current and overall stress.
- Number of participants and percentage of each group that demonstrated an increase, a decrease, or no change in their current stress ratings.
- The mean change among those who demonstrated an increase or a decrease in their current stress in Reiki vs control groups.

- Number of participants and percentage of each group that experiences an increase, a decrease or no change in the overall stress ratings.
- Mean change among those who experienced an increase or a decrease in overall stress in Reiki vs control group.
- Number of participants and percentage of each group that shows increased , decreased and no change in palm temperature in Reiki vs control groups.
- The mean change for those experiencing an increase or a decrease in palm surface temperature for Reiki vs control groups.
- Mean stress changes and mean palm temperature changes in those with prior Reiki sessions vs those with no prior Reiki exposure.

Although some may find it debatable, the “rule of thirds” is an ubiquitous concept in mainstream medicine, particularly within the field of psychiatry. It holds that, if untreated, the natural course of illness will be that one third will get better, one third will get worse, and one third will remain unchanged for an extended amount of time. Using this principle as a guideline, if greater than 30% of the Reiki group reported stress reduction, then the hypothesis could plausibly be supported. Greater than 50% of the Reiki group reporting stress reduction would be much more significant. The same would be true of increasing palm temperatures.

The definitive evaluation of the data would, of course, lie in comparisons between the Reiki group and the control group. The hypothesis that Reiki decreases perceived stress would be supported if:

- The Reiki group shows a greater percentage of participants reporting reduced stress of either current or retrospective type compared to the control group.
- Among those participants experiencing decreased stress of either type, the mean reduction is greater for the Reiki group than for the control group.
- The Reiki group shows a greater percentage of participants with increased palm

surface temperature.
- Among those participants demonstrating warming palm temperature, the mean increase is greater for the Reiki group than for the control group.

The results for those with past Reiki sessions was compared to those who have had no prior exposure to evaluate if the participants' attitudes toward Reiki are a possible confounding factor. If a positive opinion about Reiki predisposes participants toward stress reduction, then those participants would show relaxation in greater numbers and to a greater extent than their counterparts with no prior Reiki exposure. A potential confounding factor in the study would be the possibility that those with bias against Reiki or past negative experiences with Reiki will self-select away from enrollment, skewing the results to the positive. In an unforced, volunteer study, there is no practical means to accommodate for this circumstance.

This study accepted the following assumptions:

- Ten point rating scale survey questions are an accurate, valid measure of the participant's perceived stress.
- Reiki is immediately effective.
- If these modified chair sessions are effective, then traditional supine session or repeated sessions over time are equally effective, probably more so.
- Palm temperatures increase in the presence of increased relaxation and decreased stress.

Summary

If Reiki proves effective in reducing stress by these criteria, then further study is warranted to address the limitations and confounding factors found here. Stress

reduction is a logical cornerstone for Reiki studies because stress reduction and the mind-body connection has become common ground between holistic and allopathic healing systems. Understanding Reiki and stress reduction is a pathway to understanding Reiki's potential for physical healing in addition to its relaxation benefits. This simple comparison of before and after measurements in a Reiki experimental group versus a waiting-only control group is but one small part of the overall understanding of Reiki. Through simplicity, this study strives to add clarity.

CHAPTER FOUR
REIKI AND RELAXATION

Introduction

In terms of participation, the study was successful. 100% of those who approached the study qualified for enrollment. 100% of those who enrolled completed the entire study process. Data was collected as described in chapter three without incident. No adverse events whatsoever occurred throughout the study. Reiki and control group compositions are described in Table 1. Stress ratings are described in Table 2 and Table 3 in terms of points on the one to ten Likert-type rating scale. Both tables compare the Reiki experimental group to the control group. Table 4 demonstrates changes in palm temperature, again comparing the Reiki group to the control group. Table 5 compared key data between participants with a history of prior Reiki exposure to participants with no prior exposure to Reiki. Calculations involving rating scale points and palm temperatures are rounded to the nearest tenth of a point or tenth of a degree. The infrared thermometer used in the study was calibrated to degrees Fahrenheit (ºF) by the manufacturer, so all palm temperatures were measured in Fahrenheit and later converted to Celsius (C).

Analysis of Data

The small number of total participants limits the conclusions that can be drawn from all data sets. However, the differences between Reiki and control groups were notable even in this small study. Both the percentage of participants demonstrating reduced stress and the mean change in stress among them are supportive of the hypothesis with regard to current stress. With regard to retrospective overall stress in the prior 6 months, the hypothesis was negated as there was little difference between the Reiki group and the control group. Palm temperatures however,

showed a dramatic difference between Reiki and control, in support of the hypothesis. All Reiki participants demonstrated palm warming consistent with relaxation, while a majority of the control group showed palm cooling, an unexpected result. Comparisons between participants with past Reiki and those with no prior Reiki experience show little difference between those two groups, inferring that attitudes and expectations regarding Reiki have little influence over the stress ratings in this study.

In the Reiki group, 7 out of 8 participants (87.5%) reported a one point or greater reduction in current stress. This is more than a statistically random 50 % (decrease vs no decrease) and significantly greater than the rule of thirds would predict. Among the participants who demonstrated decreased stress, the mean decrease for the Reiki group was twice that found in the control group (two points and one point respectively). If these percentages and means continued through a larger sample size, then the results would be conclusive in favor of the hypothesis. In the control group, 2 of 7 participants (28.6%) reported a one point or more decrease in current stress, which is more consistent with the premise in the rule of thirds. There was remarkably little effect in either group on retrospective perception of overall stress in the preceding six months.

Palm temperature measurements showed a pattern in some ways similar to the current stress measurements. 100% of the Reiki experimental group demonstrated palm warming, while only 2 of the 7 control group participants (28.6%) demonstrated palm warming. The majority of the control group showed palm cooling. The two individuals from the control group that did have warming palms, showed a larger increase than those in the Reiki group. The cause for this is unclear, and it may be an anomaly that would not continue through a larger sample size. The overwhelming difference in response pattern between the two groups as a whole, however, supports the hypothesis.

The study data supports the assumed correlation between warming palm temperatures and relaxation. Among all participants, 40% showed both current stress reduction and palm warming, with 13 % (all from the control group) showing stress reduction without palm warming. The remaining participants showed either a nominal palm warming (generally less than one degree Fahrenheit) without stress reduction, or showed neither response. When the Reiki experimental group is evaluated separately, the correlation is 100 %. All members of the Reiki group that experienced reduced current stress also demonstrated warming palm temperatures. Interestingly, the one Reiki group participant who showed no change in current stress still demonstrated palm warming. Although no conclusions can be drawn from a single example, this raises the tantalizing possibility of physical effect from Reiki independent of stress perception.

The outcome of the study was different when comparing participants with prior Reiki (any type of session, any number of exposures) to participants with no prior Reiki use at all. Compared on this basis, there was little difference in the number of participants that demonstrated stress reduction, or the mean reduction among them. Participants with no Reiki exposure showed greater palm warming than the participants who had past positive experiences with Reiki. Both findings suggest that neither prior Reiki exposure, nor positive expectations predispose individuals toward relaxation.

Despite the random assignment to groups (alternating in the order in which they initially contacted the study) the Reiki group demonstrated a higher mean baseline stress rating than the control group. As previously noted, the Reiki group participants with decreasing stress ratings demonstrated a larger mean decrease. Both the Reiki and the control groups ended the study with similar group-wide mean stress ratings (4.6 and 4.1 respectively). Bowden et al (2010) noted a similar

pattern. The control group participants who experienced decreased stress also elected to receive the optional Reiki session. These participants described continued relaxation beyond their control group end-point. Two participants volunteered a numeric rating of their stress following the optional Reiki, as noted below. If this qualitative information is taken into consideration, then Reiki resulted in roughly equivalent amounts relaxation for all participants who experienced stress reduction, irrespective of their baseline stress ratings.

Results and Findings

Table 1

Group Composition

Total study participants n = 15

	Reiki	Control
Participants	8	7
Male	2	2
Female	6	5
Prior Reiki		
yes	4	3
no	4	4
Mean age (in years)	44.7	44.8

The two groups were well matched with regard to age, gender and past Reiki experience.

Table 2

Current Stress

	Reiki (n = 8)	Control (n = 7)
	Participants	
Increasing stress	0	0
Decreasing stress	7	2
No change	1	5
	Stress Rating Scale Points	
Group mean baseline	6.3	4.4
Group mean after	4.6	4.1
Mean increase	0.0	0.0
Mean decrease	2.0 (n = 7)	1.0 (n = 2)
	Greatest Individual Change	
Increase	0.0	0.0
Decrease	3.0	1.0

A larger percentage of the Reiki group experienced decreased stress compared to the control group, which supports the hypothesis. Of those participants experiencing a decrease, the mean decrease in stress was larger for the Reiki group than the control group, also supporting the hypothesis. The stress reducing effect is clearly immediate, supporting a key assumption of the study.

Table 3

Retrospective Overall Stress (Past 6 months)

	Reiki (n = 8)	Control (n = 7)
	Participants	
Increased stress	0	0
Decreased stress	2	1
No change	6	6
	Stress Rating Scale Points	
Group mean baseline	7.2	6.5
Group mean after	6.3	6.4
Mean increase	0.0	0.0
Mean decrease	3.5 (n =2)	1.0 (n =1)
	Greatest Individual Change	
Increase stress	--	--
Decrease stress	4.0	1.0

With regard to retrospective overall stress, the groups were essentially equivalent. The majority of both groups (75% for Reiki, 85% for control) showed no change in overall stress ratings. The 25% and 15% reductions in retrospective overall stress are less than would be predicted by the rule of thirds for both groups. Even at this low rate, the Reiki group still responded in slightly greater numbers than the control. One individual in the Reiki group who reported a three point drop in retrospective stress also reported a three point drop in their current stress. This finding may speak more to this individual's sensitivity rather than reflecting a true Reiki effect on retrospective stress. The only other decrease was also large, 4

points, with a lesser decrease in current stress. Neither Reiki participant with decreased retrospective stress had any prior Reiki exposure, so expectations or attitudes can not account for these changes. Larger sample sizes would be necessary to come to a definitive conclusion. Contrary to the data regarding current stress, Reiki does not appear to decrease overall retrospective stress in this small sample.

Table 4

Palm Surface Temperatures

	Reiki (n = 8)	Control (n =7)
	Participants	
Increasing temperature	8	2
Decreasing temperature	0	4
No change	0	1
	Mean Values	
Group mean baseline	89.3º F (32.0º C)	89.8º F (32.1º C)
Group mean after	91.6º F (33.2º C)	90.3º F (32.4º C)
Mean increase	2.4º F (1.3ºC) (n = 8)	2.8º F (1.8ºC) (n = 2)
Mean decrease	0.0ºF	0.7º F (0.3ºC) (n = 4)
	Greatest Individual Change	
Increase	4.8º F (2.7ºC)	4.6ºF (2.6ºC)
Decrease	0.0º F	0.9º F (0.7ºC)

Both groups began with nearly identical baseline palm temperatures, 89.3ºF for the Reiki group and 89.8ºF in the control group. 100% of the Reiki group demonstrated increasing palm temperatures, while only 2 participants (28.6%) of the control group showed palm warming. The control group as a whole demonstrated an unexpected pattern. Contrary to the 100% warming among the Reiki participants, a majority of the control group, 4 out of 7 or 57%, showed cooling palm temperatures after the waiting period. This result was surprising as the study was conducted in a room with a reasonably comfortable (69º to 70º F) ambient temperature as measured by the same infrared thermometer used in the study. Reiki and control

participants alternated, going through the study process in the same room, in the same chair, within minutes of each other. The difference in palm temperature response can not be attributed to location, changes in ambient temperature or other environmental factors. Despite the 2.8ºF mean temperature change between the two control participants with warming palms, which is slightly greater than the mean for the entire Reiki group, the total group pattern supports the hypothesis.

Table 5

Participants With Prior Reiki Exposure

	Prior Reiki (n = 7)	No Reiki (n =8)
Participant Opinion of Past Reiki Experience		
Positive	6	--
Negative	0	--
Neutral	1	--
Current Stress		
Participants Increasing Stress	0	0
Participants Decreasing Stress	4	5
Participants With No Change	3	3
Mean Increase	0.0	0.0
Mean Decrease	1.5 (n = 4)	2.0 (n = 5)
Retrospective Overall Stress (Past Six Months)		
Participants Increasing Stress	0	0
Participants Decreasing Stress	2	1
Participants With No Change	5	7
Mean Increase	0	0
Mean Decrease	2.5 (n = 2)	3.0 (n = 1)

Palm Surface Temperatures

Increased temperature	5	5
Decreased temperature	1	3
No Change	1	0
Mean Increase	2.6º F (1.7ºC)	1.8º F (1.1ºC)
Mean Decrease	0.3ºF (0.2ºC)	0.8ºF (0.5ºC)
Participants From Reiki Group	4	4
Participants From Control Group	3	4

When the data was regrouped according to past Reiki experience, differences between the groups greatly diminished. 85% of participants with past Reiki exposure described the experience as positive. Only one of the prior Reiki group described the experience as neutral and there were no negative perceptions. In the group with prior Reiki, only 57% reported decreased current stress, while 63% of the group with no prior Reiki reported decreased stress. If Reiki's effect was the result of beliefs or expectations alone, the converse would be expected. Of those reporting stress reduction, the mean decrease was greater for the no Reiki group than for the group that had prior positive Reiki experience. This is also contrary to the pattern that would be expected from a purely placebo effect. These results support the fundamental Reiki premise that beliefs and expectations are not a factor in Reiki's efficacy. This comparison also found little change in overall retrospective stress ratings. Five participants from each group demonstrated increasing palm surface temperatures. Participants with prior Reiki demonstrated a larger increase in palm temperatures than those with no prior exposure. It is unclear if this difference is related to expectations or a result of a cumulative physical effect unrelated to psychological perception. It is worth noting that the single individual with a neutral prior experience demonstrated both reduced stress (two point decrease) and strong palm warming, gaining 4.5ºF. If this pattern

repeated in a larger sample, it would further support the premise that expectations do not influence Reiki's efficacy insofar that a non-positive experience did not appear to reduce the stress reduction or palm warming effects. Larger sample size would, of course, be needed to definitively evaluate the connection between physical response and prior Reiki experience.

All participants elected to offer final comments. All participants from the control group elected to receive the optional Reiki session following the comparative portion of the study process. One participant stated there was no change following their Reiki session. Otherwise, no negative comments were given and no complaints were offered. To ensure consistency, comments were prompted only by the neutral question “What do you think?” Their comments were not quantified, but are as follows:

From the control group, with later Reiki:

- “My hands feel warmer now. I feel less angry with my family”
- “I’m a little more relaxed.”
- "I felt the stress leave. I was distracted for a moment, but it passed quickly”
- “...down 2 points...It’s very relaxing. It helped” (More details about this comment are found in the paragraph below.)
- “I feel no different.”
- “I’m a little more relaxed.”
- “It was good, it’s down to a 3 by now” (This individual gave a baseline rating of 5 for current stress and 8 for overall stress, reporting no change after the waiting time)
- “It was good, better than just sitting”

From the Reiki experimental group:

- “It was good.”
- “I think I could take a nap”
- “It was comforting.”
- “It felt like something was being pulled out. I felt a tension headache coming on earlier, but not so much now.”
- “You have such warm hands. It was very relaxing.”
- “It was OK” (said with a surprised tone of voice)
- “Very relaxing. I feel refreshed, not like I want to go to sleep”
- “ I could feel it, it was nice”
- “It felt as though something lifted out. I didn’t think it was possible, but I do feel more relaxed.”

One participant offered an interesting observation comparing the two experiences. A 32 year old male with no prior Reiki exposure stated that “While I was waiting, I kept thinking about everything that stresses me. Now I feel like it went down 2 points. It’s very relaxing. It helped”. The other participants' comments were less detailed. All except one indicated some degree of relaxation or were positive toward Reiki in some way. The strength of the comments did not correlate to the change in the quantified rating scale. One participant with a 3 point decrease in current stress blandly stated “I think I could take a nap”, while another, more emphatic participant had only a 1 point decrease. This coincides with the pattern seen in the literature review where single group descriptive studies vigorously supported Reiki’s relaxation effect and quantified, objective evidence was less definitive. In this study as well, all participants except one gave comments that were positive to some degree, while the quantified data showed more varied results. During the comments, all participants’ non-verbal appearance gave the impression of greater relaxation than would be expected from only one or two point changes on the rating scale. In all participants, facial expression, cadence of speech, tone of voice, and posture (lower shoulders, and in one case, an unclenched jaw) gave the

impression of increasing relaxation after the Reiki session regardless of scale ratings or original group assignment.

Summary

The two study groups were well matched, with regard to age, gender and prior Reiki exposure. Current stress decreased and palm temperature increased for more participants in the Reiki group greater than in the control group. Of participants demonstrating decreased current stress, the mean decrease was greater for the Reiki group than the for the control group. The entire Reiki group showed warming palm temperatures while the control group had mixed results. The majority of participants in both groups showed no change in retrospective overall stress over the past 6 months. The decrease in retrospective stress was larger in the Reiki group than the control group among those who experienced any decrease at all. When participants were compared on the basis of prior Reiki vs no prior Reiki, the groups were largely similar, suggesting that experience-based positive opinions and expectations about Reiki do not predispose those participants toward relaxation. Similarly, the one person with a less than positive opinion of their past Reiki experience was not influenced away from stress reduction or palm warming. The same number of participants in both the Reiki and no Reiki groups demonstrated warming palm temperature, although the mean increase was larger for the past Reiki group. As a whole, past Reiki seemed to have little influence on perceived stress ratings in this study, but seemed to minimally influence toward greater palm warming. All participants in the control group elected to receive Reiki after the controlled portion of the study was complete and offer comments afterward. 14 of 15 total study participants (93%) gave comments that were positive toward Reiki and described varying degrees of relaxation and other improved emotions.

CHAPTER FIVE
A STEP ALONG THE PATH

Introduction

This study is one more step along a path of understanding Reiki, and discovering the best means to study it scientifically. The strength of this study is its simplicity. The study compared the most basic, minimal Reiki session to an equal amount of time doing nothing more than sitting quietly. It evaluated both current stress and retrospective stress over 6 months in an attempt to more precisely understand the parameters of Reiki's effect on perceived stress. The study took place in a non-medical, community environment with no elaborate physical examinations. There were no hospitals, clinics, heart monitors, saliva swabs, psychological surveys or even blood pressure measurements. This study investigated the simple question of whether or not Reiki can reduce perceived stress by asking participants to rate their stress feelings currently, and looking back over the past 6 months. The ratings were assigned immediately before and immediately after either a Reiki chair session or a quiet waiting period. No music, aromatherapy fragrance, or other potentially confounding relaxation elements were in the study environment. Through a basic respect for each participants feelings and self-assessment, this study revealed a small but concrete affirmation of Reiki's effectiveness in reducing current perceived stress.

Conclusions and Implications of the Findings

Within the context, constraints and typical caveats of any study with a very small sample size, the results here are fairly straightforward. Consistent with the stated hypothesis, Reiki reduces current perceived stress. The results also affirm the key assumption that Reiki is immediately effective in doing so. Reiki did not, however,

reduce retrospective stress. If Reiki's benefits are nothing more than the result of placebo effect, preconceived opinions, or cultural milieu, then the perception of past stress would, it seems, be open to some degree of modification. That did not prove to be the case. The perception of past stress remained intact in the presence of Reiki for the majority of the experimental group, even in cases where current stress was reduced. It would seem that Reiki has a more definitive effect than would be expected from a trick of mind alone. This pattern would also seem to support the Reiki premise that the energy is directed to the area of greatest need by the innate, subconscious body-intelligence of the person receiving the session. As the adage says, what is done is done. Past events can not be altered, yet current body function and current emotional state can still be modified. The current stress is the most immediate need and therefor is the most immediate beneficiary of even a brief Reiki session.

Mean palm temperature increased to a greater extent in participants with prior Reiki than in those with no prior Reiki, despite the near-identical stress related data between the two groupings. This begs the question of cause. If the greater palm temperature increase is not a by-product of reduced stress feelings, then one plausible explanation may be that Reiki has direct (and possibly cumulative) physical effect independent of stress modification. The suggestion of direct physical effect is strengthened by the unexpected palm cooling in the control group that was completely absent from the Reiki group. Less than 100% of the Reiki experimental group experienced stress reductions, yet a full 100% of the Reiki group exhibited warming palm temperatures. Stress reduction is a well understood pathway by which Reiki may improve physical health. However, there are nebulous suggestions of another, less understood mechanism of action as well.

This study is yet another instance where Reiki has proven supremely safe to use. There were no adverse effects noted during the study. No participants

reported any physical or other complaints. All participants were given contact information for the researcher in the event of any Reiki-related questions or complaints. No complaints were reported to the researcher as of March 10, 2011, one month after the last participant was seen.

Safety, efficacy and immediacy are the key implications of this particular data set. Safe and immediately effective stress management can be applied to almost any situation where stress is experienced. The modified chair session in this study only took ten minutes to complete. The effect was immediate in all participants who experience stress reduction or palm warming. Reiki can provide an unobtrusive way to manage stress feelings even in busy, fast-paced situations such as medical clinics, hospitals, schools and the workplace. Reiki is certainly a safe and effective strategy to use in the home and community to alleviate stress, promote relaxation, and by so doing, promote health and quality of life.

Recommendations for Further Research

More than suggesting that Reiki is safe, immediate, and effective current stress management, this study also demonstrates that an austere, non-technical, easily replicable study format following basic scientific method can give insight into Reiki. Given Reiki's subtle nature, over-elegant, technical or complex studies may prove counterproductive in the end. Maintaining focus and simplicity is the primary recommendation for any future research that stems from this study. There is more that can be learned using this basic format alone. For Example:

- Conduct this study for a longer time and/or with a larger research staff to evaluate if these specific findings continue through a larger sample size.
- Conduct this study in variety of locations to determine what effect, if any, the environs have on Reiki's efficacy.

- Conduct this study in a clinical medical setting comparing non-invasive palm temperature readings to more technical physical objective measures such as heart monitoring or salivary cortisols (as used in prior studies) to determine what role, if any, examination anxiety plays in the study of Reiki and relaxation.

Before moving on to evaluate the presence and effectiveness of direct physical benefit from Reiki, other stress-based comparisons could be made. Potential research questions could include:

- Is overall prior stress perception ameliorated by a traditional supine session or a series of Reiki sessions over time?
- Is there a difference in the amount or quality of stress reduction in a chair session vs a traditional supine Reiki session?
- How long does the subjective relief of stress continue after a single Reiki session? After a series of sessions?
- How well does non-invasive physical measurements, such as palm surface temperatures or blood pressure, correlate to stress ratings in large sample sizes?

Finally, diseases processes most associated with psychological stress would be a logical place to begin studying the physical effects of Reiki with renewed simplicity and clarity:

- What effect does a single Reiki session have on blood pressure in a clinical setting? A community setting? What effect does a series of sessions have on blood pressure?
- In diabetics, what effect does Reiki have on home-monitored blood glucose? On glycosolated hemoglobin? Is there a difference between a single session and a series of sessions? Is there a difference in response between Type 1 and Type 2

diabetics?

- If a direct physical effect is found, how long does it last after a single Reiki session? After a series of sessions?

Scientific study with regard to other diseases where stress is less clearly a factor and study based on purely allopathic diagnosis would require cooperative study with physicians or other experts in modern scientific medicine. While beneficial, and arguably necessary, such research suggestions fall outside the scope of a Natural Health dissertation.

Summary

Peer reviewed scientific studies about Reiki have been taking place since the 1990s. Even so, the total number of past studies are small, and widely varied in their quality and methodology. There are common threads among them that justify the continued study of Reiki, most notably a high degree of safety and effective stress reduction. These two elements were evident in this study as well. Through the course of the study, no adverse effects were reported or observed. Participant comments about their Reiki experience within this study were, at worst, neutral. The majority of participant comments were clearly positive. A majority of all participants demonstrated changes in body posture, facial expression and tone of voice that were consistent with greater relaxation. A larger percentage of the Reiki experimental group experienced reduced current stress as compared to the control group. Of those participants reporting a decrease in their stress rating scores, the mean decrease was greater for the Reiki group than for the control group. All of these findings support the hypothesis that Reiki is indeed effective for reducing perceived stress, in the present moment particularly. Stress was rated immediately after the Reiki session, indicating that the Reiki benefit was immediate. The majority of both groups reported no change in retrospective stress levels looking back over

the prior six months. 100% of the experimental group demonstrated warming palm surface temperatures after the Reiki intervention. The control group showed a majority with the opposite: palm temperatures cooled after the waiting time in spite of ambient temperatures of 69ºF to 70ºF at the study locations. The control participants alternated with Reiki participants, completing the waiting time in the same room, in the same chair, on the same day, and within minutes of Reiki participants. Reiki was the only discernable variable between the groups with regard to palm temperature. When compared on the basis of past Reiki exposure vs no such experience, the two groups were very similar overall. Both the prior Reiki and the no Reiki groups had similar amounts of stress reduction and palm warming. All but one of the prior Reiki group described their past experience as positive. The one remaining participant had a neutral experience. This suggests that positive attitudes toward Reiki does not pre-dispose participants to report beneficial outcomes. Attitudes toward Reiki do not appear to be a confounding factor in this study.

Further Reiki study is certainly warranted. Despite the small sample size, this data set makes a compelling argument in favor of Reiki as a safe, effective and immediate means to reduce current psychological stress. Reiki brings relaxation.

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APPENDIX

REIKI AND RELAXATION:
A PRACTICAL LOOK AT REIKI AND STRESS REDUCTION IN A NON-MEDICAL SETTING
By Ronda Snow

DATA SHEET

Age_____

Male / Female If F, are you pregnant YES / NO

Have you ever fainted? YES / NO

Prior Reiki YES / NO

If yes, was the experience: positive negative neutral

Stress now:

Stress over 6 mos:

Palm Temp:

REIKI **WAIT**

Setting:

Stress now:

Stress over 6 mos:

Palm Temp:

(optional Reiki session for waiting group) Yes / No

COMMENTS: (on reverse if needed)

now change +/-
6mos change +/-
palm change +/-