A Heuristic Study of Poetry as a Non-Invasive Healing Modality

Incorporating Gas Discharge Visualization of the Human Subtle Energy System

A Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Integral Health at the California Institute for Human Science

Submitted by
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Dedication

For my father

#### Acknowledgments

There are not enough words to fully express the gratitude that I feel for the many people who have supported me along the way. To my mother, my six sisters, and my only brother, thank you so much for always believing in me. To my dearest and closest friends both at home and abroad, who fueled me with words of encouragement throughout the process, I offer my heartfelt thanks.

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#### Abstract

This dissertation is comprised of a heuristic mixed-method study, employing a narrative inquiry approach to investigate poetry as a potential healing modality. The study included self-selected participants as co-researchers (n=33) who were interested in learning more about their subtle energy systems. A sonnet cycle, consisting of seven sonnets written by the researcher to encompass key characteristics of the seven main chakras in the ancient Vedic tradition, was the basis for the guided listening component of the study.

Qualitative data was collected through oral interviews, and a number of participants (n=16) also participated in an optional reflective writing exercise. Primary themes, arising out of the thematic content analysis, were merged into a sonnet cycle as a means of creative synthesis. Biofeedback incorporated electrophotonic imaging, and the Bio-Well device was utilized to obtain pre- and post-measurements prior to and following the guided listening exercise. The participants' personal observations centered on four elements of the multi-dimensional body. Meaningful extracts, derived from self-reported emotional, physical, cognitive and spiritually-minded reflections, were considered within the context of the statistical findings.

Listening to a guided recording with poetry tested statistically significant in lowering the stress level parameters of the cohort. Poetry written to explore the seven main chakras correlated with the movement of energy in the chakra energy centers explicitly commented upon by participants per the Bio-Well measurements of these chakras that were tested and correlated with participant qualitative data. Participants also exhibited a highly significant change in their beliefs, regarding poetry as an energy healing modality as measured in the three-month follow-up survey. Finally, this study supported the theory of a second reading of poetry as a means to embody a poem, originally proffered by John Fox, Founder of the Institute for Poetic Medicine.

#### **Chapter 1: Introduction**

An emerging area of study in the fields of medicine and psychology was the use of narrative (Charon 2006, 2013; Desalvo, 2000; Pennebaker, 2004; Prendergast et al., 2009; White 2009). Within the larger field of narrative, poetry was considered a separate and distinct healing modality to promote well-being (Fox, 1997; Mazza & Hayton, 2013; Tegnér et al., 2009). There were few scholarly studies, however, that explored the use of narrative as a healing modality, and none specifically on the effect of poetry on a person's psycho-emotional health. The use of poetry to support wellness was a nascent topic of study within the realm of energy healing. To understand the effects of poetry on an individual's well-being, ground-breaking research approaches were needed to investigate this evolving area of scholarly inquiry.

The purpose of the study was to assess the effect of poetry on an individual's psychoemotional health through the process of self-discovery and the use of electrophotonic imaging.

Participant responses to oral interview questions, in addition to reflective writing submissions,
provided the foundation for an organic emergence of patterns grounded in an experiential
approach. Additional modes of data collection were close-ended questionnaires as well as
measurements using the Bio-Well device, which offered participants biofeedback on the state of
their energetic well-being based on gas discharge visualization. The research design employed a
mixed methods approach, blending aspects of both qualitative and quantitative methodologies to
cultivate a holistic, scientifically-grounded representation of the final analysis and presentation.

The intent of the study was to address the gap in scholarly, evidence-based research on the topic. The effects of poetry on the psycho-emotional states of an individual were explored through the use of poetry as a potential energy healing modality coupled with biofeedback. The assumption was that a guided listening exercise with poetry would have

a positive effect on the alignment of one's chakras. This hypothesis was tested, using the Bio-Well device, which produced measurements in the form of integral parameters of an individual's psycho-emotional well-being.

According to Peper et al. (2008), the use of biofeedback could assist an individual in clearing obstacles within one's personal belief systems in order that they might more actively participate in the healing process. The study was designed to promote self-directed healing as well as to permit participants to be active co-researchers in their personal development by guiding them through an ontological inquiry (Creswell, 2013).

A key difference between conventional and subtle science is the challenge of measurement. With the advent of gas discharge visualization (GDV) research, devices such as the Bio-Well, that measure the human energy field through electron and photoelectron imaging (Muehsam et al., 2015), have yielded data that has been correlated with the human energetic anatomy. The Bio-Well could also be used to determine the alignment of a person's psycho-emotional health by measuring their subtle energetic systems.

The process of biofeedback allowed participants to garner information that might empower them to make changes to improve their personal wellness. The rationale for choosing the Biowell was that the reports generated would provide comprehensive information to participants based on the status of their psycho-emotional health. The fluorescent images obtained from the fingertips were an effective means to identify areas of congestion within the body, and measurements taken by the software could be used to address imbalances on both the physical and emotional levels, providing a personalized biofeedback energy assessment for each participant.

#### **Definition of Terms**

A number of specialized terms are used throughout the dissertation. Following is a list of terms and the corresponding definitions of the terminology:

Chakra subtle energy system: Defined as "wheel" in the Sanskrit language. In the ancient Vedic tradition, chakras were the subtle energy centers consisting of seven main chakras: 1) the root (Muladhara); 2) the sacral (Swadhisthana); 3) the solar plexus (Manipura); 4) the heart (Anahata); 5) the throat (Vishuddha); 6) the third-eye (Ajna); and 7) the crown (Sahasrara). The chakras were aligned with the anatomy of the brain and the spine. These energy centers were also energetically connected to various systems in the body such as the plexuses, endocrine, and nervous systems. The chakras were also associated with colors, sounds, and symbols (Dale, 2016; Judith, 2013; Motoyama, 1978, 2011).

**Bio-Well:** A device that was used as a desktop-based technology consisting of a small portable box with a camera and corresponding proprietary software used to capture images of biophotons radiating from the living tissues of an organism.

<u>Electrophotonic imaging</u>: A relatively new process developed and patented in Russia by Dr. Konstantin Korotkov that measured energy fields of humans, plants, crystals, essential oils, and water using a gas discharge visualization device. Could be used interchangeably with gas discharge visualization.

<u>Gas discharge visualization (GDV):</u> A technique that captured florescent images radiating from living tissues exposed to a high-intensity field of energy based on the concept of Kirlian photography. The term depicted both the process and the device used to create the images.

<u>Healing</u>: Those physical, mental, social and spiritual processes of recovery, repair, renewal, and transformation that increased wholeness, and often (though not invariably), order and coherence. Healing was an emergent process of the whole system and may or may not involve curing.

<u>Healing intentionality</u>: The effort by one or more persons to improve the health status of another person through conscious, purposeful actions.

<u>Heuristic Inquiry</u>: A means of engaging in scholarly research that incorporates methods and procedures to promote self-inquiry and discovery based on direct human experience.

<u>Narrative healing:</u> The use of narrative to reflect upon and improve one's health and wellness.

*Narrative medicine*: An approach to medicine that incorporated personal stories of patients in the form of narrative, informing clinicians to promote holistic healing. This approach was further developed into a discrete discipline by Dr. Rita Charon, who believed that the use of narrative by medical professionals increased empathy on the part of physicians, resulting in more personalized and holistic treatment plans.

<u>Multi-dimensional body</u>: The distinct, integrated aspects of one's beingness that includes gross (physical), astral (subtle) and causal (wisdom) bodies, and their corresponding minds, as a holistic interpretation of one's individual reality.

*Poetic inquiry*: The use of poetry as a medium for qualitative research.

<u>Poetic medicine</u>: The use of poetry as a personal mode of healing through the art of poem-making based on one's own voice.

#### Relevance and Significance of the Study

This study has an important role to play in advancing the discipline of integral health. As one of the findings suggests, a guided listening exercise with poetry may prove to be a viable alternative to decrease levels of stress in an individual and might lead to more research on the use of narrative in healing. As a non-invasive healing modality, specific techniques of narrative healing, such as the use of poetry, could provide innovative healing solutions based on energy medicine rather than reliance on pharmaceuticals.

At the same time, research participants were provided with an opportunity to explore subtle energy modalities for themselves. The study provided participants with an opportunity to achieve a deeper understanding of the psycho-emotional health of their individual subtle energy systems as correlated to the chakras. For those participants who strictly adhered to scientific realism, heuristic evidence—derived through modern qualitative and quantitative techniques and obtained through experiential means—unlocked their minds to ancient healing systems.

#### **Research Questions and Their Implication**

The topic for this dissertation was the exploration of poetry as a non-invasive and self-directed healing modality. The study was intended to contribute to cutting-edge research based on real-time, evidence-based findings on alternative healing options, including the use of poetry. Four research questions were investigated within a mixed method research design that permitted the corroboration of qualitative findings through a statistical lens.

To examine the questions, the researcher provided participants with a phenomenological experience directly allowing them to co-investigate the effect of poetry as a potential healing modality alongside the researcher. Specific research questions included:

- 1) Can poetry that is written to capture key characteristics of the ancient Vedic chakra system contribute to the subtle energy alignment of this energy system in an individual? Experimentation was conducted through electrophotonic imaging, using the Bio-Well device to capture pre- and post-measurements of the biophotons emanating from the fingertips of participants, using gas discharge visualization to measure the potential statistical significance of the effects of a guided listening exercise with poetry.
- 2) Does prior knowledge of the chakra system have an influence on biofeedback results intended to measure the alignment of one's subtle energy chakra system? An initial qualitative questionnaire, oral participant interview, and follow-up participant survey examined this question.
- 3) Can participation in an experiential listening activity, using poetry as a narrative healing modality, influence one's personal belief systems related to energy healing modalities?

  Self-reports based on the initial intake questionnaire, collection of data through the FACIT Spiritual Well-being (non-illness) questionnaire, and a follow-up survey provided the data to consider this question.
- 4) If a participant experiences poetry as a potential healing modality, how likely is it that a participant will engage poetry as an energy healing modality in the future? Participants were provided with personalized electronic reports generated from the Bio-Well device software, and a follow-up survey was conducted three months following the experiential component of the study to address this question.

#### **Reflexive Statement of the Researcher in Relation to the Work**

This topic of research has particular importance to the researcher who is a writer and a poet. Using creative writing to contemplate subtle energy healing modalities was a professional

interest of the author, and this research would inform future evidence-based writing projects that explored alternative and complementary narrative healing methods. By encompassing poetic inquiry in the design of this study, the researcher incorporated her own creative writing as a key feature of the research.

Poetry served as an educational tool that was utilized by the researcher throughout her studies. During her doctoral program coursework, the researcher wrote and published two volumes of poetry. This work aided the researcher in the interpretation of complex subject matter. The practical application of creative writing throughout the course of the researcher's PhD studies led to a deeper level of meaning-making in the areas of quantum physics, psychology, comparative religion, subtle energy research, and states of consciousness.

According to Josselson and Lieblich (2003), when using a qualitative approach to research, examining the results based on narrative material is an inductive process. "The work takes place in hermeneutic circles, where new learnings are built as background knowledge expands" (p. 261). This study permitted the creative components of the researcher's meaningmaking to be merged and verified within the scholarly foundations of her integral studies, promoting additional levels of learning while generating new and inventive avenues for future research.

#### **Chapter 2: Literature Review**

This chapter includes a review of the literature that discusses the role of narrative in the fields of psychology and medicine. Narrative medicine is defined, followed by an overview of the main components of the discipline. The chapter then reviews studies that outline approaches that incorporate narrative as a modality in the process of healing. Expressive writing is explored as a technique to promote self-directed healing, and a specific focus on the use of poetry is also incorporated. The key elements and studies surrounding the use of electrophotonic imaging are presented, and gas discharge visualization (GDV) is considered as a means to investigate the subtle energetic well-being of an individual, including a presentation of the theoretical construct of the multi-dimensional body.

#### Narrative Medicine as an Emerging Discipline

Rita Charon worked professionally in the worlds of both medicine and the humanities with a doctorate in literature and a degree in medicine. In her work as a medical doctor, Charon observed how some of her colleagues in the medical profession were unable to fully engage with patients. Charon believed that her fellow physicians were not connecting with their patients in a meaningful way, since they were not treating the whole person (Charon, 2001). This lack of balance in the doctor-patient relationship equated to untapped potential within the patient's treatment protocol (Charon, 2006). "It is as if doctor and patient were alien planets, aware of one another's trajectories only by traces of stray light and strange matter" (p. xii.). Charon observed how each party was simply revolving around the other, attracted by the gravity of the situation that had brought them together.

Charon (2016) indicated that when we bore witness to another's story we could positively enhance our perspectives. Through the application of narrative medicine, "We find ourselves

positioned differently with patients, our missions in individual patient care and as members of our professions" (p. 177). Cognitive skills continued to be the most critical tool in determining appropriate patient care, but patient treatment approaches could also be augmented by the application of narrative medicine techniques. Based on these beliefs, Charon developed an integrated program grounded in the literary art of narrative, blending close reading and reflective writing strategies into the day-to-day tasks of medical professionals.

The purpose of narrative medicine was not to standardize the experience of providing patient care. Narrative medicine was conceived as an intersubjective discipline, and it was intended to be transformational by expanding the definition of patient-physician relationships to include self-awareness on the part of both the physician and the patient. Charon (2006) determined that what doctors lacked in humility and empathy could be learned through intensive training in the art of the narrative. Her supposition was that developing an approach to medicine that united clinical practice with elements of literary analysis would provide patients with a platform to showcase their personal stories as well as to enhance a practitioner's understanding of a patient.

#### **Overview of Research Studies Based on Narrative**

Chretien et al. (2015) determined how integrating narrative medicine techniques into medical curriculum increased empathy and resulted in a subsequent positive effect on patient care. Zak (2016) suggested that empathy could be further augmented through the art of active listening. While studying the effects of oxytocin on the brain, he found that when oxytocin was released, it increased the desire of individuals to help others. He stated that narratives that we paid attention to had the power to move us to action, since the inclination of humans was that

they are naturally predisposed to engage with others. If listeners found the stories of others to be authentic and engaging, they would be motivated to come to their aid.

Allowing one's personal narrative to be recounted directly by the storyteller was endorsed by Tovey and Manson (2004). By safeguarding a first-hand account of one's story, the narrative was not stripped of its context by someone other than the narrator. The findings from this study also highlighted the importance of respecting the personal nature of an individual's story, suggesting that doing so created a pathway to significant dialogue. For the dialogue to be meaningful, it was crucial for the stories to be constructed in the storyteller's own voice.

Roscoe (2012) found that physicians and other medical staff working with terminally ill patients could benefit from narrative medicine themselves. As a result of patient storytelling, they became witnesses to their patients' lived experiences. In return, these experiences gave rise to their own stories. Bearing witness to a patient's reality created empathy, allowed for open dialogue, and led to shared decision-making. Levels of connection between physicians and patients as well as patients and their loved ones, deepened. Additionally, if stories were shared within a wider community, the act of witnessing on the part of the larger group provided insights that initially might not have been evident to the narrator.

Huang et al. (2017) conducted a study to explore differences in perception based on outcomes of training in narrative medicine between students of Western medicine and those studying Traditional Chinese Medicine (TCM). When applying new skills and knowledge based on narrative medicine inputs, Western medical students increased their connection with others more so than with themselves. The research team observed that the students in Western medicine programs created stronger practitioner-patient relationships. Conversely, the TCM students who already exhibited a high degree of practitioner-patient communication and patient-

centered care, demonstrated increased personal awareness following training in narrative medicine techniques.

Narrative medicine was a tool for practitioners to consider healing modalities based on the express desires of the patient, resulting in treatment plans that were more closely aligned with a patient's individual needs. Medical professionals could achieve professional growth within their specific areas of practice based on application of a narrative approach. What was lacking within the discipline of narrative medicine, however, was a focus on the process of healing. To address this gap, more comprehensive programs that incorporated both narrative techniques and research in the process of healing emerged in universities across the country under the guise of medical humanities.

# **Origins of Poetic Inquiry**

The Chinese language incorporated two characters to derive the meaning of "poem" (Carrol, 2005). These characters portrayed the concepts of "word" and "temple," blending the sacred with the power of language. To connect the client with their inner, sacred selves, clients were tasked to write in the first person, since writing in the third person distanced writers from their internal realities. Carrol used expressive writing in various forms such as journaling, letter writing, and poetry to help clients to clear trauma. Adapting findings from research studies in narrative, Desalvo (2000) developed writing prompts as a tool to excavate past trauma, using poetry as a mode to promote personal healing.

A founding member at the Columbia University Teachers College Reading and Writing Project, Georgia Heard (2009) asked students to open the door to their hearts as a method when she taught poetry. Heard believed that truth could be found within one's inner images. Rafael Campo, the director of the Harvard Program in Medical Humanities, claimed that poetry had the

power to heal (Ingalls, 1997). Both a poet and a physician, Campo induced other medical professionals to expand upon the meaning of integrative medicine by including poetry into their practices. Pereira (2007), a poet before becoming a physician, informed colleagues that poetry could deepen one's ability to exhibit empathy, promoting healing from both a person- and soulbased level. Pereira offered poetry as a mode of healing that was far reaching—beyond language and words.

John Fox, founder and President of the Institute for Poetic Medicine, is a poet and certified poetry therapist who also teaches poetry. In his practice and through his writing, Fox (1997) instructed that poem-making fuses one's inner world to their outer environment. He stated that this process created a sense of connection and wholeness that contributed to healing. Fox declared the methods of science to be too exacting, shrouding one's ability to understand healing for oneself if one relied too heavily on scientific, evidence-based prescriptions (p. 33). In terms of technique, when reading poems, Fox suggested that a second reading further enhanced one's ability to embody a poem.

Because poetry inhabited both sensory and cognitive domains, Haberlin (2017) illustrated how poetry could be used to enrich the field of qualitative research through the use of poetic inquiry. The process of poetic inquiry involved identifying themes and highlighting phrases as well as specific words within a poem for cadence and rhythm (Glesne, 1997). Currently, there are two methods to directly employ poetry in research—poetry written by the researcher or poems written by participants in their own voice. Prendergast et al. (2009) defined poems drawn from a participant's own observations and subjective experiences as *vox autobiograpia*. In addition to their personal observations, researchers could also use the technique known as *vox* 

participare to construct poems based on structured and semi-structured interviews, data from psychological instruments, targeted discussions, and questionnaires.

Although one could find many references to healing through poetry that is anecdotal, scholarly research investigating the application of narrative techniques on the process of healing was sparse. Expressive writing was the rare discipline within the creative arts that included narrative in experimentation. Lepore (1997) probed the effect of expressive writing on intrusive thoughts. Although findings did not suggest a lessening of these types of thoughts, the process of writing diminished the symptoms of depression previously aggravated by such thoughts. Pennebaker (2004) provided evidence on the therapeutic effects of expressive writing, citing positive effects on the immune system as well as decreased indicators of psychological stress such as lowered blood pressure and heart rate.

The National Association of Poetry Therapy (NAPT), an interdisciplinary membership-based organization that includes poets, writers and medical practitioners, promoted healing through the written word. The NAPT supports research studies based on poetry as a healing technique and publishes a peer-reviewed journal. Yet, Mazza and Hayton (2003) noted that even though poetry therapy had been formally recognized since 1969, "to date there has been little systematic investigation of its differential use and treatment effectiveness" (p. 53).

A founding member of NAPT, Mazza designed a study based on the application of a poetry therapy practice model that he developed. This approach was comprised of receptive/prescriptive, expressive/creative, and symbolic/ceremonial modes (RES), within the larger discipline of language arts. Although findings resulted in a greater tendency for poetry therapists to use a client's own work more than that of other disciplines in the expressive arts, the study did not explore the potential healing aspects of poetry. In 2009, however, the NAPT

examined the use of poetry to improve well-being and resilience in cancer patients. Self-reports based on pre- and post-tests derived from four short scales, including the Hospital Anxiety and Depression Scale (HADS), the Mini-Mental Adjustment to Cancer Scale (Mini-Mac), the Courtauld Emotional Control Scale (CECS), and the Post Traumatic Growth inventory, found a significant decrease in emotional suppression of participants, with no changes reported in the control group (Tegner et al., 2009). Further, when poetry therapy was conducted in a supportive group setting, involvement in such studies promoted a sense of community that participants could incorporate into their daily lives after the study had ended. Investigators submitted that poetry, proposed to be a non-invasive healing modality, might promote resilience, but larger studies were needed to bolster the pilot study findings.

# **Electrophotonic Imaging Through Gas Discharge Visualization**

Biofeedback was the popular term used to describe one component of the comprehensive discipline of applied psychophysiology. Verghese et al. (2010) noted that biofeedback could teach people how to consciously control bodily functions to achieve a greater level of wellness. Myers and Young (2012) stated that beginning in the 1960s, biofeedback was utilized in counseling as a means to connect clients to physiological aspects of themselves. By teaching them how to self-regulate their physiological processes, it was believed that they might access additional information formerly in the unconscious. Findings from biofeedback could also provide insights to practitioners, who in turn could share this data with clients to help them to better understand somatic reactions within the mind-body relationship (Peper et al., 2008).

Valverde (2016) defined the classical applications of biofeedback modalities before introducing the idea of quantum biofeedback as a means to support transpersonal psychotherapy. This approach, "views the body as a complex electrical circuit combined with the application of

the principles of electrical engineering, able to analyze and balance the electric body" (p. 781). Another perspective of the mind-body relationship was offered by Mae-Wan Ho (1997) who considered the flow of energy within the connective tissues of the cytoskeleton as a living matrix. Ho (2008) suggested that coherence could be considered within an organism by imagining, "a light and sound extravaganza played out over most, if not all the 73 octaves, of the electromagnetic spectrum, perfectly coordinated as a whole" (p. 129).

Motoyama (1978) advocated that in addition to allowing us to see how the mind can be harnessed to affect control over autonomic functions of the body, biofeedback was also a means to "effect considerable repair of the vehicle" (p. 11). Waking states of consciousness have been the basis of classical biofeedback, but research was beginning to cross the divide into altered, or multi-dimensional states of consciousness, using biofeedback. Traditionally, biofeedback devices were used to measure physiological facets of the body such as respiration, heart rate variability and skin conductance. Newer devices measured aspects of the human biofield.

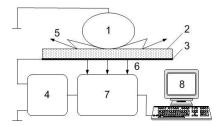
Kafatos et al. (2015) offered two definitions of the biofield: 1) subtle and reputed homeopathic functions that play a considerable role in wellness within a living organism; and 2) the dynamic organizing factors engaging micro and macro levels of subatomic, biological and ordered processes, accessing information on a number of levels, including but not limited to biochemical, neurological and cellular interactions.

Electrophotonic imaging was a recognized research approach, and devices that measured gas discharge visualization could be used to research the interface between the states of physical and energetic body systems. Devices that captured electrophotonic images within the human biofield were gaining popularity. According to Korotkov (2013), devices incorporating gas discharge visualization were being used by more than 2000 professionals around the world.

Korotkov also noted that research in electrophotonic imaging resulted in measurement variations no greater than 10%. For this reason, GDV as a method of experimental enquiry was considered a reliable approach for research.

Muehsam et al. (2015) explained that GDV was a branch of biofield science that incorporated plasma in experimentation. "Based on the Kirlian effect, a high-frequency, high-voltage field is used to stimulate weak photon emission, followed by the application of modern optics, electronics, and computer processing to form images of the weak photon emission" (p. 46). A set of pixels created the image, and each pixel had a specific luminosity associated with it. These images were reflected in "bio-grams." Bio-grams contained detailed information on the physiological and psycho-somatic states of an individual. The structure of the experiment, incorporating electrophotonic imaging is illustrated in *Figure 1* below.

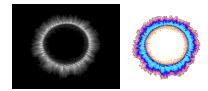
Figure 1: The Scheme of the Experiment<sup>1</sup>



The fluorescent images obtained from the fingertips were an effective means in identifying areas of congestion within the body, and the measurements taken by the software could be used to augment healing approaches that addressed imbalances on both the physical and emotional levels. The fingerprint was depicted by the central oval within the image. As could be seen below, the luminosity is diminished without variation alongside the radial of the image.

<sup>&</sup>lt;sup>1</sup> The scheme of the experiment. 1 – biological object under study; 2 – glass electrode; 3 – conductive transparent layer; 4 - generator of electric pulses; 5 – gas discharge; 6 – light radiation; 7 – optical system and CCD TV camera; 8 – computer (Korotkov, 2016, p. 1).

Figure 2: Typical Gas Discharge Visualization of Fingertip after Image Processing<sup>2</sup>



Images were taken with or without a filter. Using a filter prevented contact between the optical plate and the fingertip. Since processes such as skin perspiration were correlated with sympathetic nervous system responses, these types of responses were not captured on the biograms. Thus, bio-grams taken while using a filter portrayed the physical condition of an individual. Conversely, images captured without a filter recorded psycho-emotional states aligned with the subtle energy system of the body.

## **Overview of GDV Research Studies**

Kostyuk et al. (2011) conducted a pilot study to investigate the significance of biological patterns of the behavior and/or health of a living system. Using GDV images in the application of medical biometrics, the goal of the study was to determine patterns within disease profiles. Results of the pilot study were encouraging, providing a process to "satisfy the current demands of medical biometrics to identify a disease at early stages of development which will show as an increase in entropy and deviation from the normal functional state" (para 17).

Deo et al. (2015) cited the growing evidence of the benefits of meditation to physical and psychological well-being. This research lacked a focus on subtle energy changes, however. To remedy this gap, the team designed a study to investigate variations in the EPI parameters of anapanasati meditators. Their work considered the emotional changes of subjects as analyzed through the division of sectors based on acupuncture meridian theory. Findings of this study

<sup>&</sup>lt;sup>2</sup> (Korotkov, 2016, p. 2).

confirmed research by Balaban et al. (2005) who illustrated a correlation between levels of oxidative stress in the body and the level of photon emission.

Rubik and Brooks (2005) considered the uniformity of light in bio-grams following qigong practice. Findings suggested that the fractal form coefficient measurement of the biograms, depicted as a fractal dimension ratio consisting of the changing details in a measured pattern, decreased post-qigong. For those subjects who had chronic health concerns, the fractal dimension post-qigong increased, but for those subjects exhibiting a clear health history prior to measurement, a decrease was observed. Considering the effect of intention on bioenergetic systems, Rubik and Jabs (2017) proposed, "where the mind goes, energy flows," further propositioning that, "bio-photons may be a manifestation of the qi, and intermediator system between the mind and body" (p. 244).

In a study on healing experiments using an electrophotonic camera, (Korotkov et al., 2009) demonstrated an increase in energy in one volunteer after obtaining Didgeridoo sound healing treatment. Marked changes were also observed in the entropy parameter, signaling a harmonization with the individual's condition, thereby introducing sound frequencies to promote alignment of the mind-body-spirit.

Findings of these sort suggested that electrophotonic imaging with devices such as the Bio-Well, which measured the energetic state of a person through gas discharge visualization based on the Kirlian effect, were viable research tools to explore how various healing modalities might affect the levels of stress in a person. Employing pre- and post-measurement of a person's biophoton fields, using GDV images, provided data that could be quantitatively analyzed to determine the potential significance of a healing modality as well as other interventions.

Further, Korotkov (2013) suggested that electrophotonic applications confirmed one's trust in their initial intuitive observations, enhancing the ability of researchers to identify the process of healing within others through an objective means of investigation. Additionally, the use of the GDV might provide data on the efficacy of healing modalities to achieve an equilibrium of consciousness between the physical and the subtle bodies.

# **Theoretical Construct of the Multi-dimensional Body**

The study of subtle energy required a framework to map the interrelationships between the physical and subtle bodies. The work of Motoyama (1978, 2011) adopted the theory of the three bodies, which encompassed three dimensions of "beingness" based on the ancient practice of tantra yoga. The physical body inhabited the material world and included the physical senses and the associated thought patterns connected to those sensations. The astral (subtle) body was the domain of emotions and feelings. The causal body was the source of intelligence and wisdom, and included higher forms of knowing through the spiritual realms. Each of the three facets of the multi-dimensional body were part of a holistic being, and as such, inter-exchanged energy between each of the various dimensions. Additionally, integral to each of these bodies was a corresponding mind.

According to Motoyama (2011), energy was exchanged between the physical and the subtle bodies through the chakras. "The chakra is seen to be the intermediary for energy transfer and conversion between two neighboring dimensions of being, as well as a center facilitating the energy conversion between a body and its corresponding mind" (p. 5). In the ancient Vedic tradition, chakras were subtle energy centers. Chakras, which were aligned with the anatomy of the brain and spine, were located along the central axis of the physical body, originating in the pelvic area. There were seven main chakras: 1) the root; 2) the sacral; 3) the solar plexus; 4) the

heart; 5) the throat; 6) the third eye; and 7) the crown. These energy centers were energetically connected to numerous systems in the body such as the plexuses, endocrine, and nervous systems. The chakras were also associated with colors, sounds, and symbols (Dale, 2009, 2016; Judith 1999, 2011; Gerber, 2001; Motoyama, 1978, 2011).

Motoyama (1978) proposed that, "the 'normal' state of consciousness is one in which conscious awareness and the related individual unconscious function together, in dynamic balance" (p. 131). He explained that the interplay of energy between the physical body and the chakras was conducted through fourteen main networks of *nadis*, defined as energy channels. Three of these main nadi channels mirrored the spinal column in the non-physical and two of them were wound around the chakras. In the ancient yogic tradition, flowers were used to visualize the chakras. Expanding on this ancient metaphor, Gerber (2001) observed, "the nadis are symbolic of the petals and the fine roots of the flowerlike chakras that distribute the life-force and energy of each chakra into the physical body" (p. 131). Moreover, nadis were believed to exhibit both physical and subtle characteristics.

The heart chakra was the central chakra in the ancient Vedic energy system. This chakra was reputed to function as the intermediary point between the lower, more physically-oriented chakras and the higher, more subtlety-oriented chakras. In a study to explore the correlation between heart rate variability (HRV) and GDV based on stimulation of the sympathetic and parasympathetic nervous systems, Korotkov (2002) noted that "in situations where the sympathetic or the parasympathetic nervous systems were activated, the HRV parameter corresponding to the sympathetic regulation of heart rate was correlated to GDV" (p. 45).

When investigating a self-management program on stress, emotions and heart rate variability, among other biomarkers, McCraty et al. (1998) found that approaches that were

developed to "eliminate negative thought loops" positively affected stress levels, subsequently impacting the health and well-being of the participants. This study concluded that one could have a higher level of personal influence on their multi-dimensional bodies than previously supposed.

# **Applications of GDV to Measure the Human Subtle Energy System**

Through his extensive GDV research, Korotkov (2002) correlated the biophotonic field of the human body to physical organs associated to the traditional Chinese medicine paired organ systems. Data photographed from each fingertip through electrophotonic means were affiliated with the internal organs before being divided into sectors. Based on his empirical findings, Korotkov provided an analysis of how specific sections from each fingertip image correlated to the chakra energy systems, aligning the images with the physical body as well as the ancient eastern anatomy systems of the subtle body. To consider the applications of GDV more widely, Korotkov et al. (2010) conducted a systematic review of 136 studies employing the device. Findings from the meta-analysis suggested that application of GDV was an effective method to investigate both nosology to address issues associated with the classification of diseases as well as to assess psycho-physiologic characteristics of an individual.

Rubik and Jab (2017) suggested that altered states of consciousness and one's focused intentions might be correlated to fluctuations in biophoton discharge. Green and Green (1999) considered states of consciousness through biofeedback, suggesting that even though devices were essentially mechanical modalities, the data derived from them could reveal information previously hidden from a person. To illustrate this point, they explained that the body and mind are not separate as can be expressed through the experiences of those who have had out-of-body experiences. Green and Green explained that biofeedback training could contribute to a better

quality of life in addition to an increased sense of well-being, arguing that mental health was aligned with one's state of consciousness.

#### Parameters and Functions of the Bio-Well Devise

The Bio-Well is a small, mobile device that includes specialized software that computes its parameters differently than the Gas Discharge Visualization (GDV). Each of the fingers is photographed, and the bio-grams are calculated based on standard deviations of the area, intensity and the inner contour radius of the images. According to Korotkov (2017), this included the *normalized area* of the inner oval to allow for comparisons among different individuals. The *intensity spectrum* was used to determine the level of quantum activity within a person's organism. Metabolic rates were determined based on the number of electrons, with higher levels of electrons signaling higher metabolic rates. Interpretation of the *form coefficient* was a means to consider one's physiology, since the higher the form coefficient the higher the physiological regulation within one's energetic system.

To obtain the *energy parameter*, the level of the glow within the bio-gram was multiplied based on the area and average of intensity to achieve a correlation coefficient. To secure the ratio of the energy parameter, measurements from both the left and right fingertips were calculated. The *balance parameter* gauged the levels of energy corresponding to the organ systems as determined by the measurements taken from each side of the body. The bars associated with the paired organ systems were tinted to highlight imbalances of more than 20% within specific systems, signaling areas in the body that needed attention. Viewed through the Balance Tab program, this parameter illustrated the active internal states of the sympathetic and parasympathetic systems, working in tandem in real-time to achieve homeostasis.

The *energy reserve* parameter was a sum of all of the calculations from both the Health and Energy Reserve Diagrams. The Health Diagram was correlated to the organ systems and featured levels of functionality based on the TCM concept. Functionality of the organ systems was illustrated with color-coded graphs that centered on the normal range of optimal activity in addition to ranges to register heightened or deficient energy levels as necessary. The Energy Reserve Diagram (currently an experimental parameter), provided information on how much energy was available for a person to stimulate healing and/or achieve overall balance. According to Korotkov (2017), the higher the level of energy reserve, the more easily a person could adapt to both internal and external stressors.

Inner noise was the parameter used to determine levels of internal activity within an organism. The *emotional pressure parameter* enabled one to evaluate existing levels of stress in order to better understand one's physiological state at a specific point in time. The Chakra Program in the software established the relationship between systems associated with the functional status of the organs and one's psychological state. To determine the correlation between the energy of the organs and the corresponding systems with an individual chakra, one could consider the size of the chakra as measured by the scans. When considering multiple scans, Korotkov (2017) suggested that variances among the positions of the chakras were an indication of emotional imbalance.

To evaluate the bio-grams, practitioners were trained to use the four pillars of Bio-Well analysis. These pillars included: 1) the endocrine system; 2) the gastro-intestinal tract; 3) the autonomic nervous system (ANS); and 4) an individual's level of emotions and stress. These distinct entry points enabled investigation of both physical and psychological dimensions of the multi-dimensional body. Since each of these pillars were interconnected, they provided an

integral view of the functional and subtle energy levels of the human system when considered in a holistic manner. At the same time, Korotkov (2017) was careful to point out that the Bio-Well was not a tool for immediate medical diagnostics. Nonetheless, in addition to providing biofeedback in the form of personalized energy assessment reports that individuals could consider for themselves, the parameters derived from the Bio-Well were also an effective means to identify weaknesses in the body that could be presented to a medical professional for further examination.

# **Chapter 3: Methods of Inquiry**

This chapter outlines the methods incorporated in the exploration of poetry as a non-invasive healing modality based on a mixed-method heuristic research design grounded in poetic inquiry. Background is included to frame the approach of the study design, and a rationale for selecting narrative inquiry as the purpose for the study is presented. The research questions and their significance are outlined, followed by a detailed discussion of the processes and procedures implemented throughout the progression of the study.

## **Rationale for Narrative Inquiry Approach**

The narrative inquiry approach was selected based on the author's interest in exploring the power of poetry as a potential healing modality. Collecting evidence to investigate the role of poetry as a non-invasive, non-pharmaceutical option to promote self-directed healing was the impetus to conduct the study. Although anecdotal evidence was available through limited studies on expressive writing, studies that specifically explored the role of poetry in the process of healing did not exist.

The core elements of the research study included: 1) the recruitment, debriefing, and management of participants; 2) a detailed discussion of the procedures; 3) the treatment of both qualitative and quantitative data; and 4) measures to ensure validity, reliability and trustworthiness to ensure that the study was grounded in an ethical approach.

## **Theoretical Foundations**

In the early 1900s, the father of phenomenology, Edmund Husserl (1859 - 1938) proposed that in our current age of modernity, one needed to understand oneself and one's experiences, including consciousness (Polkinghorne, 1983). Moustakas (1990) included the researcher in a study in addition to the participants while Tassone (2017) suggested that

phenomenology provided a methodical foundation to study lived experience. This resulted in a science of subjectivity that demonstrated how mental states allowed evidence to emerge based on the formation of one's beliefs.

Within the medical field, which values randomized control trials and other quantitative approaches, the validity of qualitative research has often been called into question (Graedon and Graedon, 2016). This challenge has been met through attention to the key elements identified by Polkinghorne (1983) that affect the validity of qualitative research. Polkinghorne challenged researchers to interject more precision into investigation of the human realm to better highlight the richness of the human experience. This could be accomplished by building on established qualitative research approaches, including narrative-specific data gathering and analysis procedures.

Polkinghorne's appeal was addressed by Moustakas (1994), who outlined a number of procedural steps to guide a more rigorous phenomenological approach to complement traditional methods of enquiry. Qualitative methods such as comprehensive descriptions, reflective structural analysis, open-ended questions, and dialogue were established by Moustakas to capture meaning and intention as well as to portray the essence of personal experiences. Data collection methods included in this paradigm consisted of narrative in the form of personal writing, the spoken word, poetry and prose.

Polkinghorne (1988) suggested that although language could disguise reality, it could also be used in a transparent manner as a vehicle to explain and know reality. Anderson and Braud (2011) proposed embodied writing as a qualitative method to investigate the application of narrative in research. When incorporating embodied writing as a technique, this approach

encouraged participants to experience the phenomenon of consciousness directly by focusing on their internal bodily sensations through listening to, reading or writing a text.

# **Participant Recruitment and Demographics**

A convenience sampling approach was used to identify potential participants and coresearchers. Recruitment was conducted in San Diego, California through social media using a flyer, an email from the President of CIHS to the larger CIHS community, and personal referrals from previous participants (*see Appendix B: Recruitment Flyer*). The researcher sought out a minimum sample of 30 individuals interested in learning about their subtle energy systems. Inclusion criteria was also based on a readiness of the self-selected participants to voluntarily partake in the study, including the ability to physically join the experiential component of the study at the CIHS lab in Encinitas, California.

The study included three exclusion criteria. Prior to being scheduled for a session, participants were asked to confirm that they: 1) did not have a life-threatening disease as diagnosed by a physician; 2) were not currently on any psychotropic drugs as prescribed by a medical doctor; and 3) did not have an embedded electronic device such as a pacemaker or Vagus Nerve Stimulator. Potential participants who did not meet the criteria were thanked for their interest and asked for an address where the researcher could send them a copy of *Borderland: An Exploration of States of Consciousness in New and Selected Sonnets* as a gift for their initial interest and willingness to contribute to the study.

Sixty potential participants requested to join the study. Due to the exclusion criteria, and the need to be present in Encinitas at the lab of CIHS, not all of the interested subjects were invited to assist. A total of 40 participants were welcomed to join the study and scheduled to participate during the month of October, 2019. The day before their scheduled sessions, a

confirmation email was sent to the participants along with a copy of the Informed Consent Form. The confidentiality clause of this form noted that personal information collected as part of this study would not be shared with anyone outside of the researcher. Participants were informed that when analyzing data, non-identifying coding would be used in lieu of personal data markers, and that the data collected by the researcher would be stored in a locked facility, and any electronic data would be password protected. Further, the researcher confirmed that first names would be used in the final version of the dissertation only for participants who provided written permission to do so.

Participants were briefed that the session would be one hour in length, and an additional 15 minutes would be allotted to review their energy reports, if they chose. Prior to arriving at the lab, participants were also provided with a set of protocols to follow on the day of their session. Specifically, participants were asked not to have a heavy meal 90 minutes prior to their session, and the researcher also requested that they not drink alcohol or ingest any mind-alternating substances on the day of their session (prior to the session only).

Each person was asked to confirm if they had an embedded pacemaker or a Vagus Nerve Stimulator prior to their session. Participants also were informed that although it was not strictly required, it was highly recommended that they trim their fingernails prior to the session in order to facilitate capture of the highest quality images when scanning them with the Bio-Well device. Six of the subjects, who previously had been scheduled and confirmed, informed the researcher in writing that they needed to drop out due to personal issues. One participant was a no-show.

The final total study population included a cohort of 33 participants who each served as a co-researcher. The age range was between 25 and 72 years of age. Females represented 85% of the population while seven men were 18% of the total participants. Participants were native

speakers of five languages, including English, Spanish, Bulgarian, Japanese and Turkish. Only one participant, a non-English speaker, commented on her experience as it related to language when she stated, "if the poems had been read more slowly, results might have been different not only because my first language is not English, but also because people talk slowly in my native culture. Nevertheless, when I heard certain words, they inspired my imagination, and I believe that this inspiration is one of the powers of poems."

Table 1: Participant Demographics

Characteristic	All (n=33)	Males (18%)	Females (82%)
Age in years, mean =56		Age range, 25	- 72
Language			
English	28 (82%)	6	22
Spanish	2 (9%)	1	1
Bulgarian	1 (3%)	0	1
Japanese	1 (3%)	0	1
Turkish	1 (3%)	0	1

The participants had volunteered and were not directly compensated. However, each subject received two free subtle energy reports, a comprehensive personalized report and a comparative report produced from their Bio-Well scans. A personalized healing sound file, created from their individual chakra alignment parameters, was also generated from the Bio-Well software and sent as a link along with the electronic reports.

Participants also received a signed copy of *Borderland* as a gift following completion of the experiential phase of the experiment, since the epilogue of the book, which was written by the researcher, contained the sonnet cycle incorporated in the recording of the guided listening component of the study.

## **Equipment**

- Bio-Well device and corresponding software (Bio-Well 2.0).
- MacBook Pro (Software: MacOS High Sierra, Version 10.13.6) with embedded
   QuickTime Player (to record interviews).
- iPhone 6Plus (using iTalk 4.7.5 application for poetry recording).
- Sony Wireless Noise Cancelling Stereo Headset (Model WH-CH700N).
- Recliner with foot stool in CIHS lab that employed subdued lighting during the guided listening exercise and Bio-Well measurements.

#### **Procedures**

The study included four phases: 1) participant intake, including review and signing of the Informed Consent Form and completion of two questionnaires; 2) an experiential component, consisting of three Bio-Well baseline measurements, a guided listening exercise, and completion of three Bio-Well post-tests; 3) an oral interview, which also included presentation of the option to partake in a reflective writing exercise; and 4) an online follow-up survey.

**Participant Intake.** Co-researchers were fully briefed on the process of the study, the potential benefits, and what to expect in terms of tasks and time commitment. The importance of their participation was underscored as instrumental in opening up new pathways for future research on the process of healing with poetry. Prior to commencing the study, after orally confirming that they did not exhibit any of the exclusion criteria, the informed consent forms were signed by each participant (*see Appendix C: Informed Consent Form*).

The intake process contained a questionnaire to obtain basic information from each participant, including name, contact information, age, gender and native language. Participants were also asked about their current poetry reading habits, their level of knowledge of the chakra

energy system, and their belief systems related to poetry as a potential energy healing modality (see Appendix D: Initial Intake Questionnaire). Participants were then asked to complete a questionnaire to collect data on their states of spiritual well-being (see Appendix E: FACIT Spiritual Well-being Questionnaire).

Experiential Component of the Study. Bio-Well baseline scans to capture the initial alignment of the chakra subtle energy system, as well as other bio-energy markers, were conducted for each participant. Baseline images were measured without using a filter, since the study was investigating the psycho-emotional states aligned with the subtle energy systems of participants, rather than a subject's physical state. Participants were presented with the main features of the Bio-Well device, the origins of its software, and information on how to position fingers for best results. The researcher then opened a new card in the Bio-Well software and entered the participant's assigned code, gender and date of birth. Participants were asked to stand when taking the measurements to allow for optimum energy flow, and the researcher then prompted the subject in terms of which finger to place within the device. This process was repeated three (3) times and noted as pre-test sessions 1, 2 and 3 in the software database.

After completion of the Bio-Well baseline measurements, participants were invited to sit comfortably in the reclining chair and put their feet up on the footstool if they wished. They were offered headphones and asked to put them on in preparation for a guided listening exercise. The researcher conducted a sound test, and the volume was adjusted as requested before beginning the recording. The recording included listening to the sonnet cycle twice. Participants were first instructed to listen intently during the first reading. Halfway through the recording, participants were asked to take a deep breath, and they were then asked to allow the words to

wash over them as if they were music, rather than engaging in a lexical interpretation of the poems during the second reading (*see Appendix F: Guided Listening Exercise Script*).

When the recording was completed, participants were asked to sit quietly for a few minutes, and when they were ready, the researcher conducted the post-tests with the Bio-Well. Participants were again asked to stand in front of the Bio-Well device and three sets of scans were taken and noted by the researcher as sessions 4, 5 and 6 in the software database.

Participant Oral Interview. The participants were asked permission to record the interview session. All participants agreed to be recorded. The researcher conducted the interviews, asking the participant a series of both open-ended and specific questions (see Appendix G: Participant Oral Interview). Following completion of the oral interview, each participant was thanked for his or her time and thoughts and provided with a signed copy of Borderland. Participants were also reminded that the researcher would follow-up with an online survey within three months. The researcher then offered to review the personalized energy reports with participants prior to their departure from the lab.

All participants (n=33) opted to stay for an additional 15-20 minutes to discuss their personal energy reports. The researcher generated the report and presented the contents of each section along with tips on how to interpret the information, highlighting the fact that each of the participants was their own control. In addition, participants were encouraged to consider the information in the energy report holistically. Rather than pinpointing isolated issues, they were encouraged to consider how the information could be used to create a larger, more unified narrative to aid them in better understanding the overall states of their subtle energy systems.

Each day, prior to leaving the lab, the researcher generated the energy reports and the chakra sound files and sent them within an instructional email to the participants who had

attended a session on that day. Within the electronic missive, participants were once again thanked for their time before being reminded that the Bio-Well was a wellness device, rather than a diagnostic tool, and as such the reports had captured the energetic parameters of their psycho-emotional well-being in a specific point in time, much like a photograph captures a single image.

Optional Reflective Writing Exercise. During the oral interview, participants were asked if they would also like to participate in an optional reflective writing exercise. Participants were informed that this exercise was an opportunity to explore an additional avenue of self-discovery. Within a week of completing the experiential phase of the study, participants who had opted to partake in the reflective writing component received a set of written instructions electronically. The instructions outlined the purpose of the exercise as twofold: 1) to provide participants with the opportunity to create a deeper personal meaning (i.e. meaning-making) of their experience through the lens of narrative; and 2) to provide the researcher with an additional layer of data directly related to the experiential aspects of their participation in the study.

Prior to completing the reflective writing exercise, participants were asked to review their energy assessment reports. Then, they were instructed to write a short paragraph identifying the three most relevant features of their participation in the study before crafting a conclusive statement summarizing their experiences. They were informed that their narratives would be included in the final report, so when they submitted their prose, participants were asked to provide the researcher with written permission to use their first names if they chose to do so. Of the total population (n=33), 28 of the participants, representing 85% of the cohort, opted to complete the reflective writing exercise. Half of this sub-group, for a total of 16 participants, completed the task and submitted written responses as requested.

Online Follow-up Survey. In mid-January 2019, approximately three months after the final subject's participation in the study, co-researchers were provided with a link to the Survey Monkey website. The follow-up survey prompted respondents to assess any changes that they might have experienced as a result of their participation in the study. The response rate of the follow-up survey included 21 participants, representing 64% of the total cohort (*see Appendix H: Follow-up Participant Survey*).

## **Data Collection and Analysis**

The researcher compiled data through co-research, using a range of quantitative and qualitative sources, including two written questionnaires, an oral interview, electrophotonic imaging, an optional reflective writing exercise, and an online follow-up survey. Data derived from the open-ended qualitative elements of the study were analyzed using thematic content analysis. The process of qualitative data analysis included identifying and coding patterns of information, grouping this information into themes, and revisiting the raw data with a clear mind after completing the initial analysis.

The oral interviews and narrative submissions, the two sources of open-ended qualitative data, were coded separately to identify the main themes of each and determine whether reflective writing had produced contrasting and/or complementary data. Secondary and tertiary analysis resulted in the merging of main themes, creating sub-themes in Excel to organize the coding system, manage the process, and extract data sets to be included in the Findings and Discussion chapters of the dissertation.

The quantitative component of the study, in the form of data directly generated from the Bio-Well software, was explored through statistics. As each of the participants had six scans, comprised of three (3) pre-tests and three (3) post-tests, the data in each sub-set were averaged to

arrive at the means and standard deviations of each set of data. Standardized z-scores were also calculated. A paired t-test, which allowed for comparison between the same group of participants, was used to test the statistical significance of the data sets for the following parameters: 1) overall chakra alignment and chakra energy levels; 2) individual chakra data as compared to the qualitative data comments for individual chakras; 3) changes in stress parameter levels; 4) levels of brain coherence between left and right organ disbalance parameters; and 5) beliefs on energy healing modalities.

Close-ended questions included in the initial intake questionnaire as well as multiple choice responses from the FACIT Spiritual Well-being Questionnaire were tabulated in Excel. Pre- and post-test data were tested using a one-tailed paired t-test. A Chi-squared test was conducted using the qualitative data from the oral interviews in order to corroborate statistics from the stress parameter statistic. A Pearson Correlation Coefficient was used to further test the self-reported data on energy healing habits and energy healing beliefs collected at the time of the experiential component and three months following the study.

## Measures to Ensure Validity, Reliability and Trustworthiness

Polkinghorne (2007) explained that the use of narrative in research could build on established research techniques and data analysis. However, new approaches to research needed to be grounded in current methods of conventional research. He added that participants could make their own judgments, but they needed to be analyzed in the realm of accepted approaches. Based on a study by Barush et al. (2011), researchers could utilize triangulation as an element to increase objectivity in a research study design. In addition, the use of a mixed methods approach in the design of the study provided a means to achieve triangulation based on a higher level of rigor.

Braud and Anderson (1998) suggested that in addition to cognitive structures, emotional and bodily influences also served to obscure data. To address this, techniques such as relaxation, autogenic exercises to reduce anxiety, and meditation could be utilized. Incorporating additional techniques that also considered the emotional and bodily influences of a researcher had the added benefit of creating open pathways to allow the researcher to access elements of the data that might not easily emerge, absent a holistic mind-body approach to data analysis.

To minimize researcher preconceptions, bracketing was an approach that included reflexibility to address potential biases to mitigate preconceptions of a researcher (Braud & Anderson, 1998; Ahern, 1999; Fischer, 2009; Tufford & Newman, 2010). Bracketing was an ongoing process, requiring that researchers not only periodically test their personal assumptions, but that they also hermetically revisited data to reconsider bias based on newfound knowledge (Fischer, 2009).

Bracketing Strategies. The year prior to designing the study, the researcher conducted a pilot project to explore the use of the Bio-Well as a biofeedback device to measure the psychoemotional health of an individual, including alignment of one's chakra system. As the reports generated from the Bio-Well software provided a number of statistically derived parameters of the human energy system, the researcher believed that the inclusion of this device would further ground the narrative summaries and personal insights from the qualitative data. Although the researcher is a poet and holds the belief that poetry can heal, careful consideration was given to data collection in order to construct instruments that were as neutral as possible so as not to direct participants toward a specific outcome.

During the oral interviews, open-ended questions allowed participants to consider personal experiences without prompting. Qualitative data was meticulously noted, including

recording of the individual interviews. Prior to beginning the data collection phase, the researcher released any pre-conceived notions concerning expected outcomes related to the pre-and post-testing with the Bio-Well. In addition, any judgments on what the participants should think or feel were suspended. As a result, data collection began with a clear and open mind on the part of the researcher.

Employing a regular meditation practice during the data collection phase served to ground the researcher's mindset. The researcher walked to the Institute on most days to spend time in nature prior to welcoming the participants for their sessions in the lab. On seven out of the 12 days of data collection, the researcher did a 12-minute qigong practice at the end of the day, after all the sessions for that day had been completed. These meditative practices served to keep the researcher balanced and clear-headed in order to start each day with a fresh perspective.

Member Checking. To ensure that the information consolidated in the final analysis of the qualitative data was consistent with the intention of the participants, the researcher conducted a member checking exercise. One month after completion of the experiential component, and after all narrative submissions had been received, the researcher reached out to the complete cohort. The sonnet cycle, *Second-level Data Analysis: Integration of Themes from Oral Interviews and Narrative Submissions* was sent electronically to the entire list of participants. Participants were asked to read through the sonnet cycle to ascertain if their personal experiences had, at least in part, been woven into the sonnet cycle. If they believed that none of the elements included in the creative synthesis conveyed their personal experience, participants were asked to inform the researcher what was missing.

The member checking exercise garnered 17 responses, representing 52% of the population. Participant #19 was not able to review and provide feedback during the member

checking exercise as she had just recently given birth. Two other participants stated that they did not relate to the sonnet cycle. One stated that she simply did not remember. And, although another stated that none of the components of the sonnet cycle had pertained to her, the personal experiences that she had recounted to the researcher featured prominently in the first half of the second sonnet. Participant #8 responded with additional musings, "I came home and found my CD of David Whyte reading his poetry and listened to it multiple times. There is something about someone reading it to you that is soothing. It made me wonder why I don't do this for myself in the middle of my day - as a reset!" Participant #31 also took the opportunity of the member checking exercise to expand upon her contributions when she wrote, "through participating in your research, I have been learning that poems are not to understand, but to feel."

## **Chapter 4: Findings and Discussion**

Qualitative data based on the personal experiences of the co-researchers was collected through oral interviews, an optional reflective writing exercise, and a follow-up survey. Two sets of themes organically emerged as a result of the thematic content analysis. The first set of themes addressed the participants' subjective conclusions as a result of their experiences with the guided listening exercise, which were recounted in the oral interviews. The second set of themes, originating from the reflective writing exercise, concentrated on application of the energetic information that had been provided in the energy reports as well as a deeper personal analysis of the participants' experiences. Additional inputs from the follow-up survey served to triangulate the data. A detailed summary of the oral interview transcripts and written reflective writing submissions, representing the complete set of qualitative data, is provided in the appendix (see Appendix I: Compendium of Qualitative Inputs for Each Participant).

When similar experiences were recounted by participants, these findings were analyzed and presented statistically. According to Urdan (2010), the application of statistics was used to both describe specific aspects of populations studied and make predictions based on probability. However, Urdan cautioned researchers on the use of statistics to make projections about a larger population rather than relying on subjective inputs. "It is important to remember that, for the most part, statistics do not provide useful information about each individual's experience" (p. ix).

Statistics were incorporated in this dissertation to make general statements about the study population as well as to compare and contrast information, further strengthening the thematic content analysis employed to analyze the qualitative data. The central feature of data analysis for this study, however, was the compilation of meaningful extracts to highlight the most compelling narratives of the wide range of participant voices.

## **Creative Synthesis of Thematic Content Analysis**

The *Sonnet Cycle of the Seven Chakras*, utilized in the guided listening phase of the study, was written in *vox autobiograpia* based on the researcher's own scholarly examination of energy healing. The sonnets were written based on an exploration of the key characteristics of the seven main chakras. An additional level of thematic content analysis incorporated application of poetic inquiry by crafting an original sonnet cycle in *vox participare*, assimilating the overall qualitative data from participant inputs.

The reflective prose offered by participants served to strengthen the thematic content analysis of the data. Direct quotes lifted from participant writing submissions allowed the researcher to further weave participant contributions as co-researchers into data analysis. The following sonnet cycle, constructed by the researcher as part of the thematic content analysis, merged topics identified from both the oral interviews and narrative submissions after completing the two sets of thematic content analysis.

# Second-level Data Analysis: Integration of Themes from Oral Interviews and Narrative Submissions

Sitting back, I closed my eyes, only once
Were the lights too bright. As you dimmed them my
World melted into the chair. Sound check. I
Opened my eyes and gave you a slight nod,
And then a thumbs up. I did not expect
The sound of your voice to nourish me. I
Was energized, excited—arriving
At the lab today. My tenseness dissolved
As soon as I sat back in the chair. No
Longer was I nervous, my work somehow
Behind me. "Noticeable was the shift
Between the first and second trial." –Lisa
What leaps out the most is whether ANY
20-minute time-out would yield the same.

During the interview, I barely spoke. I simply smiled, and you somehow knew that

My introverted nature was not an Obstacle. I loved the poems. But it was My wife, the rambunctious one, who'd dragged me In. The headphones kept falling off, but I settled in, relaxed, then left willingly. I find it fascinating that something As simple as poetry could change one's Energy field. I'm more relaxed. I feel So grounded, I'm blissed out—could fall asleep. The poetry's a story, "If someone Read it with a New York accent, I don't

Know if I would feel the same way." –Lola. I'm all choked up, I needed that release. While one held back tears, I let it all out, Glad for the subdued lighting. Not wanting You to see. I was euphoric, learning About the Bio-Well, listening to Poetry. At the end, when you spoke of The crown chakra, I saw a wash of gold. "I felt the flow of energy and blood Going from the root to my crown." –Karen. Then the sense of being somewhere else. A Deep meditative state. Peaceful. Calmer. Harmonious. Relaxed. An opening — Expansiveness—safety in time and space.

The ocean washed over me. I let go, I was the ocean, the flow. The words poured Out. I was drifting. It was challenging, Even difficult, to let drop my mind. When I did, I was able to "...be with The feeling in the experience." –Deb. Energy was stirring in my body. There was heat. I felt vibrations. Tingling. Itching in my ear. There was a rising Sensation, and then I was twirling. White Light spinning at my feet as I put a Melody to the words. I listened with My cells and my body. The poems shifted My awareness inward. "I was able

To see both my outer and inner worlds Equally." –*Hide*. What a difference Between the first and second reading. I Felt more relaxed. As did I. Me, too!

The first reading was activating. The Second, more calming, integrating. Words Resonated within my body the Second time. I felt more receptive. "The Possibility to change 'beingness' At the cellular level." –Brenda. As My chakras aligned—ripples, blues, purples. Wavy at my third eye. Geometric Lines. "I have read the report many times, Seeing the mind-body connection in Such detail was enlightening." –Denise.

The Optional Reflective Writing Exercise provided participants with the opportunity to glean additional insights into the self-discovery aspects of the study. As thus, the creative synthesis process was also extended to the participants who elected to craft their own personal accounts and submit a written reflection of their experiences. As part of her narrative submission, Participant #15 wrote, "being asked to review my thoughts about the results then put them into words seems to add more meaning and structure to the experience." Participant #32 wrote, "overall, it was both a pleasant and informative experience, confirming my belief that our energies are all very connected—if we could just harness this power as a collective society, imagine how amazing our existence not to mention humanity would be."

#### **Dominant Characteristics of the Qualitative Data**

Each of the two data sets had specific areas of focus. Major themes from the oral interviews gauged personal experiences stemming from the guided listening exercise with poetry. These findings were primarily identified within the context of the multi-dimensional body. The reflective writing exercise elicited narrative submissions based on the application of the energetic information contained in the participants' Bio-Well assessment reports.

<sup>&</sup>lt;sup>3</sup> All information herein is derived from oral interviews and reflective writing submissions. Only direct quotes from those who provided written permission include the use of first names are included above.

Additionally, aspects of participant experiences described in the experiential component of the study that had been outlined in the oral interviews were given deeper meaning within the written submissions.

Two related themes emerged from the thematic content analyses of the oral interviews and narrative submissions, including: 1) an overwhelming sense of relaxation and calm, which was discussed in depth in the oral interviews and noted consistently in the narrative submissions, and 2) the effect of the second reading in terms of embodiment of the poem. Additionally, discussion of the chakras was an element in the data that was cited extensively throughout both sets of qualitative data.

## Personal Narratives Within the Context of the Multi-Dimensional Body

During the oral interviews, co-researchers individually expressed distinct states of consciousness. These states were described through somatic sensations and emotional expressions in addition to an awareness and transcendence of the mind. Subjective co-researcher observations were interpreted through the theory of the multi-dimensional body (Motoyama, 2011). Motoyama's description of the multi-dimensional body was based on a structure that included the gross (physical), astral (subtle) and causal (wisdom) bodies as a holistic rendering of one's singular reality.

As one participant noted, "Due to the subject matter, I feel that there was an actual influence on the chakras and on my energy field." Not all participants had specific sensory experiences other than relaxation, however. Some (n=3) reported no emotional, visual or somatic sensations. Of the majority of participants who experienced sensations (n=30), many experienced sensory perceptions in at least two facets of their multi-dimensional bodies, and some experienced sensations in all three (i.e. gross, astral, and causal bodies).

In addition to a phenomenological experience guided by the researcher, participants also could choose to explore their inner lives through a narrative exercise based on personal reflection. A trove of uniquely personal perspectives, which surfaced out of a deeper exploration into the complexity of each individual's experiences, was freely offered within the participants' narratives.

Prior to the guided listening exercise, participants completed the FACIT Spiritual Wellbeing Questionnaire. Of the 12 questions included in the questionnaire, nine of the responses were rated very positively, exceeding 80% or higher in terms affirmative replies. Two responses scored within the mid-range of the 70th percentile. One question, which asked whether participants "were able to reach deep down within themselves for comfort," tabulated a 64% affirmative response rate, the lowest rating among all of the questions in the instrument (*see Appendix M: FACIT Spiritual Well-being Questionnaire Results*).

With regard to the participants' capacity to reach deep down within themselves, following the completion of the thematic content analysis, a different narrative emerged.

Participants appreciated learning about their energetic bodies. Specifically, the more that they reflected on their experiences, the higher the levels of unique and tailored self-directed approaches to increase their personal wellness that they identified.

Paradigms of Illness and Wellness. Initially, when first presented with their energy reports, participants tended to discuss any variations of their energetic well-being in terms of illness. Participants wondered what was wrong with them and/or whether they should seek out medical attention for seemingly mal-aligned psycho-emotional measurements as outlined in their personal reports, even when the information was clearly within the normal ranges. This uncovered the issue of how culturally-wedded participants were to the paradigm of health that

considers first how to treat disease, rather than on using new information to increase personal well-being.

In recent decades, this paradigm has been shifting as the health care industry has incorporated an emphasis on the *prevention* of disease. This paradigm shift, however, has yet to shift to wellness as the first means of considering the health of an individual. This shift only allowed for a partial path toward wellness as the initial entry point to health, since prevention in this context was merely defined as a lack of illness. The need for a pathology to drive treatment had created a culture perpetuated by the belief that something needed to be wrong either emotionally or physically. Without a pathology, there was not a treatment, and without treatment one eluded wellness.

After a period of targeted contemplation, participants expressed how living life with a positive mindset, without consideration of disease or illness as the prevailing world view, provided a renewed approach to both define and direct their own well-being. When combined, their personal experiences and subsequent learning allowed the co-researchers to peg their individual states of wellness alongside the personal resources and methods necessary to improve those states. Findings from this study suggested that if individuals changed their personal paradigms from "tackling illness" to "cultivating wellness," they could more easily embrace the types and modalities of self-directed healing necessary to achieve higher states of well-being.

Gross (Physical) Body Sensations. One of the most surprising findings of the study was the prevalence and diversity of direct physical sensations experienced by the participants during the guided listening exercise. As the study had been designed to explore the psycho-emotional states of the cohort, the variety of bodily perceptions documented by the participants was astonishing. Most unforeseen was the feeling of movement within their bodies, including

specific sensations within the precise regions of the body connected to the corresponding chakra for that area. Physical sensations described by participants involved heat, energy pulsating, itching, tingling, and vibrations in certain areas of the body. Furthermore, when discussing their respective experiences, in addition to feeling extremely relaxed, participants recounted a sense of embodiment of the poetry during the second reading. This suggested that the experience of listening to poetry written to explore the chakras had a direct physical stimulus on the areas of the body where the chakras were presumed to be located.

Experience of Energy Moving within the Body. In addition to feeling the sensation of blood flowing up the chakras from the root to the crown, Participant #12 said that, "there was a warming sensation, I was feeling heat." During the reading of the sonnet on the heart chakra, Participant #31 explained, "while I was listening to the heart chakra poem it felt good in my heart, like a warmth." A third participant experienced, "a warming from the base up." Participants also felt vibrations washing over them, including one who "energetically felt the vibration of my biofield." This participant further stated, "I realized that the words were actually carrying their vibration so you didn't have to understand them. Like a mantra." Participant #16 articulated a change in vibration from the time she entered the lab to the time of her departure, "I went very deep within myself, and I felt like I had a full body massage after the testing was over." She went on to say that she felt cozy, adding, "even my dog who is here is in his meditative state after the reading, because he can feel my vibration."

Although one participant initially stated that he experienced feelings of being peaceful, balanced and harmonious, he then described this experience as more kinesthetic. He stated that he felt itching in his ear, on his face, and in his mouth. "During the second reading, my body reacted and the itching started." While listening to the poetry, he sought relief from the itching.

"When I touched it, it was gone, as if something was calling for my attention," he said. Another felt an uncomfortable weightiness, "going through the chakras, the ones that were not open felt very heavy. As we got to the head it felt like it was crushing me." A release in the upper part of her body was also felt by this participant, who said, "I felt the need to turn my head and my neck popped, which is not unusual, but I felt the need for an energy release—that happened twice, and then a jaw release after that."

Several participants spoke directly about interactions with their bodies during the guided listening exercise. Participant #19 experienced, "a lot of movement during the second chakra as in blood pressure change and temperature change, and a gooiness, a softening." Participant #32 sensed the chakras as an integral energetic system, saying that, "the first and the seventh are really connected, feet on earth and head to the universe." Participant #30 described her experience as being otherworldly when she wrote, "It was more of a rocking sensation, like being a baby and being rocked in a womb by Mother Earth's arms—there was a physical sensation to the out-of-body experience."

Sense of Embodiment During the Second Reading of Poetry. Recollections provided by the participants discussed how one experiences a poem when provided with the opportunity to listen to it twice. In the words of one participant, "the second time I was more listening with my cells, I listened with my body." Participant #1 felt a noticeable shift in the energy in her body between the first and second readings. Participant #12 said, "I felt more receptive and open in listening to the poetry, letting the words resonate through my body in the second reading." Participant #19 described how, "my body felt like it was sinking into the feeling more in the second reading, more than the words or the sensation and that sent me a bit adrift."

Participant #22 had been touched by the words in the first reading, but "the second time, I was more in my body." Similarly, another participant expressed how, "I had an emotional response initially because of the words, but the second time I was centered, I was more in my body." Participant #33 summarized her experience by saying, "the first reading was more activating, and the second was more calming, more integrating."

Expressions of the Astral (Subtle) Body. The theme encompassing distinct emotional states considered parasympathetic response patterns and the direct expression of feelings. Also, of significance was how some of the individual experiences merged into a collective consciousness of experience. This was particularly prevalent as it related to the explicit levels of relaxation conveyed to the researcher following the guided listening exercise. Participants conveyed the experience of a deep sense of relaxation, which was overwhelmingly the most expressed emotion within the data. Comments ranged from, "I feel very peaceful right now," to being, "more relaxed, very calm, very relaxed and calmer." One participant proclaimed, "it was very relaxing, like guided meditation." Participant #23 told the researcher, "after I listened to the poetry about the chakras, I felt so much more at ease."

The idea that poetry connects one to who they are as a human being was a notable result of the study in that there was a rush of emotion experienced by participants. Depending on an individual's emotional style, the feelings experienced during the guided listening exercise provided either an emotional release or a pathway to greater inner wisdom. Further, through the direct expression of feelings, a new understanding of what it means to be tired emerged. Energy reports presented to the co-researchers generally reflected high states of energetic wellness, yet participants still reported *feeling and being* tired. Some were surprised to learn how much

energy their living systems naturally generated, begging the question of how much of their perceived tiredness simply rested in their minds.

Explicit Emotional Experiences. The direct expression of feelings included tears, laugher and joy. Participant #33, "had tears coming out at first, and I was more seeing animals, [it was] more shamanic for me." She explained that the release of tears resulted in a clearing of some deep-seated pain. Participant #22 said that, "the first go-around, I was listening to the words and was very moved by the root chakra, initially I started tearing up." Additionally, participants experienced, "anxiousness and periods of tenseness," but these feelings were primarily exhibited prior to arriving at the lab (due to tardiness or traffic) or before sitting in the recliner to begin the guided listening exercise.

Of the total number of participants (n=33), 25 of the participants specifically defined an emotional response which was "more relaxed, calmer, peaceful, or grounded." Of these participants, 76% experienced the highest level of relaxation after the second reading of the sonnets. "With the second reading, I was able to totally relax and unwind and feel more relaxed and open," said one participant. Participant #1 considered why she might have felt relaxed following the guided listening exercise when she, "wondered if that result happened because I assumed the poetry would relax me." Participant #8 lost track of time, "Relaxation was true of all three readings, or was it two?" This finding raised the question as to whether the second reading provided higher levels of relaxation because of the additional time spent listening, or because the participants were asked to suspend their active minds and let the words wash over them as if it were music.

Awareness of Mind. The ability of the experience to bring more attention to the workings within the mind was a key feature of the findings. The poetic verse ignited the

imagination, resulting in emotions and feelings that were induced by the individual meaning-making that each participant attributed to the words within the sonnets during the first reading. During the second reading, participants spoke of being open to more instinctive impressions, rather than allowing their thoughts to guide their experiences with the poetry. The distinct cognitive styles of participants determined their personal experiences, being that some represented their experiences visually while others constructed rational responses during the interviews. This implied that varied techniques tailored to individual styles could be used to develop personalized approaches to relaxation and healing.

The multitude of colors seen in the minds of participants included reds, yellows, oranges, blues, purples, and a "wash of gold," all of which were traditionally associated with the chakras (Dale, 2016; Judith, 2013; Motoyama; 1978, 2011). Participant #33 explained how, "The first reading was more of an inner journey with my own work and my symbols, and in the second reading, I saw colors and dancing, which was more relaxing and calming." During the second reading, she explicitly, "saw a red shawl, and then orange and yellow, but at the heart chakra it was more of a pink color."

Although participants spoke of their lower chakras, including the root, only colors associated with the sacral and solar plexus in the lower region were identified during the interviews. When discussing the upper chakras, participants alluded to the blues and purples of the throat and third-eye. As it pertained to the participant who saw the wash of gold in the crown chakra, which is usually coupled with lavender or light, "a unique feature of this chakra is a smaller whirlpool of energy at its center, consisting of twelve undulations of white and gold" (Motoyama, 2011, p. 188).

Only one participant associated color with the heart chakra, and rather than the traditional green associated with this central chakra, believed to integrate the lower and higher levels, pink represented her experience with this chakra during the poetry reading. Leadbeater's theory of the chakras included "rays of vitality" whereby the rose-colored ray encompassed the whole of the nervous system. "The unique characteristic of this ray is its ability to permeate and to radiate energy to other individuals" (Motoyama, 2011, p. 196). This same participant experienced a rush of spinning colors, "starting from my root chakra to the top of my crown chakra." She added that, "In the end, this experience felt like taking a shower with rainbow colors within." What was initially experienced as a rose-colored ray of vitality, expanded to infiltrate her imagination as a sweeping spray of energy along the entire corridor of the chakras, which embodied the nervous system.

Cognitive aspects were primarily expressed by participants during the second reading, and included the difficulty of listening to the poetry without considering the words. This instruction, which was included within the scripted recording of the listening exercise, challenged some in terms of creating a focus that they could not initially get out of their minds. Once they allowed themselves to release their active cognitive minds, however, participants recounted increased relaxation and visualizations. Renderings within the mind included colors, as noted above, and other visual representations, such as being adrift in the middle of an ocean or safely nestled deep inside a cave. One participant merely said, "I could see my mind wandering."

Although the first reading was soothing, "the second time I had difficulty letting it wash over me as music," said one participant. Another said, "the mind has its own ideas. I found it difficult not to listen to the words." A third noted that, "initially, I found it hard to listen without

concentrating on the words and to hear it as sound, but toward the end, by the fifth or sixth chakra, [it] was easier." Additional comments included, "The second time was so hard; my mind was drifting off and thinking about other things, and I had to keep bringing myself back." And, "When I settled into it, then I felt as if I were riding waves on a raft and just floating on the water, and the words literally washed over me and carried me, and I went somewhere, and then I came back."

Participant #31 described how she followed her mind while considering the differences between the first and second readings. "When I listened to the poems the first time, I used my cognitive mind to try to understand the meaning. I was looking at each tree of the forest, but in the second round, I was seeing the whole forest, like a bigger picture rather than each detail." Another participant said, "I was picturing the chakras as it was going up, particularly when the reading was mentioning the lotus. My images were tracking the words." Participant #12 explained how she was "processing physically, going through the different chakras, [resulting in] more of a cognitive exercise."

Two participants, both males, described the second reading simply as noise. Noted one, "I followed the instructions and did not focus as much on the words, it was just noise, not words. Pleasant noise, but noise." The other said, "On the second reading I let it be noise, and I didn't focus on the content at all." According to Hunter et al. (2005), men use a different part of their brain when listening to a woman's voice, which makes it more difficult to hear certain tones, and ultimately, understand what is being said. But, understanding the words was not an impediment for these participants who merely turned the cognitive functions of their minds off.

**Causal Body Consciousness.** The listening exercise with poetry enabled participants to tap into a sense of well-being that was beyond the physical. Parasympathetic responses, a state

which ignites the internal healing process, also related to transcendent states of consciousness. These descriptions were interesting in that they wove together the subtle and causal bodies to achieve healing on more than one dimensional plane. Rather than being a curative treatment (i.e. a pill), the poetry guided participants into a place of reduced stress that was neither physically nor emotionally good or bad, but a heightened state of being.

Participants conveyed transcendent states of consciousness through the sense of "being somewhere else" in addition to experiencing deep meditative states. "I was adrift," said one, while another exclaimed, "I let my mind go, it was elsewhere." Altered states were also subjectively correlated with healing during the guided listening exercise. According to one participant, "I'm very easily subjected to any healing, I don't fight it, I'm gone." For Participant #15, the opportunity to listen to the reading twice put her in a more meditative state of mind. When listening to the sonnet on the throat chakra, one participant felt grounded even though she was in an altered state, "I remember thinking, what was the poem for the throat chakra, because my mind was elsewhere."

Participant #19 experienced a sense of mystery. When contemplating how the poetic aspect of the study affected her, she wrote, "strangely, there were shifts in my energetic fields and balance after the listening activity which I cannot explain." Participant #29 said, "I felt a sense of the expansiveness of things, and that there is safety in time and space." Participant #30 conveyed a sense of limitlessness, stating, "it took me deep and high like on another realm—more out of my body." The experience of Participant #31 surfaced as a blossoming revelation, "when I heard the word spirit or universe, I had an expansive vision, beyond this planet to the universe."

## **Tools and Tactics to Promote Energetic Well-being**

Three principal topics arose during the thematic content analysis of the narrative submissions. First, the Bio-Well was considered an emerging technology in the promotion of well-being based on biofeedback. Secondly, following their time in the lab, more meaningful interpretations of the energetic benefits of participation were noted in their writings after the participants had had time to contemplate their detailed energy reports. Thirdly, participants spontaneously provided the researcher with feedback on the effects of an open and supportive environment during the study, and how this had affected their demeanor during the experiential component.

**Biofeedback based on the Bio-Well.** Participants expressed their astonishment at the inventive technology of the Bio-Well, detailing practical applications of the information that they had gleaned from their personalized energy reports. Transformational learning on the part of the participants was based on specific biofeedback inputs, and included: 1) a deeper understanding and appreciation of their energetic systems, and 2) inspiration to embrace targeted self-directed healing techniques, including the use of poetry, for improved wellness.

Following the experiential component of the study, the researcher electronically sent participants their energy assessments. On those occasions in which participants wrote back to the researcher to raise concerns, the researcher responded to these participants by reminding them not to disregard the normal ranges, since the reports reflected dynamic movements within those ranges. Depending on their queries, the researcher might also explain how the same information was provided in a number of ways, stating that it was not necessary to understand it all. In all cases, however, the researcher encouraged the participants to focus on the charts and graphs that resonated with them the most. Participants were further instructed to read over the

information a number of times, and to remain open to what they could intuitively interpret from the material. By doing so, participants were offered a means to re-evaluate how they considered their states of well-being through a set of fresh eyes.

Participant #15 wrote, "I learned some comforting information about my robust and balanced health. I also learned that there are a few areas that needed attention, and receiving this objective feedback enabled me to make positive changes in my behavior." Participant #32 said, "I liked seeing how aligned my chakras were from the report, and identifying that I needed to have a conversation with someone and to know I am grounded enough to do so." After examining her report, Participant #13 outlined how her experience had validated the energy work she had been doing prior to the study. "In the last year or so, I had been working on speaking my truth, and feel I have made good progress over the last year, so it was nice to have that validated (in seeing the throat chakra balanced in the report)."

Not only did energy reports validate for participants how they perceived themselves, but these reports could also be shared with medical doctors to promote an integral approach to one's wellness. When reflecting on the relevant aspects of his participation, Participant #11 offered: 1) the data reflects an accurate assessment of the nuances of my physical condition—so much so that I will discuss the results with my physician (i.e. multiple symptoms consistent with areas of high energy/imbalance); and 2) the data also reflects a reasonably moderate/centered psychological existence—again, the way I perceive myself."

Energetic Benefits of Listening to Poetry. Generally, the population of the study knew about the chakras (all but one identified them correctly), discussing them specifically and in detail during the oral interviews as well as in their narrative submissions. Many shared that they had been working on specific chakras prior to the study. As such, the information from the

personalized energy reports corroborated their current understanding while providing them with a deeper analysis in terms of where to focus future self-directed healing energy. One participant said, "I'm excited about science and spirituality, and having the experience of listening, I could feel that something dropped down into a deeper state of being, coming more from my core."

Participant #32 asserted that, "The poetry readings were calming and uplifting to the point I could feel my energy within each of the respective chakras such that by the time the reading was completed [I felt] an overall lightness of feeling/being." Participant #23 summed it up by saying, "I am inspired to continue learning about the chakras and take comfort, knowing that when I meditate, go to yoga, walk at the ocean or even listen to poetry, my energy centers are quite visibly being affected in a positive way." Participant #16 stated that, "my experience as a participant has given me more of a sense of knowing myself in an energetic way."

Reinforcement of Personal Energy Balance. One of the principal lessons as defined by the participants was the importance of reinforcing energetic balance within themselves. When reviewing their energy reports at the end of the session, some participants were shown the six scans as the researcher flipped through them on the screen in rapid succession, an illustration that mimicked the decimal meter of a sound system. Participants were awed, as was the researcher, at how dynamic their organisms appeared to be as their parasympathetic and sympathetic systems were seen in real time, adapting through their organ systems to create balance within their energetic systems.

Participant #13 said, "I found some of the results to be profound enough to increase my awareness and inspire more proactivity in my efforts to find that balance." Participant #28 also was inspired by the results. "I felt that it gave me an idea of areas that I need to look at that may be out of balance as well as letting me know I have pretty good balanced energy overall."

Participant #31 said, "I started paying more attention to the lateral balance of my body. When I notice that I am using the right part of my body more than the left part, I try using the left part more."

The energy reports provided Participant #12 with targeted information that allowed her to more clearly see herself. "The stress, irritability and anxiety that I create or absorb through others is harmful to my overall health," she reasoned. She also determined that she would seek out more balance by being more aware of her negative attitudes and sluggish feelings during the month. Based on the data provided in her biorhythms report, she could remind herself not to lash out at those closest to her when her emotions were running high.

Attainment of L/R Brain Coherence. To further explore the concept of balance, a test was conducted to determine the degree of brain coherence exhibited on the part of the participants after the guided listening exercise. Bowyer (2016) defined coherence as a "mathematical technique that quantifies the frequency and amplitude of the synchronicity of neuronal patterns of oscillating brain activity" (para. 7). According to McCraty et al. (2009), coherence was a state of optimal function, and although it was correlated with increased parasympathetic response, it was separate from the physiological state of relaxation. One of the key distinctions between coherence and parasympathetic activity was that coherence did not contribute to a lowering of the heart rate.

In the 1960s, Sperry conducted research titled "the split-brain study." Based on his findings, Sperry (1968) devised a theory of the right and left functions of the hemispheres in the brain. The left side of the brain primarily processed thinking in words, mathematics, sequencing and logic. Functions inherent in the right side of the brain were associated with the arts and

piloted holistic thinking. The right hemisphere also included the processing of feelings, visualizations, imagination and intuition.

Beeman et al. (2000) examined how concepts were inferred in the brain. The study considered which side of the brain was more likely to obtain a level of convergence based on multiple word inputs. Their research proposed that activation of the left hemisphere was rapidly employed to process discourse, creating a mental representation. There was a contrast, however, in the language processing function of the right side of the brain, which was found to be ineffective in choosing distinct connotations of individual words. Although the two sides of the brain processed language differently, each side purportedly worked in tandem. Further, Fedorenko and Varlay (2016) suggested that language and music shared similar structural qualities and were therefore processed similarly within the brain.

To determine the level of brain coherence, the Bio-Well Organ Disbalance parameters for the left and right sides of the body were investigated. The pre- and post-tests of these measurements were used to calculate separate one-tailed t-tests between the means of these data sets. Also, a test between the combined pre-tests for the left and right sides of the body, and the combined post-tests for both sides was conducted. The results from these tests included a statistically significant change in overall brain coherence between the left and right sides of the body, calculated at a *p* value of 0.013. In terms of the individual sides of the body, the pre- and post-tests of the left side of the body, which corresponds to the right hemisphere (RH) of the brain, also resulted in a statistically significant finding, with a *p* value of 0.008. The Organ Disbalance parameters tested for the right side of the body, which corresponded with the left hemisphere (LH) of the brain, did not test as statistically significant after the experiential component.

Analysis of the two sets of measurements for each side of the body showed an increase in coherence based on the Organ Disbalance parameters of the left side of the body (associated to the right side of the brain) pre- and post-test, but not the right side of the body (associated with the left side of the brain). During the second reading, participants used targeted intention to suspend their LH language processing functions when they were instructed to listen to the poetry as if it were music. Based on a cursory review of the data, the RH of the brain, which is responsible for holistic thinking, seemingly experienced greater coherence than the LH, which processes language.

Table 2: Organ Disbalance Parameter Test for Brain Coherence

Bio-Well Organ Balance Parameter - Test for Brain Cohere
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		Pre-test		Post-test		
Description	n	Mean	SD	Mean	SD	p
Left Side Organ Balance	33	90.51	5.85	92.84	4.66	0.008
Right Side Organ Balance	33	91.39	4.90	92.13	4.05	0.221
Left/Right Organ Balance	33	90.95	3.92	92.49	3.02	0.013
	p value:	: <0.05 significant			<0.001 highly significa	

Through their experience with poetry as a potential healing modality, the co-researchers experienced a new approach to wellness. Some discussed how they could directly apply poetry to their daily practices in order to expand upon their existing energy healing options. Participant #28 suggested that poetry could be as effective as sound healing, stating that, "the poetry was beautiful—I believe in sound healing, and listening [to poetry] is perhaps the same as music." She also expressed how intrigued she was, "that listening to poetry can change your chakra placement." Participant #13 was amazed by, "the actual data showing that I can control my state of mind, and that I can reduce my anxiety with something as simple as poetry." In addition, she

expressed that, "seeing how my anxiety levels improved with the poetry, I will incorporate more music and poetry into my meditation practice."

Participant #25 maintained that, "This exercise identified personal areas that need love and attention and by using tools such as positive and affirming poetry, I can assist in [my own] healing." She also said that personally, "a desire was created to challenge myself with taking the time to use such tools to do the inner work to heal and balance myself." Participant #33 experienced a greater understanding through her heart, "At my heart center I saw more of my shadow self-work, a beautiful woman in a white robe, more open, and I saw her as more calmed down, which is part of my healing."

The Effect of Creating a Supportive Environment. An inadvertent finding of the data collection phase was how the management of the study itself could have an influence on the participants. Members of the cohort mentioned that research studies that incorporated clear instructions and open communication created an atmosphere of trust, allowing for the participants to better relax and respond to the questions posed by the researcher.

There also was a discernable sense of satisfaction on the part of the co-researchers who appreciated being part of the first group of participants to shape research of this kind. Participant #19 said, "The experience was one that was worth having for many reasons, namely, it feels important to participate in the growth of research around subtle energy, the instructor led our time well, it was a comfortable and interesting examination, and brought up some interesting points of focus for my life moving forward."

Participants showed a level of engagement with the poetry that surprised the researcher. Some expressed curiosity about the process of the study, and wanted to learn more. Others commented on the beauty of the poetry, and how it was different from what they had expected,

stating that the content of the sonnets had an effect closer to storytelling. For the participants who remarked on how the study was conducted, their experiences were infused with a sense of security and calm, allowing them to more deeply relax. "I thought it was a very comfortable environment for you to conduct what you are doing. I feel very at ease," said one. Participant #16 observed, "I was not surprised that I was able to go deep within myself when listening to your beautiful poetry, and your voice."

Some participants correlated their experiences with the concept of intention. Participants commented on the level of consideration and focused healing energy that they assumed had gone into writing the sonnets. Participant #31 said that, "It was the most interesting how the energies contained in the words in the poetry affected the energy of the listener of the poetry. Listening to the poetry felt like a communication with its author and reader and that I received her healing energy through her creation." Participant #22 said, "What intrigued me was how deeply moved I was by the poetry itself. I think it goes back to intention. The content resonated with love."

Participant #29 asserted, "Being here with you and the magic of the words in that poetry gave me a renewed sense of belief that there is something bigger guiding my current comprehension of it." Participant #30 said, "I could see everything you were leading me through, including some words like love, and I could see spirit guides hanging around, or intimations of that energy moving as these loving beings/guides that helped to write the sonnets—those that guided you, were also guiding me." Others expressed appreciation for the overall experience. "It was just wonderful, I really enjoyed it. It was nice to work with you," said one. Participant #33 summed up her involvement by saying, "I really enjoyed it, and I felt that it really resonated with me, this type of healing method. So, thank you."

## **Implications Based on the Research Questions**

The four initial research questions, which were crafted as guideposts in the investigation of poetry as a potential healing modality, could be distilled into two principal areas of inquiry. The first segment considered whether poetry written to capture key characteristics of the chakra system could contribute to the alignment of one's subtle energy system. The researcher also explored whether prior knowledge of the chakra system had an influence on biofeedback results.

The second set of questions contemplated the degree of transformational learning on the part of the participants based on their experiences with the study. The credence of poetry as a potential healing modality was tracked through self-reported beliefs, which included an appraisal of the likelihood that one's experience as a participant in the study would lead to engagement with poetry as a potential healing modality in the future.

The Impact of Chakra-Specific Poetry on the Chakra Energy System. Regarding the first set of research questions, including whether "poetry that is written to capture key characteristics of the ancient Vedic chakra system contributes to the subtle energy alignment of the energy system of an individual," the qualitative data unearthed considerable information related to the movement of energy within the individual chakra centers. Based on the qualitative inputs as outlined above, participants expressed the feeling of being more balanced, including shifts in their energetic systems during the experiential guided listening exercise.

The rich and varied experiences recounted by the individual participants suggested that the chakra-based poetry was indeed meaningful to them. Personal meaning-making was demonstrated by the participants' detailed accounts of their experiences, which were directly linked to specific chakras. The connections to the chakras as depicted by the participants,

contained words and imagery based on emotional, cognitive, physical and spiritual experiences, which were also aligned with the sonnets.

The primary quantitative finding of the study was that there was a statistical significance in the Stress Parameter based on the Bio-Well pre- and post-tests. This statistic was based on a one-tailed t-test that was further correlated with the qualitative data through a Chi Square test as seen in *Table 3* below. This outcome was substantial in addressing whether poetry written specifically to address the chakras could contribute to the energetic system of an individual. This result suggested that the parasympathetic systems of the participants reacted with a relaxation response during the experiential exercise, igniting the natural healing mechanism within the participants' subtle energy systems. However, the assumption that a guided listening exercise with poetry would positively affect the alignment of one's chakras did not test with statistical significance.

Table 3: Bio-Well Stress Parameter

		Pre-test Post		st-test	One-tailed t-test	Chi-Square	
Description	n	Mean SD Mean		SD	p	p	
Stress Parameter	33	3.11	0.50	3.04	0.45	0.031	0.020
	p value:	<0.05 significant		<0.001	highly significant		

Some participants wondered whether the result of decreased stress levels, as illustrated in *Table 3* above, would have been achieved with any 15-minute period of relaxation. Because the analysis of the qualitative data brought to light high levels of relaxation, considerable emotional responses, active somatic sensations, and transcendent states of consciousness, the researcher was hard-pressed to attribute these experiences to simply resting quietly for a 15-minute period, even though there was no control.

Based on an analysis of the energy parameters for all seven chakras, as noted in *Table 4* below, when considering the measurements of the energy parameters of both the consolidated and the individual measurements of the chakras, results were mixed. Statistical significance was found in the Third Eye (Ajna) chakra, with a *p* value of -0.003. A statistical significance was not found when testing the energy and alignment of the other six chakras, however. Furthermore, as it pertains to the statistical test of the collective measurements of the pre- and post-measurements of the means of both overall chakra energy and overall chakra alignment, a statistical significance was not established.

Table 4: Bio-Well Chakra Energy Parameters

	•	Pre-t	Pre-test		Post-test		
Description	n	Mean	SD	Mean	SD	Change	p
Root - Muladhara	33	5.48	0.64	5.45	0.58	-0.03	-0.112
Sacral -Svadhisthana	33	5.37	0.54	5.32	0.58	-0.05	-0.237
Solar Plexus - Manipura	33	5.55	0.57	5.56	0.61	0.01	-0.366
Heart - Anahata	33	5.48	0.64	5.45	0.58	-0.03	-0.262
Throat -Vishuddha	33	5.72	0.61	5.71	0.60	-0.01	-0.426
Third Eye - Ajna	33	4.48	0.38	4.64	0.46	0.16	-0.003
Crown - Sahasrara	33	4.64	0.38	4.72	0.45	0.08	-0.051
Chakra Energy Parameter	33	5.23	0.44	5.24	0.45	0.01	-0.395
Chakra Alignment	33	89.37	3.31	90.18	2.87	0.81	-0.075

A possible explanation for a lack of significant changes in the chakras might have been due to the overall balanced state of the cohort prior to the pre-test. According to the General Director of the Bio-Well company, the analysis of why the stress parameter would change, but the chakra alignment did not was the result of how the Bio-Well software calculates this parameter. "The Bio-Well software is an integral parameter: it corresponds to physical and

psychological stress together. So, if a person is just physiologically stressed, then it should not be reflected in the chakras" (personal correspondence with Dmitry Orlov, dated January 31, 2020).

To address the research question that contemplated if, "prior knowledge of the chakra system had an influence on biofeedback results intended to measure the alignment of one's subtle energy system," one can again first look to the qualitative data. Based on the intake questionnaire, only one out of the total cohort of 33 participants did not correctly identify a list of the seven main chakras. Participants self-reported their levels of understanding of the chakra system on a scale of 1-5 (with 1 being no familiarity and 5 being very familiar). The mean of the total population in terms of self-reported knowledge with the chakras was 3.3.

To further examine if the chakra-specific poetry had had a direct influence on the participants' energy systems, the researcher culled all of the comments from participant data that were directly related to explicit chakras. These comments were then mapped against the same individual's pre- and post-tests that were generated from the Bio-Well measurements for that specific chakra. Once charted, the data was statistically tested using a one-tailed t-test, which investigated two parameters: 1) the energy levels, and 2) the alignment percentages of the specific chakras. A total of 15 participants (45%) discussed specific chakras in detail. Of this sub-set, even though a number of the participants (n=6) reported knowledge of the chakras at the level of 3 or lower on the scale, all of these respondents offered detailed descriptions of their experiences with specific chakras (*see Appendix N: Individual Chakra Comments*).

The results of the t-test indicated a statistical significance in the energy parameters of the chakras that had been discussed in detail by the participants (n=34) whereby n is the number of times a specific chakra was commented upon in the qualitative data. This finding indicated a substantial relationship between the qualitative data depicted by the participants and the

participant's energy measurements for that particular chakra as illustrated by the outcomes of the test. Concerning the alignment percentage of an individual chakra as discussed by the participants, per *Table 5* below, a statistical significance was not found in this parameter.

Table 5: Statistical Analysis of Individual Chakra Comments

		Pre-test		Pos	st-test	
Description	n	Mean	SD	Mean	SD	p
Chakra Comments & Energy Parameter	34	5.07	0.56	5.16	0.54	0.019
Chakra Comments & Alignment Parameter						0.488
p value		<0.0	5 cioni	ficant	<0.001 his	ghly significant

What is remarkable in terms of this finding is the statistical significance of the *movement* of the energy located within those chakra centers that were explicitly discussed by the participants. Further, as can be gleaned from the qualitative data, the participants directly associated the movement of energy within their chakra systems with the sonnets that were written explicitly for each of the chakras. Although data was not collected in such a fashion to directly test this assumption, comments that conveyed how participants experienced individual chakras within their multi-dimensional bodies were potentially coupled with the same sonnets for the chakras being recited on the recorded script.

This result implied the formation of an instantaneous connection in the form of an overall energetic effect between the sonnets written for each of the chakras and the independent experiences of the participants listening to those sonnets as correlated to those same chakras.

Therefore, it was evident that poetry written with the intention to examine the seven main energy centers had a statistically significant effect on the chakra energy systems of those participants who specifically commented on the chakras included in the sonnet cycle.

In accordance with the data presented by the participants in the follow-up survey, all participants (n=21) correctly selected the list of the seven main chakras. As part of the survey, participants were asked if their understanding of their chakra energetic systems had increased, decreased or remained the same. Of the total number of respondents, 53% affirmed an increased knowledge of their chakra energy systems while 48% related no change in their personal understanding of the chakras. None of the participants indicated that they experienced a decreased understanding of the chakras as a result of their participation in the study.

Transformational Learning based on Participation in the Study. In order to contemplate the degree of transformational learning on the part of the participants, one of the research questions examined whether, "participation in an experiential listening activity, using poetry as a narrative healing modality, influences one's personal belief systems related to energy healing modalities." Participants were asked to self-report their poetry reading habits as part of the intake process. Based on the tabulation of data from the intake questionnaire, 7% read poetry daily, 33% read it occasionally, 45% rarely read poetry and 15% did not read poetry at all.

Furthermore, in the follow-up survey, participants indicated that there was no change in their poetry reading habits within the three-month follow-up period. This finding intimated that even though participants had commented positively on the beauty and the benefits of the poetry included in the study, they were not further induced to increase their personal poetry reading habits as a result of their participation.

Participants also were asked how often they sought out energy healing, and whether they believed that poetry was an energy healing modality. When asked how often they pursued energy healing, 58% responded regularly, 24% said that they occasionally sought out energy treatments, and a combined total of 15% said that they rarely or never visited an energy healing

practitioner. One participant did not respond. As it pertained to belief systems concerning poetry as a potential healing modality, one participant did not believe that poetry was an energy healing modality. The other responses were mixed, with 46% confirming that they held this belief, while 48% of respondents were unsure.

The follow-up survey collected data on any changes in the energy healing habits and participant belief systems related to poetry as a healing modality. The data sets from the intake questionnaire and the online follow-up survey were analyzed to determine "the likelihood that a participant would engage poetry as a non-invasive healing modality in the future" based on their level of belief in poetry as a potential healing modality. The significance between the mean differences of the pre- and post-survey data was tested with a one-tailed t-test while a Pearson Correlation Coefficient was utilized to test the linear relationship between these two sets of variables.

The conclusions of the follow-up survey revealed that the belief systems of the respondents—as to whether they considered poetry to be an alternative energy healing modality—increased considerably three months following the experiential component of the study. This finding was supported by both the qualitative and the quantitative data. Following a test of the self-reported beliefs associated with poetry as a potential healing modality on the intake questionnaire, and the responses to the same question in the follow-up survey, a one-tailed t-test resulted in a highly significant p value of 0.0004. Separately, the Pearson Correlation Coefficient for these same sets of data registered a significant p value of 0.0011.

This finding proposed that participation in a study that incorporated poetry as a potential healing modality positively influenced the belief systems of participants who previously had not deemed poetry to be a viable energy healing option. Experiencing an innovative and non-

invasive healing option, such as the use of poetry to increase well-being, allowed participants to obtain first-hand knowledge of the potential healing benefits of poetry. As a result, participants who had personally experienced increased levels of relaxation and calm as a result of the experiential component of the study had been swayed.

Based on their respective experiences, a highly significant number of participants had changed their minds in regards to what constituted a viable energy healing modality. The frequency of how often participants reported seeking out energy healing on the day of their visit to the lab and three months following their participation in the study, however, tested at a level of no statistical significance as noted above in *Table 6* below.

Table 6: Energy Healing Habits and Beliefs

Characteristic	Intake	Follow-up	One-tailed t-test	Pearson Correlati	ion Coefficient
	n=33	n=21	p	r	p
How often do you	seek out energ	gy healing to mana	ge wellness?		
Regularly	58%	71%			
Occasionally	24%	24%			
Rarely	12%	-			
Never	3%	5%			
No Response	3%	-			
Total:	100%	100%	0.1693	0.8439	0.1693
Do you consider poetry to b		energy healing mo	dality?		
Yes	46%	81%			
No	6%	5%			
Not Sure	48%	14%			
Total:	100%	100%	0.0004	0.6576	0.0011

Overall, participants gained valuable personal insights as a result of their participation in the study. Through the experiential component and consequent application of biofeedback, the co-researchers exhibited increased levels of personal power over their minds and bodies, while also gaining a greater sense of personal well-being. Participant #25 said, "My engagement with the study confirmed that our personal frequency is the key to wellness." Three months after her

time in the lab, she is eating better, and taking time to be in nature every day. Participant #15 concluded that, "the Poetry Study was a lovely experience in what was a very stressful year for me personally." Considering her experience in its entirety, Participant #10 said that, "Overall, I found my participation in the study to provide an avenue to self-awareness that is very much appreciated."

#### **Comparative Conclusions Based on the Literature Review**

As an emerging discipline, the research on narrative medicine has been instructive in terms of how this approach can aid medical practitioners to better understand their patients. Empathy on the part of physicians opened new avenues of dialogue with patients and their families, resulting in better care. Patients reported feeling heard, and for some, this brought comfort. As a result of narrative medicine, doctors have learned more about their patients. Traditional medicine practitioners, who previously had patient-centric practices, have learned more about themselves. As a discipline, narrative medicine is a flourishing approach, but it has not focused on those who wanted to achieve better wellness in their lives, no matter their ills.

This study did not focus on those who were combating disease. Based on the exclusion criteria, participants were not accepted if they had life-threatening diseases or if they were on daily doses of pharmaceuticals in the form of psychotropics. The reason for this was that the study of poetry as a potential healing modality is such a nascent topic of investigation, the researcher wanted to create a baseline of initial findings. Future studies could directly address the needs of those with serious illnesses as well as others who also could benefit from non-invasive healing modalities to bring about stress relief and healing.

The usefulness of guided listening exercises with poetry to reduce stress, allowing the parasympathetic system to promote the natural healing process of an individual, was a major

finding of this study. As a result, a new tributary of research has been established to support populations in need (i.e. cancer patients, those that suffer from depression, youth and adults who experience anxiety, dementia patients, over-extended parents, and burnt-out professionals among others) who could directly benefit from an immediate non-invasive healing modality to decrease their levels of stress.

By virtue of incorporating the theory of a second reading of a poem in the design of the study—an approach that was directly experienced by the researcher in a weekend workshop with John Fox prior to the completion of the methods chapter—this scholarly research reinforced the theory of how a second reading provided the basis for the embodiment of a poem. Georgia Heard, a teacher of poetry, has always used a second reading in her work. As a long-time educator, the intuitive insights guiding her approach have been verified by the findings of this study. And yet, there is still so much more to discover. Fox conveyed that there are more than aural elements to a second reading. "For instance, if it feels right to me I could ask someone to stand up or move around, noticing the tone of voice, the way words may be more inhabited in the 2nd or even 3rd reading—it is incredibly layered—and yet the basic invitation to be *heard* and *listened* to again [is what] is at the heart of it" (personal correspondence with John Fox, dated December 3, 2019).

Employing the approach of poetic inquiry extended by Prendergast et al. (2009), who coined the phrases and outlined the techniques of *vox autobiograpia* and *vox participare*, the researcher was provided with a framework to conduct the creative synthesis. These techniques allowed the researcher to better integrate the inputs of the participants into the data analysis. This approach secured the co-researchers as part of a distinct and cohesive cohort, which

included the researcher as the principal facilitator of the data collection, analysis and subsequent interpretations.

The inferences within this study have provided statistical fodder for poetry therapists and energy healing practitioners to build on the use of poetry to both reduce stress and activate the subtle energetic systems of clients. Use of subtle energy devices such as the Bio-Well, which delivered targeted biofeedback to participants so that they might better understand and determine self-directed healing methods and techniques, was an approach that could be incorporated within one's particular healing practice to promote transformational learning for their clients.

Motoyama (1978) advised that both the conscious and unconscious function together to create balance. The results of this study, as statistically analyzed through the Bio-Well psychoemotional measurements of the participants, confirmed that the human energetic system is in a constant state of dynamic adaptation through the paired organ systems. These findings were based on the Traditional Chinese Medicine concept, whereby internal organs were paired to create feedback loops of qi (energy) to balance both yin and yang elements within an organism. The heart chakra, which sits at the center of the upper and lower chakras, plays a considerable role as an energetic mediator within the chakra system. Based on the heuristic inputs provided by study participants, more than any other chakra, the heart chakra was a predominant point of discussion.

Rubik and Jabs (2007) proposed that, "where the mind goes, energy flows." This concept was corroborated by the data related to comments by participants who remarked on specific chakras as a result of their experience, and the statistical significance of the movement of energy within those chakras. When the statistical parameters based on the Bio-Well measurements for

these distinct chakras were analyzed, there was a statistical significance in terms of increased energy within the individual chakra that was commented upon.

Korotkov (2013) advocated for the use of the Bio-Well as a means for practitioners to confirm their intuitive instincts more deeply. He further proffered that the information provided by the software could substantiate initial findings by experts based on an established experimental device. This study allowed participants to individually determine how best to improve their personal states of wellness, using the information from their Bio-Well energy assessment reports to validate and expand upon the personal beliefs that they held for themselves. Initial experiences and subsequent learning, as documented by the co-researchers, inspired them to adopt alternative energy healing modalities, including the use of poetry, to improve their personal well-being.

According to Green and Green (1999), the importance of biofeedback was to provide information to contribute to a better state of being, since mental health was directly aligned with one's state of consciousness. The contributors to this study have established that consciousness, articulated through lived experiences grounded in aspects of their multi-dimensional bodies, including the gross (physical), astral (subtle) and causal (wisdom) bodies, is directly aligned with wellness. Furthermore, this state of well-being could be enhanced by employing poetry as a potential healing modality.

#### **Chapter 5: Concluding Remarks and Future Considerations**

In her ground-breaking study with Tibetan Singing Bowls, Goldsby (2016) described how the process of sound meditation did not need to be learned in order for one to realize its benefits. Rather, one could merely sit back and listen, allowing the sounds to softly wash over them. As part of the guided listening exercise in this study, participants were asked to listen to a sonnet cycle written to highlight key characteristics of each of the seven chakras. During the first listening, participants were instructed to consider the words if they chose, but prior to the second listening, they were asked to allow the words to wash over them as if they were music.

As a result of their participation in the study, the cohort of co-researchers were offered an opportunity to clear their minds and experience a meditative state. When recounting their experiences, participants overwhelmingly reported feeling calmer, more peaceful and much more relaxed after the guided listening experience, igniting the parasympathetic systems within their organisms. When the parasympathetic system is galvanized, the relaxation response awakens, lowering blood pressure and mitigating the fight-or-flight response (Benson & Klipper, 2000; Peper et al., 2008; Tiller et al., 1996, Yeung et al., 2014).

Additional physiological reactions to the relaxation response included the release of endorphins, which served to relax muscles in addition to increasing blood flow and elevating levels of oxygen throughout the body. These physiological responses cascaded through the body as a result of the relaxation response, clearing toxins and promoting cellular renewal. Since the body went into relaxation mode when the parasympathetic system was activated, healing could be presumed when an individual was relaxed.

#### **Poetry as a Potential Healing Modality**

As a benefit of immersion in the study, virtually all participants reached a deep state of relaxation, allowing for the natural healing process to take place. As originally reported by the co-researchers, and as further confirmed by the statistical significance of the reduction of the stress parameters based on the energy reports of the participants, one could conclude that a guided listening exercise with poetry potentially acted as a precursor to self-directed healing.

As a result of their participation, the cohort of co-researchers expanded their personal belief systems as it related to energy healing, and more specifically in relation to the usage of poetry as a potential healing modality. Those that previously had not considered poetry as a healing modality, identified how incorporating poetry into their personal wellness repertoires alongside other practices such as yoga, sound healing and meditation could positively benefit them. Understanding how a guided listening exercise with poetry had reduced their stress levels, those who had previously been readers of poetry were prompted to resume reading and/or listening to poetry with a new perspective.

Individuals described an appreciation of how the benefits triggered by the use of poetry had positively reinforced their psycho-emotional health. One participant expressed how she had experienced many spiritual changes as a result of her participation in the study, even though the reasons for these changes remained unknown to her. What was not baffling, however, was how her daily life had been transformed. She felt calmer and was incorporating more self-care into her daily practices, including more meditation and yoga in addition to setting boundaries within her relationships. Participant #32 explained how one of the results of her experience was that she was being more mindful of things that could be stressful.

Participant #33 expressed that the, "poetry practice and what I experienced on my lower chakras energetically during the practice was very calming and relaxing, and it was divine timing for me to experience this practice while I was going through some deep physical and emotional release." But poetry was only one of the many healing modalities that Participant #33 practiced in the three months following the study. For this reason, she could not definitively attribute her sense of increased well-being directly to her participation in the study or to the element of poetry alone. Rather, her experience illustrated how a combination of customized healing modalities could contribute to an overall sense of well-being. As summarized by this participant and others, poetry was considered to be one in a number of energy healing techniques at one's disposal.

#### The Second Reading as a Means to Embody a Poem

Many of the somatically related experiences outlined by the participants centered on distinctive sensations during the second reading of the poetry during the experiential component of the study. Specific comments by a wide-ranging majority of the participants, were embedded throughout this dissertation. These findings buttressed the theory submitted by John Fox, founder of the Institute for Poetic Medicine, who submitted that listening to a poem twice allows the listener to embody the poem. As further noted by Fox, however, additional techniques such as standing and/or moving while listening to or reading a poem, could further augment the incarnation of a piece. In addition, it was equally important that the reader or writer of a poem be afforded the opportunity to truly be heard.

#### **Considerations When Incorporating the Bio-Well Device**

Use of new technologies, such as the Bio-Well, to provide biofeedback on the state of one's psycho-emotional health, promoted self-directed corrective actions on the part of participants. Contributors noted that the technology was exciting, informative and visually

innovative, inspiring them to create more balanced lifestyles. They also expressed that the comprehensive nature of the energy reports could be somewhat puzzling, and some participants suggested that additional support in the interpretation of the results could be helpful.

Although both the stress and energy level parameters for these biomarkers in the Bio-Well software provided clear statistical measurements based on the bio-grams, there was some question as to how to interpret the alignment of the chakra measurements. Due to the generally healthy sample of the cohort (i.e. none had any known diseases or daily pharmaceutical intake), the alignment of the chakras for the participants were almost exclusively in the normal ranges. Each participant had had six scans (three before and three after the listening exercise), but there were no assessable changes within the pre- and post-test data sets as it pertained to the alignment of the chakras.

Participants self-reported that they had experienced increased energy and/or movement within specific chakras. And, although the reported energy levels of these energy centers were pegged to the energy parameters of the corresponding chakras as outlined in the participants' energy reports, the measurements of these same chakras were not systematically affected in terms of alignment. The chakra energy centers might therefore be more dynamic than previously imagined.

Much like the parasympathetic and sympathetic systems (as presented in the successive viewing of the Balance tabs of the six Bio-Well measurements) proved to be in a constant state of flux to achieve homeostasis through an ever-changing variety of organ systems, the chakras were also in constant states of fluctuation. Rather than being in a straight-line state of alignment to exemplify well-being, the results of this study suggested that one's energetic centers might instead be in an ongoing state of *achieving* alignment.

As a result of a statistical review of their energy report measurements, only a small number of participants had straight-line alignment (i.e. more than 95% alignment) of their chakras, and this was usually only true for one scan. To illustrate this point, none of the participants had chakras that were consistently aligned within either of the pre- or post-Bio-Well sets of scans, even though the measurements for these separate data sets were taken within minutes of one another.

The findings from this study confirmed active energetic patterns of the chakras. As such, future revisions of the Bio-Well measurement calculations might more comprehensively include how information on the alignment of the chakras is presented and explained in the energy reports that are generated from the software. Furthermore, creating an element within the Bio-Well software that allows for animated imaging of multiple measurements of the stress and chakra alignment parameters, for example, would better exemplify the actual inner workings of one's energetic body. Through animation of select Bio-Well parameters, one no longer would be given static snapshots of a single moment in time, as is currently conveyed through the energy reports. Multiple measurements taken in sequence, that are presented in a pulsating manner, would more clearly portray the vibrant, ever-expanding energetic beings that we are constantly in a state of becoming.

#### **Limitations to the Study**

The study promoted self-discovery by providing participants with experiential exercises and energy reports, based on biofeedback, to enhance personal transformational learning directly related to the states of their subtle energy systems. As this information was new to most, participants had the opportunity to explore the application of an emerging subtle energy device and its implications to their individual wellness. As these learnings were profoundly personal in

nature, outcomes from the qualitative components of the study were not immediately comparable.

Due to the exploratory nature of the study, and being that there was no prior research on the topic to build upon, it was necessary to create a baseline with a cohort of generally healthy participants. For this reason, there was not a randomized control. Although lack of a control did not adversely affect the transformational learning and/or personal insights attained by the participants based on the qualitative component of their participation, this was a limitation of the study. Incorporating a control would have been useful in relation to the statistical findings to reduce the potential of the "Hawthorne Effect," whereby positive outcomes might be for a variety of reasons, which are not specific or easily discernable (McCarney et al., 2007).

The quantitative aspects of the study addressed the research questions through comparison of pre- and post-Bio-Well measurements to determine statistical significance within homogeneous pre- and post-test data sets. Given the study sample size, the findings were not readily generalizable. Future research, stemming from the findings of this study, could build on the conclusions herein to address these limitations.

The intention of the researcher, who was very engaged with the study participants, and who exhibited a high degree of passion for the topic of poetry, might have triggered potential bias. Also, the fact that the researcher was the author of the sonnets, and the scripted poetry recording was conducted with the voice of the researcher, also could have presented possible bias. Although participants were not told prior to the guided listening exercise that the researcher was the author of the sonnet cycle, if they asked after the experiential component, this information was shared. Another variable and potential element of bias was the voice of the

researcher, who was a female with professional speaking experience who possessed an accent that could be tagged to the central states of the US, and more particularly to Minnesota.

At the same time, use of the researcher's voice in the guided listening exercise served to control variables. Since the researcher already had connected with the participants, they did not need to experience a different voice, thereby introducing an additional unfamiliar factor into the experiential component. By hearing the author's voice on the recording, the co-researchers remained connected to the researcher throughout the entire process while in the lab.

One of the weaknesses of the study, identified by the researcher during the data analysis phase, was that the psychological instrument (in the form of the FACIT Spiritual Well-being Questionnaire) was only administered once, prior to the listening exercise. Future studies could contain a more comprehensive approach to the incorporation of psychological instruments to include both pre- and post-testing in order to more systematically test self-reported data.

Subsequent to the data collection phase of the study, the researcher was introduced to a number of additional instruments that could benefit future studies comparable in design. These instruments included: 1) the Multidimensional Assessment of Interoceptive Awareness (MAIA), an instrument that measures components of "intreroception," which is inclusive of perceptions stemming from body awareness, emotions and belief systems among others (Bornemann, Herbert, Mehling & Singer, 2015); 2) the Interpersonal Reactivity Index (IRI), a measure of empathy (Davis, 1983); and 3) the Tellegen Absorption Scale, which considers the capacity of an individual to integrate experiences deemed "self-altering" (Tellegen & Atkinson, 1974).

#### **Implications for Future Research**

The findings of this study have laid the groundwork for the future study of poetry within the evolving field of subtle energy research. Since research that explores poetry as a potential

healing modality is an emerging area of investigation, there are dozens of directions that researchers can take in the future to expand upon this budding area of inquiry. A number of considerations for future research with poetry are offered below.

Being that the findings included a wide range of emotional, physical and cognitive experiences, as reported following the guided listening exercise with poetry, future research could explore the concept of "interoception." As described by Mahler (2015), this growing topic of research is based on an approach that results in concrete tactics to increase an individual's well-being by better understanding and regulating one's multiple sensory systems. Research incorporating interoception systems embodied the study of conditions raging from autism to eating disorders, and also embraced trauma, anxiety and depression. As such, future research on poetry as a potential healing modality could consider the impact of guided listening exercises with poetry on the interoception systems of targeted groups with specific conditions.

Other forms of biofeedback could also be incorporated into future poetry studies. The HeartMath Institute has done extensive research on appreciation and how a direct focus on gratitude positively smoothed out the heart rhythm patterns of an individual. Future research could examine the heart rate variability of persons after a guided listening exercise with various types and genres of poetry. This could also include poetry in foreign languages, since the theory is that poetry is like music and as such, the language would be less of an impediment to the relaxation response than the tempo and tenor of the poem.

Foundations such as the Alzheimer's Poetry Project (APP), which aims to stimulate the minds of persons with dementia, use arts-based and non-invasive therapy to provide meaningful experiences to those with memory loss so that they might experience moments of joy. Future research with guided listening exercises that incorporates poetry, especially lyrical poems or

poems that have a special significance to patients, could further advance the use of non-invasive therapies for dementia patients. Studies of this sort would further complement current research being done on music (especially from genres and timeframes that are meaningful to dementia patients) as a means to provide comfort and connection to those experiencing memory loss.

Finally, further exploration of poetry as a potential healing modality could include studies whereby participants craft poems in their own voice, with biofeedback providing personal insights and/or the ability to quantify results. Future experiments also could employ a control, and might even choose to add music as a variable and/or the sounds associated with each of the chakras. This would allow researchers to delineate the effects of additional inputs in order to investigate poetry as if it were a form of music.

#### Conclusion

The purpose of the study was to investigate poetry as a potential healing modality in order to address the gap in scholarly, evidence-based research on the effects of poetry on the psycho-emotional states of individuals. As this was the first study of its kind, there were no other findings that could be used for comparison. And, although there were some critical findings in this study, the effects of poetry writ large were not considered, only the use of a guided listening exercise with chakra-specific poetry was investigated.

As a result of the study, the assumption related to the greater alignment of one's chakras following a guided listening exercise with poetry was not confirmed. Nonetheless, results suggested that energy healing modalities, including poetry, could have an immediate and positive influence on the psycho-emotional health and well-being of an individual, including the effect of decreasing levels of stress.

Of most significance, the experience of a 15-minute guided listening exercise with poetry decreased stress levels among participants, activating their parasympathetic systems by igniting the relaxation response, a precursor to the healing mode within an individual. Further, gaining a deeper understanding of the energetic nature and dynamic functioning within their multi-dimensional bodies awakened a sense of wonder in participants. This newfound appreciation for their psycho-emotional well-being, inspired co-researchers to devise individualized strategies to better manage their personal wellness.

Not only were the participants introduced to a new mode of energy healing and its effects on their physical and emotional states, but they also were presented with the *internal energetic interactions* of their subtle energy systems as a result of their experiences with this new healing modality. Thus, the study had the outcome of promoting self-discovery by permitting participants to acquire a better appreciation of their inner selves. New perspectives gained through their personal experiences were detailed in the qualitative data in terms of how participants would better manage their psycho-emotional health in the future.

Being reminded of the importance of maintaining a balanced lifestyle was a lesson that clearly resonated with the co-researchers. Although many already had active and varied wellness practices, their catalogue of energy healing choices was expanded to include guided listening exercises with poetry. The influence of experiencing a new energy healing modality was demonstrated in the marked shifts in outlook as reported by the participants, compared to their views prior to the study. As a result of the experiential component of the study, participants changed their opinions, later reflecting more positively on poetry as a component within the realm of energy healing.

The future study of poetry as a non-invasive healing modality is promising. Based on the research findings presented herein, an exploration to better understand the potential effects of poetry on personal well-being has begun. Many new and primary pathways for future studies of this type await researchers. Future participants may also benefit from further investigation of the topic, especially when given the opportunity to experience poetry as a potential healing modality for themselves.

Finally, the findings of this study are a tribute to the co-researchers. Based on the generosity and thoughtfulness that each of the participants demonstrated throughout the process of the study, others may be inspired to investigate options to traditional forms of healing as a means of exploring their own inner lives.

#### References

- Anderson, R. & Braud, W. (2011). *Transforming self and other through research: Transpersonal research methods and skills for the human sciences and humanities*. Albany: State University of New York Press.
- Anodea, J. (2004). (Revised) Eastern body, western mind: Psychology and the chakras system as a path to the self. New York: Celestial Arts.
- Anodea, J. (1999). Wheels of life: A user's guide to the chakra system. Woodbury: Llewellyn.
- Balaban, R.S., Nemoto, S., Finkel, T. (2005). Mitochondria, oxidants, and aging. *Cell 120*, 483-95.
- Barush, A., Gringeri, C. & George, M. (2011). Rigor in qualitative social work research: A review of strategies used in published articles. *Social Work Research*, *35*(1), 11-19.
- Beeman, M. J., Bowden, E. M., & Gernsbacher, M. A. (2000). Right and left hemisphere cooperation for drawing predictive and coherence inferences during normal story comprehension. *Brain and language*, 71(2), 310–336. doi:10.1006/brln.1999.2268.
- Benson, M. & Klipper, M. (2000). The relaxation response. New York: Harpertorch.
- Bowyer, S.M. (2016). Coherence a measure of the brain networks: past and present. *Neuropsychiatric Electrophysiology* 2(1). doi.org/10.1186/s40810-015-0015-7.
- Braud, W. & Anderson, R. (1998). *Transpersonal research methods for the social sciences: Honoring human experience*. Thousand Oaks: SAGE Publications, Inc.
- Carrol, R. (2005). Finding the words to say it: The healing power of poetry. *Evidence Based Complementary and Alternative Medicine*, 2(2), 161-172.
- Charon, R. (2006). *Narrative medicine: Honoring the stories of illness*. New York: Oxford University Press.
- Charon, R. (2017). *The principles and practice of narrative medicine*. New York: Oxford University Press.
- Chretien, K.C., Swenson, R., Yoon, B., Julian, R., Keenan, J., Croffoot, J., & Kheirbek, R. (2015). Tell me your story: A pilot narrative medical curriculum during the medicine clerkship. *Journal of General Internal Medicine* 30(7), 1025-1028.

- Clandinin, D. J., & Huber, J. (2010). Narrative inquiry. In B. McGaw, E. Baker, & P. P. Peterson (Eds.), *International encyclopedia of education* (3rd ed.), 436-441. New York: Elsevier.
- Creswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks: SAGE Publications.
- Dale, C. (2016). *Llewellyn's complete book of chakras: Your definitive source of energy center knowledge for health, happiness, and spiritual evolution.* Woodbury: Llewellyn.
- Dale, C. (2009). *The subtle body: An encyclopedia of your energetic anatomy*. Boulder: Sounds True.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44(1), 113-126.
- Deo, G., Itagi, R.K., Thaiyar, M.S., Kuldeep, K.K. (2015). Effect of anapanasati meditation technique through electrophotonic imaging parameters: A pilot study. *International Journal of Yoga* 8, 117-21.
- Desalvo, L. (2000). Writing as a way of healing: How telling our stories transforms our lives. Boston: Beacon Press.
- Fedorenko, E., & Varley, R. (2016). Language and thought are not the same thing: evidence from neuroimaging and neurological patients. *Annals of the New York Academy of Sciences*, *1369*(1), 132–153. doi:10.1111/nyas.13046,
- Fischer, C.T. (2009). Bracketing in qualitative research: Conceptual and practical matters. *Psychotherapy Research* (19)4-5, 583-590. DOI:10.1080/10503300902798375.
- Fox, J. (1997). *Poetic medicine: The healing art of poem-making*. New York: Jeremy P. Tarcher/Putnam.
- Francella, F. & Dalton, P. (2000). *Personal construct counseling in action* (2nd ed.). London: Sage Publications.
- Gerber, R. (2001). *Vibrational medicine: The #1 handbook of subtle-energy therapies.*Rochester: Bear & Company.

- Glesne, C. (1997). That rare feeling: Re-presenting research through poetic transcription. *Qualitative Inquiry 3*(2), 202-221.
- Goldsby, T.L., Goldsby, M.E., McWalters, M., & Mills, P.J. (2017). Effects of singing bowl sound meditation on mood, tension, and well-being: An observational study. *Journal of Evidence-based Complementary & Alternative Medicine*, 22(3), 401–406. doi:10.1177/2156587216668109.
- Green, E. & Green, M. (1999). Biofeedback and states of consciousness. *Subtle Energies & Energy Medicine 10*(3), 180-220.
- Haberlin, S. (2017). The butterfly whisperer: Representing a gifted student's connection with nature through poetic inquiry. *Journal of Poetic Therapy (30)*4, 209-217.
- Heard, G. (2009). Celestino: A tribute to the healing power of poetry. *Voices from the Middle* (16)3, 9-14.
- Heron, J. (1996) *Co-operative Inquiry: Research into the human condition*. Thousand Oaks: SAGE Publications.
- Ho, M.W. (1997). Quantum coherence and conscious experience. Kybernetics (26), 265-276.
- Ho, M.W. (2008). *The rainbow and the worm: The physics of organisms*. New Jersey: World Scientific.
- Hunter, M.D., Sokhi, D.S., Wilkinson, I.D., Woodruff, P.W.R. (2005). Male and female voices activate distinct regions in the male brain. *NeuroImage* 27(3), 572-578. Retrieved from https://doi.org/10.1016/j.neuroimage.2005.04.023.
- Ingalls, Z. (1997). A professor of medicine discovers the healing power of poetry. *The Chronicle of Higher Education (43)*25, B8.
- Josselson, R., & Lieblich, A. (2003). A framework for narrative research proposals in psychology. *Up close and personal: The teaching and learning of narrative research*, 2, 259-274.
- Kafatos, M.C., Chevalier, G., Chopra, D., Hubacher, J., Kak, S., Theise, N.D. (2015). Biofield science and healing: Toward a transdisciplinary approach. *Global Advances in Health and Medicine 4(suppl)*, 25-34.

- Korotkov, K. (2002). *Human energy field study with GDV bioelectrography*. New Jersey: Backbone Publishing Co.
- Korotkov, K., De Vito, D., Arem, K., Madappa, K., Williams, B., & Wisneski, L. (2009). Healing experiments assessed with electrophotonic camera. *Subtle Energies & Energy Medicine*, 20(3), 33-40.
- Korotkov, K., Matravers, P., Dmitry, V., Orlov, M.S., & Williams, B.O. (2010). Application of electrophoton capture (EPC) analysis based on gas discharge visualization (GDV) technique in medicine: A systematic review. *The Journal of Alternative and Complementary Medicine* (16)1, 13–25.
- Korotkov, K., & Yakovleva, E. (2013). *Electrophotonic applications in medicine: GDV bioelectrography research*. San Bernardino: CreateSpace.
- Korotkov. K. (2016). Recent advances in Electrophotonic Image Processing. doi:10.2174/2451827105666160125232527.
- Korotkov, K. (2017). The energy of health. San Bernardino: CreateSpace.
- Lepore, S.J. (1997). Expressive writing moderates the relation between intrusive thoughts and depressive symptoms. *Journal of Personal Social Psychology* (73)5, 1030-1037.
- Mahler, K. (2015). Interoception: The eighth sensory system. Shawnee: AACP Publishing
- Mazza, N. F., Hayton, C. J. (2013). Poetry therapy: An investigation of a multidimensional clinical model. *The Arts in Psychotherapy 40*, 53-60.
- McCarney, R., Warner, J., Iliffe, S., van Haselen, R., Griffin, M., Fisher, P. (2007). The hawthorne effect: a randomised, controlled trial. *BMC Medical Research Methodology* 7(30). doi.org/10.1186/1471-2288-7-30.
- McCraty, R., Barrios-Choplin, B. Rozman, D., Atkinson, M., Watkins, A.D. (1998). The impact of a new emotional self-management program on stress, emotions, heart rate variability, DHEA and cortisol. *Integrative Psychological and Behavioral Science* 33(2), 151-170.
- McCraty R., Atkinson M., Tomasino D., Bradley R. T. (2009). The coherent heart: heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order. *Integral. Rev.* 5 10–115.

- Mehling, W. E., Price, C., Daubenmier, J. J., Acree, M., Bartmess, E., & Stewart, A. (2012). The Multidimensional Assessment of Interoceptive Awareness (MAIA). doi:10.1371/journal.pone.0048230.
- Motoyama, H. & Brown, R. (1978). *Science and the evolution of consciousness: Chakras, ki and psi*. Brookline: Autumn Press.
- Motoyama, H. (2011). *Theories of the Chakras: Bridge to Higher Consciousness*. Encinitas: CIHS Press.
- Moustakas, C. (1990). *Heuristic research: Design, methodology, and applications*. Thousand Oaks: SAGE Publications, Inc.
- Moustakas, C. (1994). *Phenomenological Research Methods*. Thousand Oaks: SAGE Publications, Inc.
- Muehsam, D., Chevalier, G., Barsotti, T., Gurfein, B.T. (2015). An overview of biofield devices. Global Advances in Health and Medicine 4(suppl), 42-51.
- Myers, J. & Young, S. (2012). Brain wave biofeedback: Benefits of integrating neurofeedback in counseling. *Journal of Counseling and Development 90*(1), 20-29.
- Pennebaker, J.W. (2004). Writing to heal: A guided journal for recovering from trauma and emotional upheaval. Oakland: New Harbinger Publications, Inc.
- Peper, E., Tylova, H., Gibney, K., Harvey R., Combatalade, D. (2008). *Biofeedback mastery: An experiential teaching and self-training manual*. Wheat Ridge: Association for Applied Physiology and Biofeedback.
- Pereira, P. (2007). The healing power of poetry. *The Writer* (120)3, 15-17.
- Polkinghorne, D. (2007). Validity issues in qualitative research. *Qualitative Enquiry* (13)4, 471-476. doi:10.1177/1077800406297670.
- Polkinghorne, D. (1988). *Narrative knowing and the Human Sciences*. Albany: State University of New York.
- Polkinghorne, D. (1983). *Methodology for the human sciences: Systems of inquiry*. Albany: State University of New York.

- Prendergast, M., Leggo, C., & Sameshima, P. (2009). *Poetic inquiry: Vibrant voices in the social sciences*. Boston: Sense Publishers.
- Ramey, H.L., Young, K., Tarulli, D. (2010). Scaffolding and concept formation in narrative therapy: A qualitative research report. *Journal of Systematic Therapies* (29)4, 74-91.
- Roscoe, L. (2012). Healing the physician's story: A case study in narrative medicine and end-of-life care. *Narrative Inquiry in Bioethics* (2)1, 65-72.
- Rubik, B. (2002). The biofield hypothesis: Its biophysical basis and role in medicine. *The Journal of Alternative and Complementary Medicine*, 8(6), 703-717. doi:10.1089/10755530260511711.
- Rubik, B., & Brooks, A.J. (2005). Digital high-voltage electrophotographic measures of the fingertips of subjects pre- and post-qigong. *Evidence Based Complementary and Integrative Medicine*, *2*(4), 245-252. DOI:10.2165/01197065-200502040-00007.
- Rubik, B., & Jabs, H. (2017). Effects of intention, energy healing and mind-body states on biophoton emissions. *Cosmos and History: The Journal of Natural and Social Philosophy* (13)2, 227-247.
- Rubik, B., Muesham, D., Hammerschlag, R., & Jain, S. (2015). Biofield science and healing: History, terminology, and concepts. *Global Advances in Health and Medicine 4(suppl)*, 8-14.
- Sperry, R. W. (1968). Hemisphere deconnection and unity in conscious awareness. *American Psychologist*, 23(10), 723.
- Tassone, B. (2017). The relevance of Husserl's phenomenological exploration of interiority to contemporary epistemology. *Palgrave Communications 3*. doi:10.1057/palcomms.2017.66.
- Tegnér, I., Fox, J., Phillipe, R., & Thorne, P. (2009). Evaluating the use of poetry to improve well-being and emotional resilience in cancer patients. *Journal of Poetry Therapy* 22(3) 121-131.
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences, a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83(3), 268-277.

- Tiller, W., McCraty R., Atkinson M. (1996). Cardiac coherence: a new, noninvasive measure of autonomic nervous system order. *Alternative Therapies in Health and Medicine*, 1, 52-65.
- Tovey, P, & Manson, N. (2004). Story teller or story analyst? How useful is the storied narrative for a critical sociology of CAM and nursing? *Journal of Health Organization and Management* (18)4, 226-239.
- Tufford, L. & Newman, P. (2010). Bracketing in qualitative research. *Qualitative Social Work* (11)1, 86-96. DOI: https://doi.org/10.1177/1473325010368316.
- Urdan, T. (2010). Statistics in Plain English (3rd ed.). New York: Routledge.
- Valverde, P. (2016). A quantum biofeedback and neurotechnology for support of transpersonal psychotherapy. *NeuroQuantology* (14)4, 780-790.
- Varghese, K.J., Koshy, M.E., Soumya, M., Silvipriya, K.S., & Resmi, S. (2010). Holistic medicine: Stepping stones of new life in modern medicine. *The International Journal of Pharmaceutical Science and Research 1*(10), 1-10.
- Wolter, J.A., DiLollo, A., & Apel, K. (2006). A narrative therapy approach to counseling: A model for working with adolescents and adults with language literacy deficits. *Language, Speech & Hearing Services in Schools* (37)3, 168-177.
- Yeung A., Slipp L.E., & Niles H. (2014). Effectiveness of the relaxation response-based group intervention for treating depressed Chinese American immigrants: A pilot study *International Journal of Environmental Research and Public Health (11)*9, 9186–9201.
- Zak, P. (2015). Why inspiring stories make us react: The neuroscience of the narrative.

  \*\*Cerebrum\*. Retrieved from https://www.dana.org/Cerebrum/2015/Why\_Inspiring\_Stories\_Make\_Us\_React\_The\_N\_euroscience\_of\_Narrative/

#### Appendices

## Appendix A: Sonnet Cycle of the Seven Chakras



### 1. Muladhara (The Root Chakra)

Closing my eyes, as angels stand guard, I
Fall quickly and quietly toward the earth.
As I descend singularity my
Vibration gains density. With a slap,
I am born. Swaddled in a field of dreams
I take my first breath, grasping Gaia's slim
Fingers as gravity lays me down. I
Sense my existence and let go a yelp.
Primal feelings lace my memories in
A delicate shroud. Forgotten not have
I from whence I have come. Still, I am stunned.
Anodea Judith says to find our
Form we need only look toward our ground. I
stare back in wonder. My search has begun.

## 2. Svadhisthana (The Dwelling Llace of Self)

Seat of sexuality, element
Of water. Release and containment in
Equal measure. An effortless movement.
Locomotion of emotion as the
Lotus unfolds one petal at a time.
Too many at once excessive, too few
Less divine. United is the whole of
Individuation. Creation of
A "fuzzy logic" beyond zeroes and
Ones. In the center of the ocean one
Finds the outlines of the soul, six-petaled.
"Soul," an individual expression
Of spirit. "Spirit," the universal
Expression of self. Sensual in form.

# 3. Manipura (City of Gems)

The warmth of sensuality rises From below. At the center of the sun, Success shines brightly. Doubt yourself not here. The power of your will resides in "clear Sensing" within fields of information.
Rise above it, and you will fall in love.
The base of spirituality thrives
When energy flows downward before it
Reaches back up, defying gravity.
Don't be fooled, no matter how deep the wounds.
To heal them, movement and emotion are
Essential elements. Trust. Let go as
"the natural healing process takes place
under the bandage." Honor your power.

### 4. Anahata (The Heart Chakra)

As the Father of creation holds out
His hand, within his fist the heart of a
Woman is transformed. Conscious unity
In perfect balance. The healing of the
Sacred revolves here. To heal the heart is
To heal the whole of the subtle world. The
Color of nature the language of love.
The twelve-petaled lotus teaches us well:
To keep our ego in check, step with our
Shadow into the light, nurture both sides
Of our soul. At the center, sparked by the
Union of heaven and earth, resides the
Divine. Anima/animus. A child,
Knowing she is enough just as she is.

#### 5. Vishuddha (Lurification)

As the surrounding earth vibrates, blue light dances as the storyteller chants. The sense of timing is impeccable. All within listening range are enraptured. "I share with you what springs from the bottom of my heart," we are told. One can also find balance in affirmations. "I hear and speak the truth. I express myself with clear intent. Creativity flows in and through me." Anodea Judith said. "My voice is necessary." Yet, many shy away from what needs most to be said. Give voice to your thoughts. Soundwaves double in Amplitude when combined, creating strength.

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<sup>&</sup>lt;sup>4</sup> Judith, A. (2013), Eastern Body, Western Mind: Psychology of the Chakra System as a Path to Self. p. 151.

### 6. Ajna (Lerception and Self-Realization)

Beyond the imagination is the Song of symbols. Patterns of perception Drawn from the base of our identify. Behind the curtain of the unconscious One finds not a pile of rubbish, Jung said. This is where our individual lives Are determined in invisible ways. Through intuition, one gains an enhanced Awareness of oneself. False impressions Dissolve. With our full potential in view, We are free to form our own mandalas. We manifest ourselves through this chakra, Creating, in Dale's words: *a stream of grace*. <sup>5</sup> Before our own eyes, consciousness takes shape.

# 7. Sahasrara (The Crown Chakra)

How is it, I wonder, that the world can Contain such iridescence? How is it That energy pulsates from the deepest Throes of the cosmos to the center of My soul? Ever present. Defying space And time. A lightness of being void of Mass. Free of words. Except one. Love. As we Develop within the circle of life, Within our own microcosmic orbit, We breathe. At our crown, we both receive and Release. With our bodies planted firmly, We are free to raise our hearts and transcend. A gold pileus graces the sky. As the flock approaches, I spread out my wings.

<sup>5</sup> Dale, C. (2013). The Subtle Body Practice Manual: A Comprehensive Guide to Energy Healing.

#### **Appendix B: Recruitment Flyer**

# Join a Ground-Breaking Research Study and Get a FREE Energy Assessment

In addition to a free copy of Borderland: An Exploration of States of Consciousness in New and Selected Sonnets as a gift

Both gifts valued at \$185



# **Electrophonic Imaging as Biofeedback**



The Biowell is used to measure the alignment of the chakra system, the subtle energy centers of the body in the ancient Vedic tradition. The fluorescent images (right) obtained from the fingertips are an effective means to identify areas of congestion within the body, and measurements taken by the software can be used to address imbalance on both the physical and emotional levels.

# The study will contribute to cutting-edge research on alternative healing modalities

The purpose of the study is to assess the effect of poetry on an individual's psycho-emotional health through electrophonic imaging.

The elements of the study include a listening exercise and measurements of the fingertips with the Biowell device, providing participants with biofeedback on the state of their energetic body.

The study will be held at the CIHS lab in October 2019.

Slots are filling up quickly, claim your spot now!



701 Garden View Court Encinitas, CA 92024



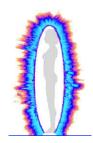
CIHS Ph.D. Candidate

Julie R. Dargis
is conducting research on
poetry as a non-invasive
healing modality.

To Sign-up, contact Julie at: <a href="mailto:julie.dargis@gmail.com">julie.dargis@gmail.com</a>

Tel: 612.516.2150

#### **Energy Body Assessment**



Personal energy assessment of the human body based on Biowell measurement.

#### Chakra Alignment Report



Reading of psycho-emotional health based on imaging of the fingertips following measurement with the Biowell.

#### **Appendix C: Informed Consent Form**

#### INFORMED CONSENT FORM

- 1. **Purpose.** The purpose of the study is to explore poetry as a narrative healing modality.
- 2. **Methodology.** This study will use questionnaires with self-reported responses. Biofeedback, in the form of electrophotonic imaging using the Bio-Well device to measure the psycho-emotional health of participants prior to and after an experiential listening exercise will also be incorporated.
- 3. Study Design Implementation. The study has six main components: 1) initial intake, which will include a) signing the informed consent form; b) completing an intake questionnaire, and c) completing the FACIT Spiritual Wellness Questionnaire; 2) biofeedback baseline measurement with the Bio-Well devise; 3) an experiential listening exercise; 4) a post-test with the Bio-Well to measure any changes in the subtle energy system; 5) an oral interview, which will also include the option to participate in a reflective writing exercise; and 6) an online survey 90 days after the experiential phase of the study.
- **4. Risks and Benefits of Participation**. No physical or psychological risks are anticipated as a result of participation in the study. Potential benefits are two-fold and include: 1) an increased awareness of the participant's subtle energetic psycho-emotional health; and 2) a greater understanding of the chakra system based on a personalized Bio-Well analysis report, which will be provided to the participant electronically.
- **5. Exclusion Criteria**. The study includes three exclusion criteria. Prior to the session, participants will be asked to confirm that they: 1) do not have a life-threatening disease as diagnosed by a physician; 2) are not currently on any psychotropic drugs as prescribed by a medical doctor; and 3) do not have an embedded electronic devise such as a Pacemaker or Vagus Nerve Stimulator.
- **6. Voluntary Participation**. Participation is completely voluntary, and participants may choose to withdraw at any time without penalty or prejudice.
- 7. Confidentiality. No personal information collected as part of this study will be shared with anyone outside of the researcher. When analyzing data, non-identifying coding will be used by the researcher and statisticians in lieu of personal data markers. Data collected will be stored in a locked facility, and any electronic data will be password protected.
- **8.** Contact Information. For any questions or concerns that you may have at any time during or following participation in the study, contact Julie Dargis, the lead investigator at: Email: julie.dargis@gmail.com or Mobile: (612) 516-2150.

For information on potentially transformative experiences related to participation in this study, visit the American Center on Integrated Spiritually Transformative Experiences website at: <a href="https://www.aciste.org">www.aciste.org</a>.

By signing below, I confirm my understanding of the above.

Name (please print)	Signature_	Signature				
Date:						

# Appendix D: Initial Intake Questionnaire

1.	Naı	me: (assigned code):	
2.	Co	ntact (place of residence/phone/email)	
	a.	Address:	
	b.	Email: Phone: ()	_
3.	Ag	e:	
4.	a.	nder (circle one) Male Female	
5.	Wh	nat is your native language?	
6.	a. b. c.	w often do you read poetry? (circle one) Daily Occasionally Rarely Never	
7.	no	3 4	1 <u>g</u>
8.	a.	Base, Hands, Heart, Core, Skull, Sight, Sky Root, Sacral, Solar Plexus, Heart, Throat, Third Eye, Crown Ground, Sun, Moon, Spine, Lungs, Vision, Mind	
9.	e. f. g.	w often do you seek out energy healing modalities to manage your wellness? Regularly Occasionally Rarely Never	
10.	a.	you consider poetry to be an energy healing modality? Yes No Not Sure	

# **Appendix E: FACIT Spiritual Well-being Questionnaire**

# FACIT-Sp (Version 4)

Below is a list of statements that other people have said are important. Please circle or mark one number per line to indicate your response as it applies to the <u>past 7 days</u>.

		Not at all	A little bit	Some- what	Quite a bit	Very much
Sp1	I feel peaceful	. 0	1	2	3	4
Sp2	I have a reason for living	. 0	1	2	3	4
Sp3	My life has been productive	0	1	2	3	4
Sp4	I have trouble feeling peace of mind	0	1	2	3	4
Sp5	I feel a sense of purpose in my life	0	1	2	3	4
Sp6	I am able to reach down deep into myself for comfort	0	1	2	3	4
Sp7	I feel a sense of harmony within myself	. 0	1	2	3	4
Sp8	My life lacks meaning and purpose	0	1	2	3	4
Sp9	I find comfort in my faith or spiritual beliefs	. 0	1	2	3	4
Sp10	I find strength in my faith or spiritual beliefs	. 0	1	2	3	4
Sp11 NI	Difficult times have strengthened my faith or spiritual beliefs	0	1	2	3	4
Sp12 NI	Even during difficult times, I know that things will be okay	0	1	2	3	4

English (Universal)
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## **Appendix F: Guided Listening Exercise**

## Sonnet Cycle Recording Script

- 1. Welcome to the Narrative Healing through Poetry Study.
- 2. This recording is approximately 15 minutes in length. Please relax and get comfortable. You may close your eyes if you wish.
- 3. You will be listening to a sonnet cycle that includes seven poems. Each poem is written especially for each of the seven main chakras in the ancient Vedic tradition system of the chakras and includes a poetic rendering of the key characteristics of each chakra.
- 4. You will be asked to listen to the sonnet cycle twice. The first time, you will be free to contemplate the words of the poems if you choose. We will begin now.
- 5. First reading of the sonnet cycle.
- 6. Take a breath. You will now be asked to listen to the sonnet cycle a second time. This time, please do not focus on the words of each poem. Rather, allow the words to wash over you as if they were music. We will begin now.
- 7. Second reading of the sonnet cycle.
- 8. Thank you listening. Please rest quietly, and when you are ready, please open your eyes and sit up.

## **Appendix G: Participant Oral Interview**

- 1. What were your general impressions during the listening exercise?
- 2. Prior to beginning the study today, how would you describe your overall state of wellness?
- 3. As we sit together now, how would you describe your current state of well-being?
- 4. During the recording, did you experience any emotional feelings? Is so, please explain.
- 5. During the first reading of the recording, did you experience any physical feelings? If so, please explain.
- 6. At any point during the listening exercise, did you experience any visual sensations? If so, please explain.
- 7. What observations, if any, did you notice between the first and the second readings of the sonnets?
- 8. Do you have any additional comments or observations to share with the researcher as a result of your participation in the study today?
- 9. Would you also like to participate in an optional reflective writing exercise prior to the follow-up survey (i.e. to be completed within the next three months)?

(Note: This exercise will include identifying the three most relevant elements of participation and crafting a conclusive statement summing up your experience as a participant. For those who chose to participate, the written piece will be included in the dissertation final report.)

Thank you for your participation.

## **Appendix H: Follow-up Participant Survey**

- 1. In the past three months, have you made any changes in your life as a result of your participation in the study?
- 2. If you answered "yes" to Question 1, what changes have you made as a result of your participation in the poetry study?
- 3. What aspect of the poetry study was the most interesting to you?
- 4. What are your reading habits since your participation the study? (*Please choose one.*)
  - a.) I am now reading more poetry than before the study.
  - b.) I am now reading less poetry than before the study.
  - c.) My poetry reading habits have had no change since participation in the study.
- 5. Has your understanding of the chakra system changed in any way since your participation the study? (*Please choose one.*)
  - a.) I now have an increased understanding of the chakra system than before the study.
  - b.) I now have a decreased understanding of the chakra system than before the study.
  - c.) My understanding of the chakra system has neither increased nor decreased as a result of my participation in the study.
- 6. Please select the correct list of the seven main chakras from the choices below.
  - a.) Base, Hands, Heart, Core, Skull, Sight, Sky
  - b.) Root, Sacral, Solar Plexus, Heart, Throat, Third Eye, Crown
  - c.) Ground, Sun, Moon, Spine, Lungs, Vision, Mind
- 7. How often do you seek out energy healing modalities to manage your wellness?
  - a.) Regularly
  - b.) Occasionally
  - c.) Rarely
  - d.) Never
- 8. Do you consider poetry to be an energy healing modality?
  - a.) Yes
  - b.) No
  - c.) Not Sure

### Appendix I: Compendium of Qualitative Inputs for Each Participant

The qualitative inputs from each participant are summarized below. In the case of the oral interviews, the responses from the original transcripts have been contextualized and edited. Please note, however, that submissions provided to the researcher as part of the optional reflective writing exercise have not been edited in order to preserve the authentic voice of each participant who chose to submit a supplemental narrative

**Participant 1.** Found the experience relaxing while visualizing listening to the words. Considered herself overall healthy, but with a palpable level of fatigue. After the listening exercise, was relaxed. Visualized some images, but didn't notice any physical sensations. Followed instruction with closed eyes and allowed the words to wash over her. Wondered if she had failed the question about the chakras since she was not able to visualize them.

†This participant agreed to complete the optional writing exercise.

There was a noticeable shift in my level of relaxation between the first and second trial after listening to the poetry – which I understand to be a shift in energy throughout my body. I wonder if that result happened because I assumed the poetry would relax me and therefore was looking for evidence that it actually did or other factors also affected the second reading. The reports are helpful and affirming of how I 'sensed' my own balance lately in my life. For example, the Chakras Diagram showed that my orange chakra (work/life balance) was slightly out of alignment – compared to the others. I'm interested to learn more about what the 'alignment' means and what is an 'ideal state' for me. I'd like to understand more about the Biorhythms measurements and their meaning for me. It wasn't clear to me from the report but it caught my interest. I appreciate the reports generated from the Bio-Well readings – they are full of interesting information that I would need some coaching and guidance to fully understand and use. It is a lot of information and somewhat mysterious to the novice reader. Another thought/question: Is it appropriate in a research study like this to share with the participants in the study the research questions that you are trying to answer? Or the hypothesis you are holding about what you think happens between the first and second readings? Or what you are hoping to see in terms of the healing properties of poetry? –Lisa

**Participant 2.** Said the exercise was very peaceful and calming, like guided meditation. The vocals were very calming and soothing and it was easy to let the words wash over her. Saw colors much like an experience during sound healing (purples, dark fuchsia, orange). In the first reading, focused on the words, her mind drifted, she thought of mandalas. The second time, focused on the colors in her mind and let it pass over her.

**Participant 3.** Was shy, smiled a lot instead of responding verbally. Had technical difficulties with the headphones, the lights were too bright, but once she was situated, she relaxed and enjoyed the poetry. During the second reading was even more relaxed, and tried to picture the chakras opening and closing. "I don't interview well, that's why I was laughing."

**Participant 4.** Felt very safe, calm and relaxed. Was in total bliss and could have fallen asleep. Was deeply grounded and in a blissful state of mind. Went into a really deep state of relaxation and felt very comfortable without any apprehensions. Got so relaxed, she felt herself falling asleep. "And I [was] thinking was it the words, was it your voice, or both. I feel like I've had a healing session. Cranial sacral or meditation, the gong, any sound healing." Stated, "If someone read it with a NY accent, I don't know if I would feel the same way. I really feel cozy. Even my dog who is here is in his meditative state after the reading, because he can feel my vibration." The second recording, felt her leg twitch, felt like she was falling asleep and was trying not to do that. "I was someplace else." Saw a rosy color, but I wasn't

focusing on that. Was between time and space, and let go. "I find it fascinating that something as simple as reading poetry could change someone's energetic field. But as a sound healer, I know that sound works."

†This participant also agreed to complete the optional writing exercise.

The three most interesting elements of the study: 1) chakras; 2) biorhythms; and 3) functional/energetic condition of organs and systems. I found these three elements were quite interesting to see on paper how I was functioning/processing in the moment of the test. I do know that I have so called issues where the test showed was out of range. I'm fascinated by how the tip of one's fingers has such a great amount of information. Like I said, I do know where some of the energy was off, either too high or low, that I do have some physical issues going on. My experience as a participant has given me more of a sense of knowing myself in an energetic way. I am very sensitive and I can feel something now and then, and yet I can't explain what it is, as it's not a pain, but more of sensation. I was not surprised that I was able to go deep within myself when listening to your beautiful poetry, and your voice. I felt totally relaxed and supported. I went very deep within myself, and I felt like I had a full body massage after the testing was over. I was definitely vibrating differently than when I walked in. Even my dog had a deep meditative experience. —Lola

**Participant 5.** Said that the lady had a nice relaxing voice. Considered himself both mentally and physically healthy. Followed the instructions and did not focus as much on the words, and said that it was just noise, not words (the second time). Pleasant noise, but noise.

**Participant 6.** Commented that the imagery was pretty, lovely, and the speaking tone was calming. Experienced a deeper sense of peace and relaxation. Nothing too intense, but a joy, maybe the excitement of being part of this and learning more about the Bio-Well and thinking about poetry in general, and sound healing. More thought processes than emotion. "During the crown reading at the end, when you mentioned the gold I saw a wash of gold a bit more vividly than some of the other." Initially, found it hard to listen without concentrating on the words and to hear it as sound, but toward the end by the fifth or sixth chakra was easier.

**Participant 7.** Knew about Anodea Judith and was familiar with her work. "I expected more of the rhythms, but it was more like a storytelling." She liked the visuals when she focused on what they meant, and also liked the connection with each of the chakras. She said that she was trying not to focus on the second, and was trying to distract her mind, so there were certain key words that stood out. "My thought was about the power of suggestion in terms of focusing my attention to a specific chakra. Knowing that I was going to focus on the chakras and knowing that each poem related to each chakra, I started thinking what if I didn't focus on the chakras at all, would it have a different effect." She tried not to focus on the chakras at all on the second one.

**Participant 8.** Liked it, is visual and wanted to see it. "It was beautiful. I loved the last line." Working on putting myself first. Felt very peaceful after reading, didn't want to go back to work. Was curious, found it pleasant. Drifted off a few times (hadn't meditated that day), freedom. Easy to go somewhere else, went in and out a bit. "Relaxation was true of all three readings, or was it two?" And, "I was trying to listen, but I found myself drifting in and out by about halfway through the second reading." Curious about the results, was it the voice on recording or putting feet up? Reiterated beauty of poetry.

Additional information from member checking exercise: I came home and found my CD of David Whyte reading his poetry and listened to it multiple times. There is something about someone reading it to you that is soothing too. His was to music too. Check him out reading his poetry on YouTube. He is amazing.

The CD is "Sometimes." One of my favorites is "Sweet Darkness" -- my favorite line: "Anyone or anything that does not bring you alive, is too small for you." -Eileen

**Participant 9.** First part was very soothing, very interesting. Wanted to remember the wonderful poetry, but couldn't keep up, so just enjoyed it. "I was wondering who wrote this, and could I get a copy of this." Overall, mentally, physically, spiritually, pretty good. Felt calm during/after meditation with the poetry. Find myself very curious about what you are doing, and I want to know more. "I was trying to connect the poetry to music, so visualized a sheet of music a few times, trying to figure out how these words show up on a sheet of music." Allowed the words to be more of a flow, than trying to remember them. "I tried to recognize the words as music. And I did recognize the flow and timber of the lyrics." Curiosity about what you're doing and how it's going and what the be well machine really does.

**Participant 10.** Felt very calm listening, was amazed at the difference in the prompts—verses to listening to it like music, and then it flowed over me. Tried very hard to no focus on the words. It wasn't easy at first and then it was, felt very calm at the end. Relaxed, calm. Really amazed at how different it felt than before [guided] listening. The first one was very intent and focused; had an amazing flush of feeling of calm and serenity, like I could have gone to sleep after the second.

†This participant also agreed to complete the optional writing exercise.

I found the whole exercise to be very interesting and informative. I was happy to see that all of my indicators were at optimal energy levels. One of the most interesting aspects of the report was the Chakra Alignment. What I found most thought provoking about that report was that #5, Vishuddha, was the highest and both Anahata and Sahasrara were the lowest (around 78%). I am not a very spiritual being so that makes sense but having #4 that low made me really think about myself in the aspects of love, sympathy and empathy. I believe myself to be a very sympathetic and empathetic individual with a strong love of life and self, so, I am curious what was it about the day of the test that made those numbers so much lower than I would expect? The last part of the report that concerned me was the functional/energetic condition of organs and systems. I had 4 areas that were in the low range. The worrier in me read it and thought, "Should I go see a doctor"? Overall, I found my participation in the study to provide an avenue to self-awareness that is very much appreciated. I have read the report over many times and seeing on paper the mind-body connection in such detail was very enlightening. —Denise

**Participant 11.** Said it was very relaxing. During the first one that seemed to be describing birth, he got some images. "To me they were apples and oranges because I tried to follow the instructions. On the second reading I let it be noise, and I didn't focus on the content at all." Considered the soothing voice as key more than the point that it was poetry, and said: "you could have been reading Mien Kamph and I think that it would have had a similar effect on me"

†This participant also agreed to complete the optional writing exercise.

The three most relevant elements of participation in the study included: 1) the data reflects an accurate assessment of the nuances of my physical condition – so much so that I will discuss the results with my physician (i.e. multiple symptoms consistent with areas of high energy/imbalance); 2) data also reflects a reasonably moderate/centered psychological existence – again, the way I perceive myself; and 3) the post-data reflects a movement towards better balance, especially Chakra 1 (red). The aspect I enjoyed most about the experience was that I knew nothing about the technology, therefore had no expectations what the data would reflect. This also removed any capability for me to try to influence the results. Clearly there was indeed a difference in the before and after data. Again, not knowing the technology, I cannot scale the level of significance of this change. What leaps out at me most is whether the content

(poetry) was significant or whether ANY 20-minute period of relaxation would have yielded the same results.

**Participant 12.** It was very easy and very relaxing to do. Retired without a lot of stress. "My stress is walking my dogs." Very mellow and Zen-like. "I felt I didn't sleep very well last night and this was like a very nice little cat nap." First reading was cognitive, thinking about the words and relating it to the chakras. "With second reading, was able to totally relax and unwind and feel more open. My body position changed, and I felt like I was open and receptive." Processing physically, going through the different chakras, more of a cognitive exercise. Felt the flow of energy and blood going from the root chakra going to my head to the crown chakra. There was a warming sensation, feeling of heat. The second reading was much more fluid and relaxed because I did not need to focus on the words. "I let my mind go and was just open to the rhythm of the words, and that put me at a more relaxed state."

†This participant also agreed to complete the optional writing exercise.

One relevant element of the study was examining the Biorhythm Overview for the Month of October. I completed your study on October 12 with my physical and intellectual cycle at the lowest point of the month and my emotional cycle close to the low for the month. Just earlier in the morning before yoga, my husband was asking me "What is wrong with you? Everything is bothering you. Are you not feeling well today?" Another intriguing component was the overall Yin-Yang Meridians: high level energy in the Bladder (negative emotional imbalance), Liver (irritability emotional imbalance) and Lungs (disappointment, anxiety). Final area of interest was the alignment of my Chakras. The lowest two areas were the Root Chakra (84%) and Heart Chakra (83%). I need to work to strengthen my immune system, especially since I have Rheumatoid Arthritis and work on endurance and optimism. Most importantly with the heart chakra. I need to consciously work on harmonizing my home environment and not be so judgmental and harsh with my husband. Participating in this research study provided a vast amount of information that I did not expect to gain from finger scans from the Bio-Well assessment. Although there did not appear to be a significant change in the pre and post scans, I felt more receptive and open in listening to the poetry and letting the words resonate through my body in the second reading. I came into the session relatively calm since I had yoga in the morning, so I felt more balanced. I need to be aware of my negative attitudes and sluggish feelings during the month and not lash out at those closest to me. The stress, irritability and anxiety that I create or absorb through others is harmful to my overall health. -Karen

Participant 13. It took a lot of focus to make sense of what was said during the first set. A thinker, it took effort not to pay attention to the words. "In the second, got into a trance during the solar plexus." Throat and crown died off, felt a little in the throat but nothing in the third eye and the crown. Felt a little tense. Need to know if work is needed on solar plexus. This is where the tenseness is coming from. It makes me want to explore more. Emotional during solar plexus, felt this rush of emotion come up, and wanted to cry (release) but held back. Nothing specific came up that would have eventually led to crying if allowed it. Generally, saw blueish hue of geometric lines going everywhere. It started off small on the right side and it got bigger and then was just moving around like it was floating there. "My eyes flutter when I get into this trance so I get distracted and wonder what that looks like from the outside." It took some effort to just listen to it like it was music. Deep meditative state.

†This participant also agreed to complete the optional writing exercise.

During my experience as a participant in the Exploration of Poetry as an Alternative Healing Modality Study, I received insight into my energy/chakra levels both during the test and upon reviewing my reports. The first most relevant or notable insight I received was my experience listening and trying to focus intently on part 1 of the chakra poetry reading, I caught myself putting in extra effort to focus and comprehend the content. However, with Part 2 of the poetry

reading. I was asked to listen to the poetry reading as music: I found that once I was able to stop the overthinking and effort, I was able to go into a deep meditative state during the sacral reading but most deeply during the solar plexus chakra. During this deep meditative state, I felt of rush of emotions, mostly with the urge to cry. This was notable to me because I love music and was able to fall into a deep meditative state that I generally find very difficult to do. Also, I had been previously working on my Solar Plexus Chakra for months prior to the study, so the emotions I felt gave me an indication that my efforts need to continue. The second and third most notable elements of the study for me came after seeing that I am carrying a large amount of energy in my throat. In the last year or so, I had been working on speaking my truth and feel I have made good progress over the last year so it was nice to have that validated (in seeing the Throat Chakra balanced in the report). My liver was the other notable element in that for many years, I have had digestive issues and my naturopathic doctor found that my liver was functioning at a sub-optimal level and for this reason put me on a strict elimination diet. As I am still reintroducing foods but also eating some foods that are knowingly toxic to my body, it is no surprise to see that that my liver is at an increased level of stress which again validates the effects of eating toxic foods. In associating my recent eating habits to the energetic results of my liver, I have another perspective of how my liver is affected. Overall, the insight and validation is helpful as I continue to work towards balancing my chakras. While my energy levels in the reports may only represent the moment of time during the study, I found some of the results to be profound enough to increase my awareness and inspire more proactivity in my efforts to find that balance. Also, seeing how my anxiety levels improved with the poetry, I will incorporate more music and poetry into my meditation practice. -Nadia

**Participant 14**. The first time liked hearing the name of each chakra and the descriptions, it was very nice, soothing. The second time I had difficulty letting it wash over me as music. There was still the tendency to tend to the words. That was harder. Sitting there it was nice to relax, went into a semi-meditative state. The Heart Chakra brought joy. A warming from the base up. Colors at the especially upper chakras, deep blue. Strong sense of Crown Chakra being open both times. It was just wonderful, I didn't see any major difference. "I really enjoyed it. It was nice to work with you."

**Participant 15**. The words were leading to opening up chakras, heart and ascending. "The poetry reading and focusing on the chakras was really exhilarating." Felt release and opening from all of the beautiful imagery that was expressed. Strong sense of peace, paying more attention first to the words. Was very relaxed, following the rise of the chakras from the root. Was more cerebral. Had vague visual sensations but they were vague, it was a very expansive feeling. Did not focus on the words and to let it wash over her like music, thought that was great, enjoyed that. The second reading reinforced without concentrating. "I think that the whole thing as I anticipated is a very pleasant experience and I feel that it is healing and beneficial."

†This participant also agreed to complete the optional writing exercise.

Julie's careful explanation smoothed the way for what for me was a special experience-akin to a gift. The tactile experience of slipping one's fingers into the Bio-Well devise and then touching in a delicate way had a mindful effect on me. Changing from the office chair to the recliner to relax with the headphones created the feeling of nesting in preparation to receive the poetry sonnets about the Chakras. Having the opportunity to listen twice and then have the readings wash over me put in a more meditative state of mind. I was not surprised that the finger readings with the Bio-Well were somewhat altered after the Poetry. The closing information and receiving the beautiful original book of poems with its lovely cover confirmed that the invitation to participate was an act of generosity. Later after reviewing the personal info from the Bio-Well I learned some comforting information about my robust and balanced health. I also learned that there are a few areas that needed attention and receiving this objective feedback enabled me to make positive

changes in my behavior. Being asked to review my thoughts about the results then put them into words seems to add more meaning and structure to the experience. I am grateful for my intuition to participate in this study. This researcher possesses a deep and gentle wisdom that infuses her approach to writing and much more. I will share in particular the chakra series sonnets with someone interested in learning more about this subtle energy. —*Christina* 

**Participant 16.** I was surprised how when you don't have to listen to follow the words, I got more relaxed when I let them wash over me. I got to a deeper state. It was an interesting finding. The first time my mind was too engaged, but it still was good because I was going through the chakras, and certain words were more powerful. More tense. Very peaceful and (smiling) thoughts have subsided. Felt personal energy field pulsating and moving. Felt energy washing over her from the beginning. In the chair with the headphones, energetically felt the vibration of my biofield. "With the first chakra, and the words you are dropping down, it felt like that release/relief." Am visual, was following the words. The beginning was very impressive, envisioning the chakras. "I realized that the words were actually carrying their vibration so you didn't have to understand them. Like a mantra."

**Participant 17**. Peaceful. Balanced. Harmonious. Itching. Reaction of the body in ear, on face, and in mouth. When touched, it was gone, as if something was calling for attention. More kinesthetic, more body. The second reading, body reacted and the itching started. In the first reading, because she was mentioning the chakras, I was following the structure of the poems. "Then I followed instructions, following the chakras and this is when my body started reacting, with the itching." Based in my heart chakra, I noticed that I'm responding to your questions calmly. And I am listening to sounds, close buzzing but far away. Fizz. When you put a shell to the ear, close but far away. I feel that often, and now that I am quiet, I am aware of that.

Participant 18. During the first time it was emotion, like it was a rebirth, and not that you want to cry, but it was like a deep emotion, that didn't really come out, and then it passed. "I find that with emotional healing, you get a burst of energy release." At sacral, brought attention to my third eye and everything became purple, but it disappeared after that. It went to the throat and crown. The second reading, the purple came back, but it was wavier. Continued healing, emotion and physical body. "Once something calms down, something pops up again (laughter)." Energy less ripples, calmer. "I felt the need to turn my head and my neck popped, which is not unusual, but I felt the need for an energy release." That happened twice, and then a jaw release after that. Color started purple in the center and went out. More focused on the second reading, calmer, in the second reading, there was peace within. The first reading, when we got to the Throat Chakra thought of what needed to be done in the physical world. "I remember thinking what was the poem for the Throat Chakra because my mind was elsewhere."

**Participant 19**. First felt very engaged with the content and felt some body sensations connected to what was hearing. Feeling energized. In the heart and in the throat, I was feeling very moved. "A lot of movement during the second chakra as in blood pressure change and temperature change and a gooiness, a softening." And, "In the Svadhisthana (sacral) I saw an ocean; a big vast ocean and I was floating in the center of it." And. "My body felt like it was sinking into the feeling more in the second reading, more than the words or the sensation and that sent me a bit adrift."

†This participant also agreed to complete the optional writing exercise.

[I] Felt instantly drawn to the study because of my interest in poetry and subtle energy work. If I could identify the most relevant elements of my participation in this study, they would be first, receiving my energetic snapshot and reading, I found the technology very interesting in determining balance and body harmonic. The second would be the poetic aspect of the study and how it affected those harmonics, strangely, there were shifts in my energetic fields and balance post the listening activity which I cannot explain. I left the study feeling fine and harmonious,

although a bit tired - the reading pulled me more inward and sent me on a trajectory towards the word "liminal", which was particularly fitting. The third element would be the audio that was provided with my report. I did listen to it with headphones and I felt a tremendous sense of balance and gratitude from it. It sounded a lot like whale noises which I often listen to in my peace time. The experience was one that was worth having for many reasons, namely, it feels important to participate in the growth of research around subtle energy, the instructor lead our time well, it was a comfortable and interesting examination and brought up some interesting points of focus for my life moving forward. —*Mikaela* 

**Participant 20**. Liked the poems. Your voice is very soothing. Relaxed. At the beginning of the first round, had some euphoric feeling on the first and second [chakra] and started to drift. Euphoric on the first and partially on the second. Hard to listen to the words, eventually phased out. "The mind has its own ideas. I found it difficult not to listen to the words." I'm generally tired after work, and you turn the lights down and you put me in this relaxing state. So, I don't know if it's your poetry or if it's something else as I would be very different in the morning. It was very relaxing.

**Participant 21**. It was an interesting format in the poetry, almost more like a narrative. Like story-telling. Relaxation. Very visual, gets senses of things more and was just following along through the energy centers.

Participant 22. The first go-around, was listening to the words and was very moved by the root chakra, started tearing up. "I caught mind wandering, but because the words were so nurturing, I felt myself come back." The second go-around, was in a cave, for the first time was able to focus on my mind and my center, and when my mind wondered, the nurturing words gently brought me back. Feel much more peaceful. "I felt like a child who needs a lot of love and who's been missing that, and this has been very nurturing." Tears. Second reading, visualized being in a cave where I could sense the words pouring [over me] and the sensation allowed me to stay connected to my center. Was in my mind the first go-around, was touched by the words. The second time, was more in my body. I could see my mind wandering, but I could see myself go back. "I had an emotional response initially because of the words, but he second time I was centered." It makes a difference auditorily. When I'm physically reading, I have judgement, but auditorily I could absorb it better. Just very lovely.

†This participant also agreed to complete the optional writing exercise.

The three most relevant elements included: 1) intention and purpose; 2) quality of poems; and 3) before and after test results. I came with no expectations. After a slightly stressful drive I was welcomed and began to feel relaxed and at ease. Instructions were clear and after the initial testing, I prepared to first listen to the poem's words, and then in round 2 allow the words to wash over me. To my surprise I started to tear up during the first sonnet reading. Because the content of the poem reflects love and acceptance, I could surrender judgment and attempt to listen to the ensuing stanzas. During the 2<sup>nd</sup> reading my attention was more centered in my chest, my breathing. I envisioned the cascading of words fall on an arc that covered me. Though my thoughts wandered, I could gently return my attention to my center. I do not recall the last time I could sit quietly and consciously experience an inner peace. The test results showed slight changes, nothing dramatic or significant that I could discern. Along with Julie's intention, I believe, the quality and rhythm of the poem created the fulcrum that allowed for my initial release and any biometric changes. In the best format, one that emanates from high vibrations, the words forming this poetic cadence softened and opened me, and my body responded, 'yes and thank you.' –Beth

**Participant 23**. I was so interested in hearing the words and I wanted to absorb all of the words for the chakras and it was fascinating and beautiful. The second time was so hard, my mind was drifting off and

thinking about other things and I had to keep bringing myself back. Then I got into a zone with a waterfall effect. The poetry was gorgeous and I loved the approach coming at it from the chakras, it was beautiful. Was very calm, but was a little tired. Was relaxed, curious and excited, and believe that I was meant to be here. "I was thinking of the light meditations that I've done with the colors of the chakras, and trying to bring that in, so the colors became more vivid in the first part." And, "I'm really happy I came."

†This participant also agreed to complete the optional writing exercise.

I am happy to participate in the optional writing exercise for the exploration of poetry as an alternative healing modality. I was very interested in learning about CIHS and the Bio-Well machine as I was unfamiliar. When I arrived, I was a bit "anxious" now knowing what to expect but when I walked into the room and found that it was you doing this study it amazed me as we had met a few years back at The Soul Of Yoga and I never thought I'd see you again but there you were and I remembered you as a very spiritual, positive person. I agree with you that there are no coincidences and this was no exception. I found you extremely articulate and professional and was so happy to assist you as you prepare for your dissertation on such a beautiful alternative healing modality. In addition to being a bit anxious due to now knowing what this study was going to entail I had just returned from a very stressful "vacation" with my husband and longtime friends. I was feeling completely out of sorts upon arriving but I must say after I listened to the poetry about the Chakras, I felt so much more at ease. The poetry reading was lovely and soothing. I am genuinely enthralled with the Chakras so I especially enjoyed that the poetry was about these energy centers as any opportunity to dive deeper is welcomed. I found it interesting that you said afterward upon seeing my report that what you found interesting, but you did clarify that you were not "diagnosing" but rather observing that my Root Chakra was in alignment but what was evident was that my Throat Chakra was enlarged and out of alignment compared to the others. How interesting that the report showed exactly what I was so upset about. There was someone I needed to talk to post vacation and was anxious on how to approach the subject. The reading picked right up on that fact. I guess that's what struck me above all else. That at a glance you could interpret what was going on with my energy field. I have looked through the report and it's a bit over my head so I didn't dive in too deep but knowing how something as lovely as poetry can help align my energy, I am all for it! I am inspired to continue learning about the chakras and take comfort knowing that when I meditate, go to yoga, walk at the ocean or even listen to poetry it is encouraging to know that my energy centers are quite visibly being affected in a positive way. Thank you for this work and thank you for the humanitarian work you do abroad – you are making such an incredible difference. –Susan

**Participant 24**. Very relaxing. Going through the chakras, the ones that were not open felt very heavy. As we got to the head it felt like it was crushing me. The second round I felt really relaxed. Felt an opening of the chakras, one by one, but the ones in the head that weren't open felt heavy until they opened. Very calm, opening and the heaviness. "Once the chakras were already open, it felt very relaxing." [Went] into a deeper state each time.

**Participant 25**. Calming, informative, creative, compelling, relaxing, powerful. A little anxious due to work problems. Very relaxed and calmer. The heart, the sacral, and "when you got to the crown, it was pretty extraordinary. I felt light, very light, and happy." Awareness of my organs, was focusing in on my lungs and my heart and I remember seeing them and thinking, "you guys are healthy." "I was all over the place, I was in the earth, I was in a forest, I was in the ocean for a long time, twirling. I love to twirl in the waves. So much twirling and dolphins and white light spinning from my feet, from the top of my head, stars, universe." Was visualizing sound waves and trying to put a melody to the waves as opposed to the first reading where I was focusing on words. "I thought it was very comfortable environment for you to conduct what you are doing. I feel very at ease."

†This participant also agreed to complete the optional writing exercise.

My engagement with the study confirmed that our personal frequency is the key to wellness. External factors have a powerful effect on our well-being. This exercise identified personal areas that need love and attention and by using tools such as positive and affirming poetry can assist in healing. Desire was created to challenge myself with taking the time to use such tools to do the inner work to heal and balance myself. The information conclusions were simply fascinating and easily understood. Participating in this study was enlightening and informative. –*Deb* 

Participant 26. I was glad to do the two testing because the first was feeling out the parameters of the experience, but more heavily on the linear side the first time. The second time, not having to use the mind, I could drop the mind and just be with the feeling in the experience. Even and neutral, but not in a negative way at all. In the Tao. I'm Uplifted. "I'm excited about science and spirituality, and having the experience of listening, I could feel that something dropped down into a deeper state of being, coming more from my core." Not emotion, emotions are more reactive, but felt a sense of well-being and joy. "I felt a shift in consciousness with the second reading." And, "Due to the subject matter, I feel that there was an actual influence on the chakras and on my energy field."

**Participant 27**. Felt some emotional feelings during the reading. Stated was difficult, not in touch with feelings. Was looking forward to finding more about self. During the second reading, had visualizations of the ocean and water, and felt more relaxed, there was a comfort level. Thought it was very easy, very simple, very efficient.

†This participant also agreed to complete the optional writing exercise.

The 3 most relevant elements of my participation in the study are: 1) My chakras seem to be very balanced. This does not come as a surprise to me as I am a very calm person; 2) One might wonder how to read and figure out how the study directly relates to that information and said individual; and 3) What can one do with the information that you provide from the study? My experience was fun for me as I could get information on how my energy levels were and maybe do something to 'alter' them accordingly. As each person is different and each person may have different desires for the 'outcome' it is hard to be 'conclusive' in this regard. –*Eric* 

**Participant 28.** Thought it was super interesting, wasn't sure how it was going to work, but was pleasantly surprised. "The poetry was beautiful. I believe in sound healing and listening is perhaps the same as music. If words with water, why not poetry." The emotion of the poetry was moving and heartfelt. I was getting sleepy. My mind wandered during the second reading, although I wanted to listen to the words, I tried not to.

†This participant also agreed to complete the optional writing exercise.

The experiment was really fun and I didn't know what to expect and was pleasantly surprised at the info it incorporated. I have been doing Dispenza meditations of energy centers and this was really timely as he talks about measuring the energy in and around bodies. I felt that it gave me an idea of areas that I need to look at that may be out of balance as well as letting me know I have pretty good balanced energy overall. I especially liked the poetry aspect of it and how words can affect the body and emotions. I enjoyed this experiment. –*Kim* 

**Participant 29**. Found it a little fast, would have been more relaxing if it were slower. Liked the poetry and is familiar with chakras so it resonated. Had a deep connection at a couple of points, because has some understanding of the chakras and where work or healing is needed, some of the words affected the participant strongly. "Some of the words were harsh to me, "slap" and "yelp" were jarring, but overwhelming it was very peaceful and I quite enjoyed it." And, "I feel super fatigued, but being here with you and the magic of the words in that poetry gave me a renewed sense of belief that there is

something bigger guiding my current comprehension of it." And, "I felt a sense of the expansiveness of things and that there is safety in time and space. I felt peaceful and very tired as decompressing." Felt a need to deeply exhale to let myself into the relaxation entirely, and the weightiness since my blood pressure drops when I sit down. Was picturing the chakras as it was going up, particularly when the reading was mentioning the lotus. Was picturing colors, and wings at the ending when it mentioned fly away. My images were tracking the words. "The second time I was listening with my cells and with my body." "wonder if there needs to be a control study with nothing playing, because just sitting down is relaxing in itself so [its] hard to know if it was the poetry. And the type of poetry.

Participant 30. It was just beautiful, there was so much imagery happening for me. For the first one, felt a tingling sensation through my hands and arms, beautifully written. Felt more relaxed, more peaceful. More emotional in a very positive way. "I feel uplifted as if I've gone deep, like after a good meditation. Got choked up on a couple of the sonnets, probably more than a couple. I could feel the experience such as the birthing process, the love of the heart, rising up from the crown chakra. All just sweet emotion. "I felt a tingly sensation in my hands and arms—being a reiki master when I get energy flowing very freely, my hands start to tingle—energy was moving and it felt cleansing, the tingling is a sign of that for me." Lots of imagery. "I could see everything you were leading me through, including some words like love." And, "I could see spirit guides hanging around, or intimations of that energy moving as these loving beings/guides that helped to write the sonnets—those that guided you, were also guiding me." And, "the whole journey was picturesque for me." The second reading, was challenging to let go and to let it wash over me because I wanted to hear the words again. When I settled into it, I felt as if I were riding waves on a raft and just floating on the water, and the words literally washed over me and carried me, and I went somewhere and then I came back. Oh! there are words happening in my ears. It took me deep and high like on another realm. More out of my body. It could have queued something, but I don't know that I mentally went to that correlation. It was more of a rocking sensation, like being baby, like being rocked in a womb by mother earth's arms. There was a physical sensation to the out of body experience. I'm excited to have it all to read again and again. I'm in the process of doing medical intuitive training and what I am focusing on is the chakras. The sonnets will definitely feed into that, and I already feel more open to what energy each of the sonnets brings.

**Participant 31**. It was very poetic, not concrete but more imaginative. It inspired my imagination. When I woke up this morning, was kind of sleepy or tired. Right now, I'm sleepier. Was neutral but in the first round, was listening to the third chakra, and it clicked in me somewhere. I paid attention to each chakra, feeling or connecting to them. While I was listening to the Heart Chakra poem it felt good in my heart, like a warmth. "When I heard the word spirit or universe, I had an expansive vision, beyond this planet to the universe." And, "When I listened to the poems the first time, I used my cognitive mind to try to understand the meaning, I was looking at each tree of the forest, but in the second round, I was seeing the whole forest, as the big picture, rather than each detail." The poems were like music, even though they were made up with words, it was like a music of words that felt good.

†This participant also agreed to complete the optional writing exercise.

When I reviewed my chakras in my reports, I was drawn to my fourth, fifth, and sixth chakras. Although the alignment of my Heart Chakra was within the normal range, my experience of the chakra and its shift to the right were congruent. Regrading my fifth chakra, I had been in a difficult relationship where the other person was not open to discussing our relationship. I had many things that I wanted to tell him but did not know whether it would be a good idea to do so. I think that this inner conflict over communication created a lot of energy in my fifth chakra. Lastly, after having listened to the poems, my sixth chakra became more aligned. Before having listened to the poems, my point of view was more extroverted, but the poems gave me an opportunity to shift my attention to my inner world more. As a result, I became able to see both my outer and inner worlds equally. English is not my first language, so when I listened to the

poems in English, I think that I used the logical part of my brain more in order to understand the meaning of each sentence, which may have led to some negative results. If the poems had been read more slowly, results may have been different not only because my first language is not English but also because people talk slowly in my native culture. Nevertheless, when I heard certain words, they inspired my imagination, and I believe that this inspiration is one of the powers of poems. —*Hide* 

<u>Additional inputs from member checking exercise:</u> Through participating in your research, I have been learning that poems are not to understand, but to feel.

**Participant 32**. It was generally the flow, knowing that it was with the chakras, it was just the flow through your body. By the time you got to the second one, it was relaxing. Being reminded that the first and he seventh are really connected, feet on earth and head to the universe. "You could feel a sensation as it was going up" I see colors when I close my eyes, purples were floating through, magenta maybe. Otherwise visualizing a lotus flower. The earth. "It was very grounding, it was lovely to sit there and meditate." Giving yourself a little space.

†This participant also agreed to complete the optional writing exercise.

I believe this to be true like music and it may be better studied over time with regular sessions of poetry. The poetry readings were calming and uplifting to the point I could feel my energy within each of the respective chakras such that by the time the reading was completed an overall lightness of feeling/being. I liked seeing how aligned my chakras were from the report, and identifying that I needed to have a conversation with someone and to know I am grounded enough to do so. Overall, it was both a pleasant and informative experience confirming my belief that our energies are all very connected. If we could just harness this power as a collective society. The possibility to change our "beingness" at the cellular level is very real. Imagine how amazing our existence not to mention humanity would be. —Brenda

Participant 33. I had tears coming out at first, and I was more seeing animals, more shamanic for me. On my third chakra, I saw a lion and at the crown the animal turned into a bird. It was intense, but when we went up to the heart it was more cooling. In the first two chakras, I felt heat. I saw colors dancing in my chakras during the second reading. I saw a red shawl, and then orange and yellow, but at the Heart Chakra it was more of a pink color. It was a rich experience, but no tears. The first reading was more activating, and the second was more calming, more integrating. The voice was also calming as well. Recently, I feel like I am giving birth to the woman that I am supposed to be and it's a deep karmic experience along with health issues related to the emotional healing. In this lifetime, I brought the second chakra into this lifetime to heal. Tears, with the first two chakras I felt so emotional, and I felt like I was releasing something. I do body talk, and talk to my organs, and do yoga therapy and hone into and listen to each chakra. What I was experiencing was after the emotional release with the first two, I felt more soothing after the third, and an opening at the heart. I felt confusion at the third eye in the first one, my mind was a bit active, but at the crown I shifted to tuning into the divine light. Heat in the first and second chakra. In the first one, animals. The first one was more mystical, and symbolic to me. I saw myself as a woman in the forest. The second was more like a mermaid in an ocean, then shifted to a lion and in my heart, I was more (talk of inner story including shadow). "The first reading was more of an inner journey with my own work and my symbols, and in the second reading, I saw colors and dancing, which was more relaxing and calming." "I really enjoyed it, and I felt that it really resonated with me, this type of healing method. So, thank you."

†This participant also agreed to complete the optional writing exercise.

I was going through a deep karmic healing during the time I participated this study. I was also having physical pain. First part of the exercise led up to a shamanic experience within me. While I was listening to the recording, I got visions and connected to lion and phoenix spirits. I also had a release of some pain, and tears were clearing my emotional pain, especially during the first and second chakra parts of the meditation. I was more relaxed and had a very pleasant experience during the second part of the exercise. The vision was more like a colorful shawl dancing starting from my Root Chakra to the top of my crown chakra. In the end, this experience felt like a taking a shower with rainbow colors within. –*Berna* 

### **Comments from the Follow-up Survey**

One of the questions in the follow-up survey asked participants what they liked most about the study. Following are the direct comments provided to the researcher in response to this question as part of the online survey.

- Being read to, and being able to absorb the words and feelings that put me in a very relaxed state.
- The visual imagery of the chakras.
- The energy photography.
- Getting me back into thinking about reading poetry.
- Learning more about myself.
- How listening to the same thing twice with a different mindset can affect your pulse rate.
- Seeing actual data showing that I can control my state of mind, and that I can reduce my anxiety with something as simple as poetry.
- The equipment that measured my physiological reaction.
- I liked sitting in the chair with closed eyes and listening to the poetry twice.
- How calming it was.
- The energy meters.
- I don't remember.
- What intrigued me was how deeply moved I was by the poetry itself. I think it goes back to intention. The content resonated with love.
- The chakras.
- The diagnostics, of course.
- That listening to poetry can change your chakra placement.
- Trying to figure out if it would make any changes. Is this the type of thing that could help someone create change?
- It was the most interesting how the energies contained in the words in the poetry affected the energy of the listener of the poetry. Listening to the poetry felt like a communication with its author and reader, and that I received her healing energy through her creation.
- ... the part where you think about things differently.
- I love poetry and art. I see healing as an art form. It was a very unique way of [creating an] experience for me.

## Appendix J: Researcher Journal of Transformational Learning

The purpose of this journal is to identify and document key elements of transformational learning on the part of the researcher as a result of the design, data collection and data analysis phases of the study. The narrative entries below, written between the period November 15, 2019 – January 31, 2020, highlight the most profound elements of the researcher's personal experiences related to new and deepening scholarly insights.

#### **November Entries**

On balancing the qualitative and quantitative elements of the study. As I begin data analysis, I am faced with a challenge. I have chosen to conduct a mixed-method study that includes both the richness and discovery of individual and thematic narrative to form a story of the experiential elements of the study as well as a statistical basis to quantitatively measure the research questions. As my educational pursuits have one foot in each of a qualitative and quantitate worlds, my intention is to create a bridge between these two worlds of research. I believe in the power of narrative and the value of individual stories. As noted in my introduction, some consider individual experience as anecdotal and/or potential outliers. I respect the experience of each individual as well as their perceived reality. In addition to insight into one's current personality, inputs derived from individuals also can provide a basis for a thematic understanding of the collective consciousness.

I am interested in the statistical findings of the study as a means to advance scientific enquiry, introducing poetry as a new means to study healing. Whatever the findings, the cohort of participants as the first group to explore poetry as a potential healing modality will contribute to a baseline for future studies. The inclusion of a statistical analysis is offered to support this goal. As I embark on the thematic content analysis, however, I am more interested in the findings that will arise from the qualitative data. Since I am committed to contribute to the qualitative approach to research as a means to better understand how our experiences contribute to the larger whole of humanity, I have chosen to lead with the qualitative findings in my dissertation and use the statistics as a supplemental level of support for the findings.

**The dynamic nature of the human organism.** The data collection phase of the study was conducted between October 6 - 31, 2019. When I did a Beta test of the experiential component, I considered whether to provide an individual detailed report or a comparative report of the results to the participants. The feedback I received was that there were elements of both reports that were of value. As such, I decided to provide each participant with two reports, one detailed report of the third pre-test and a comparison report of the third pre-test and the third post-test. This decision proved to be the basis of one my most profound learnings.

During the data collection phase, since I had been conducting six measurements on each participant, when I scrolled through the six balance tabs for each scan, I noticed how the levels of the sympathetic and parasympathetic response did not remain within a particular organ system. Rather, these paired and pulsating responses tended to shift between the organ systems. This was presumably done subconsciously to achieve a balanced state of wellness within the human organism. I saw how dynamic our organisms are, and how we are in a constant state of healing. Much like the visual rendition of a receiver that displays the decibels of a song while it is playing on a sound system, scrolling through the balance tabs in rapid succession elicited similar waves of energy within our mind-body systems.

**Initial findings that had an immediate impact on the researcher.** Following completion of the data collection on October 31, I made notations in my notebook related to my initial observations, prior to data analysis. In addition to being amazed by how dynamic our bodies are (as discussed in detail in the entry above), I was struck by how participants immediately tended to view malalignment of the chakras and

organ systems in terms of a physical weakness in their systems, even though their measurements were in the normal ranges per the legends outlined in the energy reports. With the addition of the option of the reflective writing exercise, I am pleased that there is an additional layer of data to explore this issue in more detail.

Overwhelmingly, the participants reported being more relaxed following the second reading of the sonnets. I am interested to see how this emerges during the data analysis, since including the second reading was an element incorporated by design, on the theory the one "embodies" the poetry with a second reading as suggested by John Fox. Finally, I noticed while I was interviewing the participants that there was a marked difference reported between the first and second readings of the sonnet cycle, with participants exhibiting experiences such as feeling as if they were adrift upon an ocean (a number of participants used this word expressly) in addition to experiencing heightened levels of relaxation.

Unanticipated enthusiastic response to the optional reflective writing exercise. I have been surprised by both the number of respondents and the quality of the optional writing submissions. Of the 28 participants (85%) that agreed to do this additional task, just over half submitted narratives (16 pax). As I have worked with writers in the past to do reflective writing exercises, since many of these writers often opted not to submit a piece, even though they had come to me to explore healing through writing, I did not expect that there would be such a high level of interest in this component of the study. But in fact, the optional writing component provided a path for personal reflection on the part of the participants, and what they have subsequently provided to me has been deeply insightful.

**Appreciation for the gratitude that abounds**. It's been three days since I last worked on the raw qualitative data, conducting thematic data analysis. Today, my focus was the individual interviews, writing up a synopsis for each participant as an appendix. I was immediately struck by how engaged the participants were with the poetry, something that had not immediately stood out to me in my initial data review. I was touched by the love of the poetry, and the many descriptions of its beauty. I had written the sonnet cycle in gratitude to Dr. Dexter during her class on the Psychology of the Mind-Body. As part of that same class, I had an in-person practicum with Cyndi Dale in 2017 while I was in Minneapolis for my father's 90<sup>th</sup> birthday celebration. When I arranged to pay for the session, Cyndi had gifted it to me before signing the book she had written that we were using in class. Following the session, I sent Cyndi the sonnet cycle, and I received an enthusiastic response about my work from her.

The Sonnet Cycle of the Seven Chakras is a work of art in the truest sense, since the writing of it had poured through me. When the poetry I am writing requires focus—when I need to work out each line, I know this to be a life lesson for me personally. When the poetry flows through me, I know it to be a universal gift to be shared. What I once put out to my teacher and mentor as a gift is now flowing back to me a hundredfold through participant comments. It has been extremely satisfying to see how positively the participants have responded to the sonnets. This process has been an extremely inspirational experience that has provided me with wonderful fodder, encouraging me to explore new avenues to share my future work with the world.

#### **December Entries**

**Ever-Expanding Beginnings**. As I embark on the writing phase of the dissertation, I am struck by how many new ideas and concepts are emerging as I continue to examine the findings. Considering the lack of a pre- and post-test of the FACIT Spiritual Questionnaire, a weakness that I found in the design of the study, I went back to review some of the CIHS faculty research. Considering Randy Fauver's ACES study findings of psychic abilities and perception, I came across a reference to the Multidimensional Assessment of Interoceptive Awareness (MAIA), an instrument that measures components of "intreroception," which is inclusive of perceptions stemming from body awareness, emotions and belief

systems among others. I thought about how appropriate this instrument, as well as others in Randy's study, would have been in the design of this study.

I am intrigued by the concept and new direction of research offered by "interoception." The role of the sensory systems, grounded firmly in perception, has been a keen interested of mine for years. What I liked about considering this concept is that it revealed itself as a means to bridge the divide between the traditional and subtle sciences. But rather than thinking that others needed to cross the bridge to my side of thinking to understand my work, it was I who found myself stepping into the minds and work of others. Within these thoughts, I began to see more clearly, and I felt united and part of a larger, more integral whole of science and discovery in areas that were meaningful to me.

In Answer to the Research Questions. I am astounded at how differently the issues are presenting themselves as it relates to the research questions. My level of understanding has increased so much since I formulated the initial research questions that I am glad that I have opted for a heuristic approach so that I can build upon my learnings as I progress through the dissertation sequence. I have found that the initial questions were not robust enough to encompass the depth of the study. They continue to provide guidance, but the findings are taking me into dimensions that I did not anticipate. I will thus continue to report the findings clearly and concisely, including the direction that the findings are taking me over time.

## **January Entries**

From resistance to persistence. I returned to the US in June 2019, after spending nearly a year with UNICEF in Ethiopia. As I was between jobs, I had the time to begin the data collection phase of the study in early summer. In July, I spent a week in Encinitas on campus. I traveled back to Southern California in early September to conduct training on the Bio-Well with another PhD student who was conducting a reliability study with the device. Yet, I still was not ready to dive into the recruitment and data collection phase of the study. Instead, I travelled to the high desert for a break. Immediately upon arriving in Palm Desert—one of my favorite places on earth—I had an epiphany. I called one of my sisters to discuss my resistance. The morning I returned to Encinitas, prior to leaving the desert, I wrote the following sonnet:

#### The Quitting Gene

I hoisted the forty-pound pack onto My right knee and twisted down to slip my Right arm into the harness. As I stood, I slid my other arm into place. The group Of thirty had been hiking just over A week. The terrain flat enough. Joe asked Permission to scale the rock slide as the Rest of us set up our tarps. I planted My heels into the rocky clay as Joe Scurried across boulders, unhinged. The next Day, we traced his steps. TJ, who had a Scratched eye, used a stick to guide her over The rock piles. As she moved with the grace of A determined mountain goat, I faltered, Stopping dead in my tracks. I no longer Could climb. The quitting gene was weighing me Down. Below me, the landscape offered no Exit. I looked to the left and then to The right. No matter which path I chose, the

Challenge would be equally as daunting. There seemed to be no options before me, Except to carry on. That day, atop That mountain, my future was crystalized. In that moment, there was nowhere to go But up. The quitting gene stayed in my pack, And it would be years before I came to Understand it for what it truly was—A crack in my compass, under the glass.

Upon my return to Encinitas, I reluctantly carried on. Serendipitously, both the Level I and Level II Bio-Well training programs were held at CIHS during the first week of October, 2019. I attended these trainings and was able to work with Dr. Dmitry Orlov, one of the developers of the Bio-Well software (in addition to the Sputnik and other Bio-Well accessories) who rarely comes to provide the essential second tier training in the US. The trainer for level I, Rev. Tiffany Barsotti, who has a practice at CIHS, invited me to join a women's support group on campus. Attending this group is where I came to understand my reticence.

For two months in 2018, I had spent nearly every day with my aging father who had experienced a serious fall, significantly advancing his dementia. Prior to his passing in July of 2018, I had been by his side. One day, when I was with my father in memory care, he called his nurse, who was named Delphine, "Dr. D." She laughed and simply told him that she was a not a doctor, but a nurse. When I returned home that evening, I realized that my father would most likely no longer be with us when I received my doctorate. But that day, I had heard my father say, "Dr. D.," a moniker he no doubt also would have attributed to me. I acknowledged that I was holding back from advancing with my degree so as to linger a bit longer in the heart of my grief. Once I completed my doctorate, I had subconsciously surmised, the reality finally would hit that I would no longer be able to hear my father's voice.

This journal, which I close with gratitude, provided me with the space to consider and document what designing and conducting this study has meant to me. I am happily prepared to become "Dr. D." In the future, I will continue to use the art of narrative, and specifically poetry, to explore integral health as a means to promote *self-directed*, *soul-based healing*. No matter where I find myself in the world, I will remember first to look within. I appreciate the time that I have spent at CIHS, learning about myself through the pursuit of inner peace. Through writing, I will support others on the same path so that those who are interested may also seek within themselves that which will bring them the highest level of personal well-being and a world of inner peace.

# Appendix K: Thematic Content Analysis – Oral Interviews

## **Major Themes**

Oral Interview Themes: Participant Experiences with Guided Listening Exercise with Poetry				
Characteristics of the Multi-dimentional Body	Sub-themes			
1. Gross (physical) body sensations	Experience of energy moving within the body such as heat, energy pulsating, vibrating or tingling in addition to a rising sensation of moving up the chakras.			
	Sense of embodiment of the poetry, especially during the second reading.			
2. (a). Subtle (emotional) body expressions	Parasympatheic response (healing mode) states, including relaxation, increased calm, peacefullnes and a feeling of being grounded.			
	Direct Expression of Feelings (active response) such as tears, laughter, joy, anxiousness, and other forms of emotional release.			
2. (b). Sublte (mind) body cognition	Imagination through visual sensations, colors and the sense of being in an ocean, adrift, going with the flow.			
	Cognition, specially difficulty allowing words to wash over one when listening.			
3. Causal (spiritual) body transcendence	Parasympathetic Response (healing mode) related to a sense of "being somewhere else" and experiencing a deeper meditative state.			

## Appendix L: Thematic Content Analysis – Reflective Writing Exercise

# **Major Themes**

Reflective Writing Exercise Themes: Application of Energetic Information and Deeper Meaning-Making				
Themes	Sub-themes			
Use of new technologies to provide the state of psycho-emotional health promotes self-directed	The Bio-Well report can serve to validate the states of wellness for participants.			
corrective actions to create a more balanced lifestyle.	With the advent of new technologies comes the need to provide adequate orientation and training on how to interpret results.			
	Biofeedback such as the comprehensive reports generated by the Bio-Well software provide participants with targeted information to direct their attention.			
	Application of information of one's energetic system allows for targeted self-directed healing and wellness improvement plans.			
	Energetic reports can be shared with medical doctors to promote an integral approach to one's wellness.			
2. Guided listening exercises with poetry promote relaxation and the feeling of balance.	Employing the technique of a second reading allows listeners to relax and embody the poetry.			
	Poetry is one technique that can be used to enhance one's meditation practice.			
3. Studies that have clear instructions and open communication create an atmosphere of trust.	The better organized and managed that a research study is, the more confidence that participants have in the researcher, leading to trust, a sense of safety, and calm on the part of the participants.			

# Appendix M: FACIT Spiritual Well-being Questionnaire Results

		0-414/	NI-4 -4 -11 /			
				CIP.	Quite a bit /	Not at all /
	Question	n	Mean	SD	very much	very little
1	I feel peaceful	32	2.79	0.97	72%	-
2	I have a reason for living	33	3.61	0.69	91%	-
3	My life has been productive	33	3.39	0.96	91%	-
4	I have trouble feeling peace of mind	32	1.09	1.20	-	75%
5	I feel a sense of purpose in my life	31	3.18	0.84	87%	-
6	I am able to reach down deep into myself for comfort	33	2.94	0.89	64%	-
7	I feel a sense of harmony within myself	32	3.00	0.83	84%	-
8	My life lacks meaning and purpose	33	0.45	1.13	-	85%
9	I find comfort in my faith or spiritual beliefs	33	3.18	1.21	82%	-
10	I find strength in my faith or spiritual beliefs	32	3.12	1.23	81%	-
11	Difficult times have strengthened my faith or spiritual beliefs	33	3.06	1.32	-	81%
12	Even during difficult times, I know things will be OK	33	3.39	0.70	-	91%

Appendix N: Specific Comments on Individual Chakras

45%

3.6 Mean

Append	Appendix N: Specific Comments on Individual Chakras						
Cha	Chakra Comments Against Pre -and Post-Parameters of Energy and Alignment						
Pax #	Familiarity	Chakra	Specific Comment on Chakra				
6	4	Crown	During reading saw wash of gold				
12	5	Root	Felt energy rising root to crown				
		Heart	Heart Chakra needs work				
		Crown	Felt energy rising root to crown				
13	4	Sacral	Experienced deep meditation				
		Solar Plexus	Emotional, working on it				
		Throat	Throat and crown died off, much energy in throat				
		Third Eye	Felt nothing in third eye				
		Crown	Felt nothing in crown				
14	4	Crown	Strong sense of crown being open				
15	3	Root	Energy rising from the root chakra				
		Heart	Heart up and ascending				
17	3	Heart	Based in heart				
18	3	Sacral	Connected to the third eye				
		Throat	Energy from throat to crown				
		Third Eye	At sacral brought attention to third eye				
		Crown	It went to the throat and crown				
19	4	Sacral	Saw ocean during the reading				
		Heart	Feeling moved in heart and throat				
		Throat	Feeling moved in heart and throat				
22	1	Root	Was moved by the root sonnet				
23	3	Root	Root Chakra was in alignment				
		Throat	Evident that throat is enlarged				
25	5	Sacral	Calmer at heart and sacral				
		Heart	Calmer at heart and sacral				
• •		Crown	When you got to the crown, it was extraordinary				
30	2	Heart	Love of heart rising up from crown				
		Crown	Rising up from the crown				
31	4	Heart	Felt warmth in heart				
32	4	Heart	Heart felt good				
33	5	Root Heart	Dancing starting from the root  Heart goaling, pink goler, visions of lion in heart				
		Third Eye	Heart cooling, pink color, visions of lion in heart Felt Confusion in the third eye				
		Crown	Saw pink at crown, shifted to divine light				
15	54	Total	Saw plink at Crown, Sillited to divine light				
13	34	1 VIAI					

### **Appendix O: Poetry Study Results - Key Findings Flyer**

## POETRY STUDY RESULTS



## A Heuristic Study of Poetry as a Non-Invasive Healing Modality Incorporating Gas Discharge Visualization of the Human Subtle Energy System

The heuristic mixed-method approach—allowing participants to discover new information for themselves—employed narrative inquiry. Participants were co-researchers (n=33) interested in learning more about their subtle energy systems.



A sonnet cycle, consisting of seven sonnets written by the researcher to explore key characteristics of the seven main chakras in the ancient Vedic tradition was the basis for the guided listening component of the study.

### **KEY FINDINGS**

		Pre-test		Post-test		One-tailed t-test	Chi-Square	
Description	n	Mean	SD	Mean	SD	p	p	
Stress Parameter	33	3.11	0.50	3.04	0.45	0.031	0.020	
	p value:	<0.0	5 signi	ficant <0.001		highly significant		

- Listening to a 15-minute guided poetry recording tested statistically significant in lowering stress levels of the cohort.
- Poetry written to explore the key characteristics of the seven main chakras correlated with changes in these energy centers per statistical tests based on Bio-Well parameters and participant comments of these specific chakras.
- As a result of their experiences, participants exhibited a highly significant change in their beliefs, regarding poetry as an energy healing modality in a follow-up survey.
- This study confirmed the theory of a second reading of poetry to embody a poem, as originally proffered by John Fox, Founder of the Institute for Poetic Medicine.



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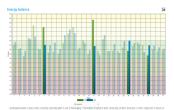
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The study explored the effect of poetry on psycho-emotional well-being. An experiential exercise and personal energy reports, generated from the Bio-Well, aided participants in gaining insights into their multi-dimensional bodies.

Moving from "tackling illness" to "cultivating wellness" when thinking about health, resulted in tailored techniques—including non-invasive energy modalities, such as the use of poetry—to promote self-directed healing to achieve improved states of well-being.



Energy Balance tab generated from Bio-Well personal energy report, depicting snapshot of dynamic interval balancing of sympathetic and parasympathetic nervous systems within the paired organ systems based on TCM.