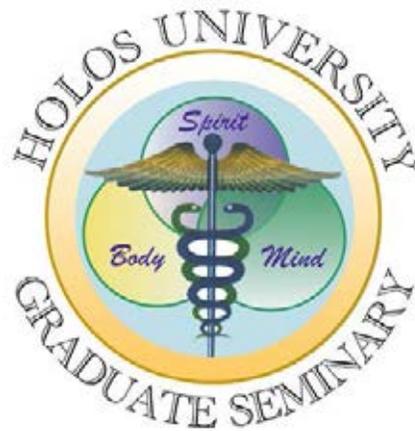


Near-Death Experience and Its Integrative Imprint

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Dissertation
submitted to the Faculty of
Holos University Graduate Seminary
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DOCTOR OF THEOLOGY

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Marie S. Maddox

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Martin Luther King Jr.

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ABSTRACT

Near-Death Experience and Its Integrative Imprint

The objective of this research was to examine if near-death experiencers (NDErs) demonstrated increased levels of integrative and holistic wellness as indicated by the Five Factor Wellness Inventory (FFWEL) in comparison to the normative data of the FFWEL. The study sought to identify and study the components that make the NDE population unique, especially in those factors related to the individual and the totality of integrative and holistic wellness as defined by the FFWEL.

The study utilized a custom survey administered through the Internet, combining qualitative and quantitative data provided by the Greyson Near-Death Experience Scale (Greyson NDE Scale) and the FFWEL. The Greyson NDE Scale was used as inclusion/exclusion criteria, assisting as a measure of NDE validity as well as categorizing the type of NDE. The Five Factor Wellness Inventory (FFWEL) was employed to evaluate the five factors of wellness and its inclusive subsets as designated by the measurement instrument. Supportive qualitative questions were used for a Pearson correlation between the participant's perception of integrative wellbeing before and after an NDE and the total wellness scores of the FFWEL.

Of the initial 87 participants, 78 individuals met the inclusion/exclusion criteria of the research study, scoring a 7 or higher on the Greyson NDE Scale. Transcendental type NDEs accounted for 37% (29 of 78) of the sample, cognitive 33% (26 of 78), affective 15% (12 of 78), paranormal 3% (2 of 78), and 12% (9 of 78) were scored as unclassifiable.

Results from the Pearson correlation, comparing participant's perceptions of integrative wellness before and after NDE, and the total wellness scores of the FFWEL, showed marginal statistical significance ($p < .08$).

A one-sample Z-test analysis of each of the five factors of the FFWEL, and its corresponding sub factors, demonstrated statistical significance ($p < .0001$), as well as total wellness and life satisfaction ($p < .0001$) scores. The local, institutional, and chronometrical contextual results also indicated statistical significance ($p < .0001$) with the only variance in the category of global context ($p < .0006$). Conclusions and suggestions for future research are presented in the final chapter.

Key Words: Near Death Experience (NDE), Near-Death Experience (NDE) and Wellness, Wellbeing, Wellness, Integrative Wellness, Integrative Wellbeing, Holistic Wellness, Holistic Wellbeing, Greyson Near-Death Scale, Five Factor Wellness Inventory (FFWEL).

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CHAPTER 1: INTRODUCTION

Holism: A theory that the Universe and especially living nature is correctly seen in terms of interacting wholes (as of living organisms) that are more than the mere sum of elementary particles.

Merriam Webster Dictionary

BACKGROUND AND STATEMENT OF THE PROBLEM

As the unfolding of random events often changes our lives, the sum of who we are is to a great extent the result of our unique personal experiences.

However, as the definition of holism implies, the whole of who we are is far more than the sum of our experiences. For those who have had a near-death experience (NDE), this remarkable phenomenon has far reaching implications often changing the individual in dramatic ways, not changing only the sum of their parts, but the whole of who they are. As is often the case, striking events such as these often change lives, and for some individuals, these circumstances provide incentive for growth and transformation toward holistic wellbeing and wellness.

Much has been written and studied regarding NDE and its mechanism, and many books abound describing a multitude of theories. In the scientific world, there are two main suppositions regarding NDE: these are the materialist and the survivalist views. Briefly, in the eyes of the pure materialist, the brain and the mind are the same. The mind simply does not exist outside the contents of the bundle of neural connections that make up the brain. In contrast, survivalists believe the mind is a non-physical entity that has meaning outside

the physiological workings of the brain. Intriguingly, both hypotheses have a plethora of material to corroborate and support their individual beliefs and conclusions regarding the mechanism of NDE.

Perhaps the importance of NDE does not lie in the physiological questions of what occurs during or after death, but in the transformative insights of NDE. Even for skeptics, these effects are difficult to refute as the positive results of NDE flourish in its scientific literature; however, many of the aftereffects of NDE have concentrated solely on spiritual and religious implications. Few have examined the integrative impact of holistic wellness and wellbeing of the NDE individual and how these components can be made accessible to others. The dissection of these components and the potential for offering them as a tool to other individuals has meaningful implications for those who are inclined to seek avenues to enhance their own wellbeing and wellness, including everyone from the health care professional to the survivor of an NDE.

In the United States (U.S.), the average cost of health care per capita is \$8,508.00 per year and comprises 17.6 % of our nation's Gross Domestic Product (GDP).^{1 2} This GDP is, by far, the highest of any industrialized nation. In comparison, health expenditure constitutes 12 percent or less of the GDP in other countries, with 9.5 percent the average among the 34 countries comprising the Organization for Economic Co-operation and Development (OECD).

In general terms, 17 cents of every U.S. dollar goes toward health costs, and it is projected by the year 2022 this figure will increase to 19 cents.³ The U.S. outspends most nations in health care, but paradoxically, quality of care

and health care outcomes are poor.⁴ In fact, in a June 2014 report released by The Commonwealth Fund, the U.S. ranks last in healthcare among the 11 nations studied.

In the U.S., citizens do not live any longer than those countries that spend much less on healthcare. Current life expectancy in the U.S. is ranked at 26th at 78.7 years, which is slightly below the OECD average of 80.1 years. Switzerland and Japan have the highest life expectancy of any countries at 82.8 years and 82.7 years, respectively.⁵ However, their health care expenditures are considerably lower with Switzerland spending \$5,643.00 per capita on healthcare and Japan, \$3,213.00.

The research data supports that simply relying on expensive mainstream healthcare for longevity, individual wellbeing, and collective wellness is *not* the totality of the answer when it comes to healthcare and wellness. It appears there is much more than meets the eye when balancing the components of a cost effective healthcare system and the factors that enhance and promote wellbeing and wellness.

PURPOSE OF THE STUDY

The objective of this research was to examine if near-death experiencers (NDErs) are imprinted with the factors of integrative and holistic wellness using the Five Factor Wellness Inventory (FFWEL) as a measure of physical, mental, emotional, and spiritual health. These measurements were used to examine whether evidence exists for increased integrative and holistic wellness in the

near-death experience (NDE) population, in comparison to the normative data of the FFWEL. The purpose of this research was to identify and study the components that make the NDE population unique, especially in those factors related to the individual and the totality of holistic wellness.

IMPORTANCE OF THE STUDY

In our Western culture, wellness is often equated with proper diet, exercise, and good mental health. These three lifestyle factors play an inordinate amount of importance in the Western ideal of wellness. Diet and exercise have been well advised and researched, and the ideals of good mental health are reflected in the West by the profuse rise in use of anti-depressants.⁶ Unfortunately, little is discussed in our Western medical model regarding the significance of emotional and spiritual health and their related factors as components of holistic and integrated wellness.

When Candace Pert demonstrated the link between peptides and other informational molecules as carriers of emotion, science began to link the enormous effect our physical, mental, and emotional state had on individual wellbeing.⁷ The Western paradigm began to quiver a bit, but presently, the idea of an integrative wellness medical model is still far from the norm. Culture, the mainstream media, and to a large degree the scientific community, have not caught up with Pert's conclusions.

The idea of integrative wellness has been described as the link between the body, mind, and spirit, but this model is integrative wellness in its most

simplistic form. In fact, Dr. Andrew Weil asserts, “Integrative medicine takes account of all aspects of the individual—mind, body, and spirit—and how they function in unity.”⁸ Over the last decades, scientific research has presented evidence signaling emotions are a formidable component of the integrative paradigm, but rarely, if ever, do we encounter the words: body, *emotion*, mind, and spirit.^{9 10} The current triune representation of integrative wellness does not include all the multi-factorial facets of holistic wellness, especially the role emotions play in physiological wellbeing and wellness.

As holistic wellness is a unique, intricate web of a multitude of factors encompassing the bio-individuality of the whole individual, the dissection of holistic wellness into its various integrative components is helpful to discover what factors, including emotions, allow humans to live meaningful and healthy lives. By examining the many elements of integrative and holistic wellness, we are better able to understand how these components relate to the interacting whole to include and transcend the sum of its elementary parts. This is important not only to the individual but to the sum of the whole and all that it encompasses.

THEORETICAL FRAMEWORKS

HOLISTIC VERSUS INTEGRATIVE WELLNESS

J. C. Smuts, one of the first pioneers of holism, summarizes the nuances of holism and integration as:

“Holism in all its endless forms is the principles which works up the raw material for unorganized energy units of the world, utilises, assimilates, and organises them, endows them with specific structure and character and individuality, and finally with personality, and creates beauty and truth and value from them. And it does all this through a definite method of whole-making, which it pursues with ever increasing intensity from the beginning to the end, through things and plants and beasts and men. Thus it is that a scale of wholes forms the ladder of Evolution. It is a continuous and universal process of whole-making that reality rises step by step, until from the poor empty, worthless stuff of its humble beginnings it builds the spiritual world beyond our greatest dreams.”¹¹

Based on Smuts interpretation, The PI defines integrative wellness as the total unification of the art of interweaving the scales of wholes that comprise holistic wellness. It is the embodiment of the constant fluctuating process that moves an individual toward holistic wellness, creating a more unified whole that is more than the sum of its parts. Therefore, the process of holistic wellness is the overall, unified, and endless scales of wholes that comprise an individual’s emotional, physical, cognitive, social, emotional, and spiritual state. Holistic wellness enfolds integrative wellness. Neither integrative nor holistic wellness precludes the presence of disease or dilemmas.

BACKGROUND AND THEORETICAL FRAMEWORK OF THE FFWEL

The FFWEL is based on Alfred Adler's theory of Individual Psychology. Adler was a general practice physician, in the early 1900's, who recognized a link between physical illness and psychological functioning. For several years, he studied with Freud but left this circle after concluding Freud's views were no longer congruent with his own. Later, Adler went on to formulate his own personality theory taking into consideration the social-psychological, developmental, and cognitive aspects of the individual. This was known as Individual Psychology.

Individual Psychology is based on the belief an indivisible whole exists in each person, and each individual functions as a whole being.¹² Adler believed interdependence existed between society and the individual, in contrast to Freud's belief in the schism of the divided personality in relation to the self. Adler felt the struggle of the individual was not so much in the personality, but in the way the entirety of the person oriented the self to the outer world and their goals. Adler's theory united the personality with the holism of the individual and the world at large.

The FFWEL is organized on the basis of Adler's original theories of holism and Individual Psychology. The FFWEL was developed as a way of defining holistic wellness via evidence gathered through the model of the Indivisible Self. The purpose of the FFWEL is to establish and demonstrate wellness as a holistic integration of the body, mind, emotion, and spirit. Wellness, in this context, is more than the mere absence of disease. It is a scale of integrated

wholes, where an alteration in one factor causes a change in all other factors. It is a way of living that includes a concern for optimal health and wholeness well beyond the physical level.

The FFWEL is based on theory of The Indivisible Self, which is a multi-factorial model oriented toward holistic wellbeing and wellness through the integration of the creative, coping, social, essential, and physical self. These five factors are further broken down into 17 additional ordered components correlating with the five factors of the creative, coping, social, essential, and physical self. Its structure is shown in figure 1.¹³

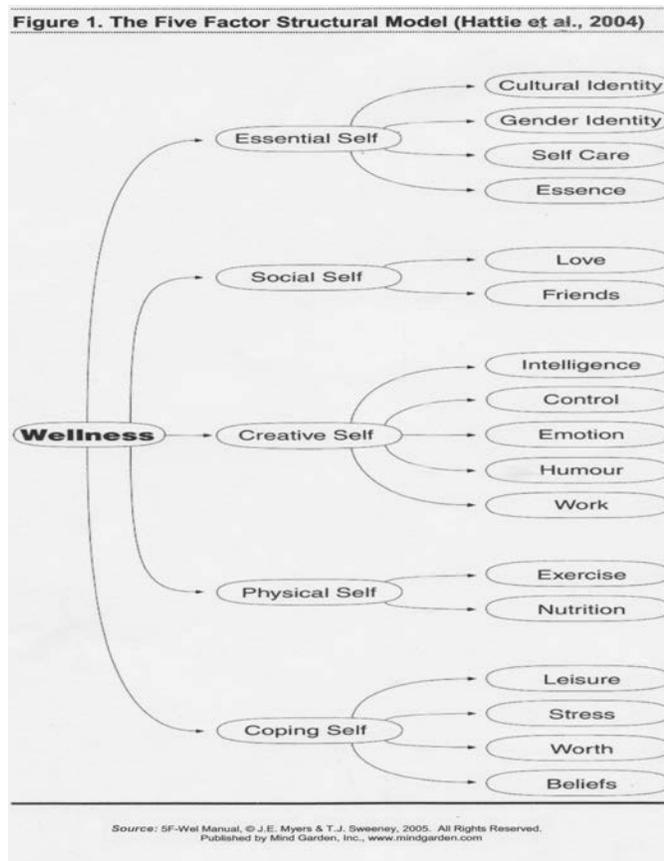


Figure 1. The Five Factor Structural Model and Wellness

Included as a component of the FFWEL, are contextual variables. Similar to Adler's belief in the interdependence of society and the individual, the FFWEL uses variables of context and its relationship to human behavior. These envelop the contexts of localities, institutions, global events, and chronometrical (lifespan) elements. Their relationship to the FFWEL is shown as figure 2.¹⁴

WELLNESS

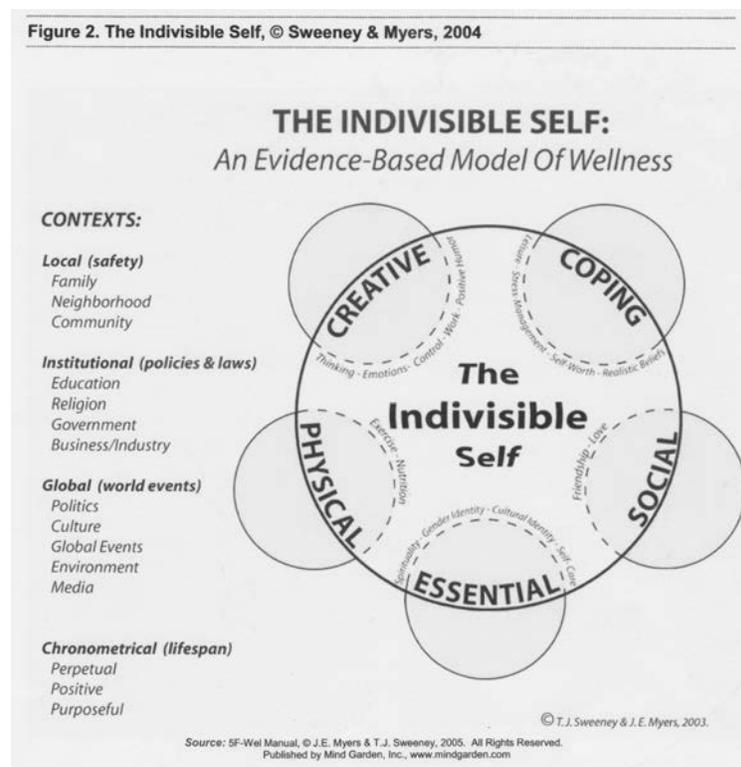


Figure 2. The Indivisible Self

THE INDIVISIBLE SELF AND ITS MEASURES

The Indivisible Self is relevant in its totality. However, to fully understand its function in the FFWEL, a more thorough examination is necessary. Its single higher order holistic wellness factor, the five second order factors, and the contextual variables are discussed below.

THE HIGHER-ORDER WELLNESS FACTOR

This is exemplified by the bold Wellness heading in figure 2 on the previous page. In this case, holistic wellness is defined by the sum of all items of the FFWEL as a measure of overall wellbeing.¹⁵ In terms of holism, the individual is more than the sum of its parts. Likewise, holistic wellness and wellness as defined by the FFWEL, is more than just the sum of the parts of the FFWEL and The Indivisible Self model.

THE FIVE SECOND ORDER FACTORS

The Creative Self

The Creative Self is considered to be those aspects that each of us formulates to express our uniqueness to the outside world.¹⁶ Within the Creative Self lie five subsets of factors: Thinking, Emotions, Control, Positive Humor, and Work. Research supports the notion that the manner in which one thinks affects both the body and emotions. Control is the perception of one having some capacity to influence everyday life and its events. Positive Humor

and appropriate beliefs have a role in thinking and perceiving clearly and accurately, so one can formulate a suitable response to arising situations. Work is another element that can either enhance or detract from the human experience. All these factors have the potential to decrease stress and strengthen the immune response in the physical body when functioning at optimal levels.

The Coping Self

In the Coping Self, there are four components.¹⁷ These are Realistic Beliefs, Stress Management, Self-Worth, and Leisure. Beliefs regarding one's self have an impact on how an individual responds to life's events. If these beliefs are unrealistic or delusional, stress can arise. However, with proper beliefs and coping mechanisms in place, life can be less frustrating and burdensome. Self-worth increases wellness through realistic expectations and successful experiences. Leisure provides time for reflection, especially when time is allowed for contemplation and transcendence of life's activities. Therefore, the Coping Self is comprised of components that assist in moderating our responses and buffering life's more unpleasant affects.

The Social Self

The Social Self has two elements: friendship and love.¹⁸ Love and friendship are not easily distinguishable. They are often thought of as existing on a continuum in many counseling and wellness models. Sexual intimacy is not a factor in this model, as the distinction between love and physical desire sometimes are exclusive of each other. Research has clearly shown that positive

social interactions, friendship, and love enhance the quality of life and add longevity, as well as having a positive family support system. Positive family support does not need to be inclusive of a biological family. It may be constructed from a family of choice.

The Essential Self

There are four factors elements of the Essential Self.¹⁹ These are Spirituality, Self-Care, Gender Identity, and Cultural Identity. Spirituality includes elements of religiosity but is geared toward the existential meaning, purpose, and hopefulness incorporated into life. Gender and cultural identities are the schemas one uses for filtering life's experiences into personal meaning, and they affect how we relate to others. Self-care encompasses the preventative measures we make to assure our quality and longevity of life.

The Physical Self

The Physical Self is comprised of two factors: Exercise and Nutrition.²⁰ These are the factors most associated with wellness and wellbeing and one of the most studied and advised, especially by Western medical models and the media. Exercise and nutrition are important components to consider, especially as we age.

CONTEXTUAL VARIABLES

Understanding human behavior in context is paramount to discerning why we do the things we do. Since holistic wellness embraces the principle that the individual affects the whole and vice versa, it is pertinent to consider the

framework where human behavior is taking place. For purposes of the FFWEL testing: Local, Institutional, Global, and Chronometrical contexts are considered as a component of The Indivisible Self.

Local Context

Local context includes the perception of our safety within various social networks and recognizes its potential impact on positive wellbeing.²¹ Most often, these social and cultural influences include our families, neighborhoods, and local communities.

Institutional Contexts

Institutional contexts place a similar role as local contexts, but on a much larger scale.²² These social systems embody religion, education, government, business, industry, and the media. These factors have the potential for widespread influence; however, it is oftentimes difficult to fully comprehend their significance.

Global Contexts

Global contexts are much more palpable in conjunction with the media and Internet.²³ Global contexts incorporate politics, the environment, culture, and world events. Through such events as 9/11 and the dismantling of the Berlin Wall, we are connected not only a nation, but as a human species. These events also play a part in the holistic wellbeing and wellness paradigm.

Chronometrical Contexts

Chronometrical Contexts take into account that wellness changes, fluctuates, and morphs over time.²⁴ Wellness is the sum of our past and present

behaviors, beliefs, and practices. These are defined in The Indivisible Self model as: Perpetual, Positive, and Purposeful. Adlerian theory proposes if high levels of wellness and wellbeing are to be achieved, it must be Perpetual, Positive, and Purposeful.

THEORETICAL FRAMEWORK OF THE NEAR-DEATH IMPRINT

In recent years, quantum physics has opened the door to some very intriguing questions and answers through the use of the Large Hadron Collider (LHC) at the European Organization for Nuclear Research (CERN).²⁵ Classic Newtonian physics has given way to the very unusual world of quantum physics, and Einstein's dislike for "spooky action at a distance" has been explained.²⁶ Entanglement is a strange phenomenon, but its existence has been proven, and it is not simple magic. It is simply the exquisite way in which the subatomic universe exists.

Information derived from quantum physics is a bit tricky, and it can be quite mind-boggling. According to physicists, quantum information cannot be copied at will, like the information from a chalkboard, and by simply observing and measuring information, the final output is changed forever.^{27 28}

Quantum information theorist Charles Bennett proposes quantum information is like the data in a dream.²⁹ When you begin to describe a dream you change the memory of it, your dream recall begins to diminish, and you tend to only remember what you have verbally described. Information in your dreams can be distorted, "but unlike dreams, quantum information obeys well-

know laws,” and some of these laws have yet to be discovered.³⁰ The understanding of quantum physics and information will continue to evolve, especially as we continue to discover the ways in which quantum physics plays out in our physical reality.

In the classic sense, information as a whole can be no more pure than its impure part, but in the context of quantum physics, entangled information allows information to be pure and whole and yet have impure parts.³¹ This is known as the Church of the Larger Hilbert Space and is summarized by Edwin Markham in the following poem:^{32 33}

“He drew a circle that shut me out,
Heretic, rebel, a thing to flout,
But love and I had the wit to win.
We drew a circle that took him in.”

In the colloquialism of philosopher Ken Wilber, the continued exploration of the entanglement present in quantum mechanics allows physicists to “transcend and include” a number of theories that may not demonstrate the entire picture, but as science continues its exploration into the world of quantum mechanics, older theories become relevant and enfolded into the whole as the understanding of the quantum world and the scientific universe expands and grows.

Scientist and researcher Dean Radin has long been a proponent that quantum theories are relevant in understanding the entanglement of minds and psi phenomena. He contends, “I’m not claiming that quantum entanglement magically explains all thing spooky. Rather, I propose that the fabric of reality

is comprised of “entangled threads” that are consistent with the core of psi experience.”³⁴ The principal investigator (PI) proposes that the near-death experience could be categorized as a type of psi experience entangled within the quantum fabric of reality.

Along these threads, William Tiller has performed several research experiments specifically chosen “to test the ability of human consciousness to significantly influence physical reality.”³⁵ His research has utilized an electronic device “imprinted” with a targeted intention via a meditative state. This device was then sent to several remote locations, switched on, and eventually, results of the targeted intentions were produced.³⁶

Interestingly, some unexpected phenomena also arose during this time. It appears that continued use of the device in the lab for a period of 3-6 months “conditioned” the space for at least three experimental signatures, yielding improved results. In conjunction with the use of an “unimprinted” control device, Tiller’s experiments have shown human consciousness has statistical significance influencing physical readings in both inanimate and animate materials.

Physicist and inventor of the first microprocessor, Federico Faggin, defines human consciousness as “a hierarchical organization of experience, where at the highest level you have a mystical connection with the universe.”³⁷ If human consciousness can imprint both inanimate and animate materials, perhaps the “mystical hierarchy” is capable of imprinting human consciousness while having a near-death experience.

Let us suppose mystical consciousness is a type of “conditioned space” where the near-death experiencer is imprinted toward wholeness and wellbeing as a result of being exposed to the mystical consciousness hierarchy and an inherent quantum coherence associated with this space. If, as Faggin proposes, “consciousness is actually more real than matter, because matter is made of consciousness” then the near-death experiencer could possibly be dipping into the very nature of reality by touching mystical consciousness upon near-death—and when returning to the lower reality of physical consciousness, they are imprinted and transformed by having touched the whole of all there is.³⁸

Like Faggin, the PI promotes the possibility of uniting science and spirituality.³⁹ However, as he explains:

“A scientist doesn’t want to talk about that stuff. For a scientist, generally, God is the unnecessary hypothesis. Well, to me, God is that undivided energy, that undivided wholeness of which everything is made—that’s God. What else can it be, since everything is made of that? And that’s all that you have to say about it. Obviously, God is not anthropomorphic. It’s something way beyond our comprehension, but we can connect with that energy because we are made of it. Everything is made of it.”⁴⁰

The PI proposes that this undivided energy of “all that is” comprises the timeless mystical hierarchy of consciousness and provides a conditioned space that is capable of imprinting the near-death experiencer toward wellbeing and wholeness, as they return to the time constraints of a physical reality consciousness. At this time, uniting this theory with current scientific

knowledge is beyond comprehension as very little is truly known regarding human consciousness. It is a bit like attempting to measure the complex smell of roasted coffee. We can easily detect its delightful aroma, but how do you begin to define and measure it?

THE RESEARCH QUESTION AND RESEARCH HYPOTHESIS

Question: Do near-death experiencers (NDErs) score higher in factors of holistic wellness as defined by the Five Factor Wellness Inventory (FFWEL) in comparison to the normative data of the FFWEL?

Hypothesis: NDErs will score higher in factors of holistic wellness as defined by the FFWEL in comparison to the normative data of the FFWEL.

Null Hypothesis: NDErs will not score higher in factors of holistic wellness as defined by the FFWEL.

SCOPE OF THE STUDY

DELIMITATIONS AND LIMITATIONS

This study collected quantitative and qualitative data through a custom survey created in conjunction with Mind Garden's Transform data collection system and a website custom created by the principal investigator and a website design company.⁴¹ Data collection was limited by the use of a computer. No printed copies were made available to any potential participants.

The study used a sampling of convenience open to all adults over the age of 18. It was limited to those participants who had a self-reported near-death experience(s) and scored a 7 or higher on the Greyson Near-Death Experience Scale. Participants were recruited through a wide array of areas, including: the Holos University and International Society for the Study of Subtle Energy and Energy Medicine (ISSSEEM) databases, social media, word of mouth, personal contacts and announcements placed in the International Association for Near Death Studies (IANDS) quarterly newsletter, and local and nationwide IANDS chapters. An announcement was also made by the American Center for the Integration of Spiritually Transformative Experiences (ACISTE) to prospective participants. The principal investigator purposefully kept recruitment to a narrow scope to have some control over participants seeking or making an attempt to skew data due to the nature of the study's subject matter.

Potential participants were directed to the principal investigator's website at www.ndeandintegrativewellness.net to take the custom survey. The study was open for a period of eight months. All surveys were completed anonymously and assigned a random number through Mind Garden's Transform system. The principal investigator was not privy to any personal information of any participant. One hundred five licensed, custom surveys were used. A total of 87 surveys were completed, and nine participants were excluded due to a score below 7 on the Greyson NDE Scale. Of the 78 final participants utilized for the study, fifty-seven participants were female, and twenty-one were male.

It was the decision of the PI to use the demographic characteristics of the 3,343 persons that comprise the FFWEL normative data for comparison to the near death population as opposed to developing a norm based on non-near death experiencers and the demographic characteristics of those who participated in the initial study.

As the primary focus of the study was to determine and examine if the NDE population had any statistical significance in those factors related to the individuality and the totality of holistic wellness, in comparison to the general population at large, the PI reasoned it was more important to compare the research data to a very high number of sample participants that can better represent the general population.⁴² The PI acknowledges this may result in sampling error, but at this time, a suitable research tool does not exist that would be appropriate to ensure complete similarity and generalizability between these two populations at this time.

DEFINITION OF TERMS

Apparently Nonphysical Veridical NDE Perception (AVP): Due to the physical position or condition of the NDEr where normal sensory processes or rational inference is not possible, any perception of the five senses that occurs during an NDE and is later corroborated as having corresponded to events or details in physical reality. Its plausibility suggests that consciousness exists outside the context of the brain and body.⁴³

Entanglement: the connection between separated particles that exist outside the flow of time and regardless of distance.^{44 45}

Holism: A theory that the Universe, and especially living nature, is correctly seen in terms of interacting wholes (as of living organisms) that are more than the mere sum of elementary particles. It is the scale of wholes that forms the ladder of evolution.

Holistic wellbeing: the dynamic, fluctuating, and infinite scales of wholes that are in a perpetual state of counterbalance between an individual's emotional, physical, cognitive, social, and spiritual state and the challenges they face at any given time.⁴⁶ It implies an active process of becoming aware and making choices within the whole toward a more balanced and rewarding existence. Holistic wellbeing does not suggest an individual is free of disease or problematic issues.

Holistic wellness: the overall, undivided, and endless scales of wholes that encompasses an individual's emotional, physical, cognitive, social, and spiritual state. It enfolds integrative wellness, and like holistic wellbeing, it does not exclude the absence of disease, illness, or challenges.

Human Consciousness: as conceptualized by Federico Faggin, "a hierarchical organization of experience, where at the highest level you have a mystical connection with the universe."⁴⁷

Imprint: a rapid learning that occurs during a brief receptive period and establishes a long-lasting response to a category of stimuli.⁴⁸

Integrate: to form or blend into a unified whole.⁴⁹

Integrative medicine: an artful patient-centered whole person approach to medicine that integrates and weaves patient bio-individuality and needs, while simultaneously taking advantage of the multitude of available therapies from a wide range of perspectives. In the current Western culture, Integrative Medicine is mostly often referred to as the body, mind, and spirit paradigm.

Integrative wellbeing: the perpetual art of interweaving the endless scale of wholes that comprise holistic wellbeing with the function of creating a fundamental unified whole, which is more than the sum of its parts.

Integrative wellness: the totality or unification of the art of interweaving the infinite scale of wholes that comprise holistic wellness. It is the embodiment of the constant fluctuating process that moves an individual toward holistic wellness, creating a more unified whole that is more than the sum of its parts.

Mystical Realm: the space where the highest hierarchical levels of human consciousness are experienced.

Null hypothesis: the assertion that the variables or populations being tested are not related and are a result of random chance.

Psi phenomena: any type of event that cannot be explained by current, known natural laws. It includes knowledge that is acquired through means other than the usual five senses.

Unity: the integration of the scales of wholes of which everything is made, including consciousness.

Wellbeing vs. well-being: Wellbeing is much more than well-being. Wellbeing, as a whole, is a dynamic and fluctuating state that is a result of the counterbalance between an individual's emotional, physical, cognitive, social, and spiritual state and the challenges they may face at any given moment. The use of the compound adjective of well-being simply implies the state of being well.^{50 51}

Wellness: the quality or state of being healthy in body, emotion, mind, and spirit, especially as the result of deliberate effort. The FFWEL define wellness as, "The sum of all the items and is a measure of one's overall wellbeing."⁵² As a medical model, it is an approach to overall health that emphasizes wellbeing and the prevention of illness.⁵³

Wholeness: holism in its undivided form.

CHAPTER 2: REVIEW OF THE LITERATURE

The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed.

Albert Einstein

THE NEAR-DEATH EXPERIENCE

In 1975, Raymond Moody's, *Life After Life: The Investigation of a Phenomenon—Survival of Bodily Death* was published. This innovative, pioneering publication paved the way for the term near-death experience (NDE) and propelled an even deeper exploration and examination into the NDE. Many scientific investigations, from both the materialist and survivalist view, have been undertaken attempting to explain the phenomena of NDE. Interestingly, both perspectives have a plethora of data to support their positions, and there are as many questions as there are answers.

For some, the intrigue of the NDE lays in the causal underpinnings of NDE. For others, interest lies in how the NDE individual transforms following the experience, but for those who have never been exposed to NDE, the basic inquiry is: What is a NDE? This section will attempt to answer this question and provide factors and markers of the NDE for those with no or little exposure into the subject matter.

CHARACTERISTICS OF THE NEAR-DEATH EXPERIENCE

Near death experiences are those events that take place, most often, as an individual is physically dying or being successfully resuscitated following cardiac arrest.⁵⁴ At present, there is no contiguous definition of what constitutes the NDE. From Moody's original research suggesting fifteen components, and other NDE scientists who have proposed as little as five, several common components have been reported and utilized for representation.^{55 56 57 58} These are:

1. Ineffability

Most NDErs report great difficulty using language to articulate their experience. They often remark there are no words in the human experience to accurately characterize the events of NDE. As one woman expressed to Raymond Moody:

Now there is a real problem for me as I'm trying to tell you this, because all the worlds I know are three-dimensional. As I was going through this, I kept thinking, "Well, when I was taking geometry they always told me there were only three dimensions, and I always just accepted that. But they were wrong. There are more. And of course, our world—the one we're living in now—is three dimensional, but the next one definitely isn't. And that's why it's so hard to tell you this. I have to describe it to you in words that are three-dimensional. That's as close as I can get to it, but it's not really adequate. I can't really give you a complete picture."⁵⁹

The NDE seems to produce an ineffable experience where the person cannot communicate the totality of the experience adequately to another individual, but they are very clear within themselves regarding the reality and insight of the NDE.⁶⁰

2. The Experience of Positive Emotions

For many of the NDE, there are positive feelings of peace, joy, love, and being pain-free during the event. Shelia describes her feelings during a severe allergic reaction during surgery: “In contrast to the chaos below, I felt a profound sense of peace. I was free of any pain.”⁶¹ In a Dutch study by Pim van Lommel, fifty-six percent of patients who reported memories of an NDE experienced emotions that were positive.⁶²

3. An Awareness One has Died

It is not unusual for the NDEr to realize they are dying or dead. Some individuals report being confused by the declaration of death by doctors and bystanders, as they are often aware of their own consciousness. One NDEr recounts, “The weird thing is that I wasn’t surprised or anything. I simply thought: “Hey I’m dead now. So this is what we call death.”⁶³

4. The Sensation of Separation from the Body

Many NDErs find themselves floating up from their body or watching events unfold from a different viewpoint. This realization usually begins as a sensation that the individual’s consciousness is leaving the physical body and is replaced with an awareness of floating. This “new” nonphysical body can many times penetrate wall and doors, remember details regarding their resuscitation, and locate objects. Many times, the individual finds it no longer possesses the ability to communicate with the physical world. Furthermore, some NDErs report being able to see and hear everything—even when the individual is known to be blind.⁶⁴

In some of these cases, relatives, doctors, or nurses have corroborated the individual's account of the events taking place during an NDE. In 2007, NDE researcher Janice Holden examined 107 reported cases of apparently nonphysical veridical perception (AVP) from 39 different publications and 37 authors, or author teams, since 1975.⁶⁵ In cases where details and events regarding the NDErs' rescues or resuscitation efforts were reported, or in some cases, the NDEr facilitated the recovery of a lost object, the rate of error was determined to be 8 percent.⁶⁶ This number is significant and points to something beyond the consideration of mere hallucination.

5. Feeling of a Dark Tunnel, Space, or Void

Sometimes with the accompaniment of noise or buzzing, individuals find themselves being pulled into a dark space. Lommel suggests 15 percent of NDEr's find this experience frightening.⁶⁷ This dark space has also been described as a space, void, or tunnel, and many times, an awareness or appearance of a bright light is also noted. NDE author and neuroscientist Eben Alexander describes his contact with this phenomena as: "I continued moving forward and found myself entering an immense void, completely dark, infinite in size, yet also infinitely comforting. Pitch black as it was, it was also brimming over with light: a light that seemed to come from a brilliant orb that I now sensed near me."⁶⁸

6. The Perception of Another Realm

Individuals often describe the sojourn of their NDE as having had visited a land of dazzling proportions. Some hear music, smell flowers, and see

incredible colors. Others articulate the existence of magnificent cities or buildings. One NDEr comments, “ What I saw was too beautiful for words: I was looking at a magnificent landscape of flowers and plants that I couldn’t actually name...Exceptionally beautiful. The best way to describe it would be: a heavenly sight.”⁶⁹

7. Meeting and Communicating with Deceased Persons

As some individuals are dying, they are aware of other deceased friends or family members. These individuals often appear to the NDEr healthy and full of vigor. This phenomenon is not restricted to the acute NDEr. John Lerma, the director of TMC Hospice, in Houston, Texas explains, “During the last days of his life, as most terminally ill patients do, Milton began to see angels, including his deceased relatives, and his wife, his beautiful friend and lover.”⁷⁰

Sometimes, the near-death individual will come into contact with an individual they do not know or whom they were unaware. Eben Alexander describes his extraordinary experience with this element in the following excerpts:

Though no two NDEs are exactly alike, I’d discovered early on in my reading that there is a very consistent list of typical features that many contain. One of these is a meeting with one or more deceased people that the NDE subject has known in life. I had met no one I’d known in life. . . .

Four months after my departure from the hospital, my birth family sister Kathy finally got around to sending me a photo of my birth sister Betsy. I was up in our bedroom, where my odyssey all began, when I opened the oversized envelope and pulled out a framed glossy color photo of the sister I had never known...

My eyes were misting as I put the picture carefully up on the dresser and continued to stare at it. She looked so strangely, hauntingly familiar. But of course, she *would* look that way. We were blood relations and had shared more

DNA than any other people on the planet with the exception of my other two biological siblings. Whether we'd ever met or not, Betsy and I were deeply connected.

The next morning, I was in our bedroom reading more of the Elisabeth Kubler Ross book *On Life After Life* when I came to a story about a twelve-year-old girl who underwent an NDE and at first didn't tell her parents about it. Finally, however, she could no longer keep it to herself and confided in her father. She told him about traveling to an incredible landscape full of love and beauty, and how she met and was comforted by her brother.

"The only problem," the girl told her father, "is that I don't have a brother."

Tears filled her father's eyes. He told the girl about the brother she did indeed have, but who had died just three months before she was born.

I stopped reading. For a moment I went into a strange, dazed space, not really thinking or not thinking, just...absorbing something. Some thought that was right on the edge of my consciousness but hadn't quite broken through.

Then my eyes traveled over to the bureau, and the photo Kathy had sent me. The photo of the sister I had never known. Whom I know only through the stories that my birth family had related of what a hugely kind, wonderfully caring person she had been. A person, they had often said, who was so kind she practically was an angel.

Without the powder blue and indigo dress, without the heavenly light of the Gateway around her as she sat on the beautiful butterfly wing, she wasn't easy to recognize at first. But that was only natural. I had seen her heavenly self—the one that lived above and beyond this earthly realm, with all its tragedies and cares. . . . It was she.⁷¹

8. The Perception of a Being(s) or Being(s) of Light

Moody comments, this is: "the most incredible common element in the accounts I have studied, and is certainly the element which had the most profound effect upon the individual...Despite the light's unusual manifestation, however, not one person has expressed any doubt whatsoever that it was a being, a being of light."⁷² It is interesting to note several scientific publications do not bother to mention this component, or the author will minimally mention it under the guise of other factors. The PI also finds this characteristic of the

NDE to be a major element, as it is mentioned by many NDErs in much of the documentation the researcher has located.

This “being,” and sometimes, “beings,” are non-judgmental, accepting, and benevolent. Frequently, the being(s) will impart wisdom and knowledge. Moody notes this being seems to take on a form according to the NDEr’s religious beliefs.⁷³ Most often, NDErs do not communicate with this presence via language; instead, telepathic communication appears to be the method of choice.

An NDEr explains:

At first, when the light came, I wasn’t sure what was happening, but then, it asked, it kind of asked me if I was ready to die. It was like talking to a person, but a person wasn’t there. The light’s what was talking to me, but in a *voice*.

Now, I think that the voice was talking to me actually realized I wasn’t ready to die. You know, it was just kind of testing me more than anything else. Yet, from the moment the light spoke to me, I felt really good—secure and loved. The love which came from it is just unimaginable, indescribable. It was a fun person to be with! And it had a sense of humor, too—definitely.⁷⁴

9. Experience of a Life Review Sometimes Including the Future

Individuals may experience this as a partial or entire life review and is often sensed as occurring instantaneously through vivid, visual images. They may flash forward, but in most circumstances the life review is of past events. Most individuals watch the review with a sense of detachment and time is sensed as non-existent. Many NDErs report, during the life review, they know their actions, thoughts, and words have had an effect on themselves and others.⁷⁵

Some NDErs experience an occurrence of precognition in the context of the life review. Like the life review, it also retains a sense of timelessness. Ring and Lommel both report verifiable accounts of “flashforwards.”^{76 77} These cases are puzzling as it raises questions regarding if life is determined, or are we subject to free will? Perhaps, it is both as this NDEr describes:

And in a flash I saw the rest of my life. I could see a large part of my future life: taking care of my children; my wife’s illness; everything that would happen to me, both in, and out of the workplace. I could see it all. I foresaw my wife’s death and my mother’s passing. One day I wrote down all the things I saw back then; over the years I’ve been able to tick them off. For instance, I saw my wife on her deathbed, wrapped in a white shawl, just like the one she was given by a friend of hers shortly before she died. . .⁷⁸

10. Encountering a Border or Barrier

This is not a common experience among all NDErs but is mentioned enough to be included in both the works of Lommel and Moody. Both describe this barrier as a fog, mist, line, fence, door, river, bridge, or border that if crossed, determines actual death. Lommel contends if this line is crossed, then the individual will not be allowed to return to the physical body.⁷⁹ In contrast, Moody’s anecdotes from an NDEr suggests this border can be crossed and the NDEr can be returned to physical consciousness. The divergence of these views is demonstrated by the following extracts:

From Moody: “. . . . In the presence of the light, the thoughts or words came into my mind: “Do you want to die?” And I replied that I didn’t know since I knew nothing about death. Then the white light said, “Come over this line and you will learn.” I felt that I knew where the line was in front of me, although I could not actually see it. As I went across the line, the most

wonderful feelings came over me—feelings of peace, tranquility, a vanishing of all worries.”⁸⁰

From Lommel: “Then I reached a border. Even at the age of ten I needed no further explanation. I simply understood that I’d never be able to return if I crossed this border...”⁸¹

11. A Conscious Return to the Body—Either Voluntarily or Involuntarily

The return to the body can be quite sudden. The individual can consciously decide they must go back, or others are simply sent back. Ring concludes these decisions are based either on the force of a loved one pulling them back (spouses/children) or a sense that one has not fully completed their life purpose.⁸² Sometimes, individuals feel themselves being pulled back through the tunnel, and others report reentering ordinary physical reality via the head. Many times the experience is quite unpleasant, and once back, they experience all the pain and frustration of the dying experience.

KENNETH RING AND THE CORE EXPERIENCE

One, some, or all of these characteristics may be present during an individual’s NDE. Kenneth Ring was the first researcher to carry out a scientific study based on Moody’s findings. From this investigation, many of Moody’s fifteen components were confirmed. Ring proposed five factors that comprised most NDEs. These are: feelings of positive emotions/peace, the perception of being separated from the body, entering a dark tunnel or void, seeing the light, and entering the light. The above order is significant as this is

how most NDErs tend to describe the arrangement of their experience. It also appears there is a continuum to the NDE, deepening the longer the individual is actively dying or considered dead.⁸³

Ring's, *The Connecticut Study*, concluded the core experience is not related demographically nor does religious affiliation or degree of religiousness appear to be a factor in the NDE. Prior knowledge of NDE phenomena does not appear to play a part nor does the mechanism of dying.⁸⁴ However, survivors of NDE/core experience were left with positive changes both in personality and values.⁸⁵

BRUCE GREYSON AND THE NEAR-DEATH EXPERIENCE SCALE

In the early 1980's, Bruce Greyson set out to develop a more quantitative approach to NDE research in order to assist in distinguishing the NDE from stress responses and brain disorders.⁸⁶ Based on Kenneth Ring's, Weighted Core Experience Index (WCEI), his inquiry led to the development of the Greyson Near-Death Experience Scale (Greyson NDE Scale).⁸⁷

The Greyson NDE Scale (Appendix I) is comprised of a set of 16 questions measuring the cognitive, affective, paranormal, and transcendental components of an NDE experience. The scale has high internal consistency, split-half reliability, and test-retest reliability. Its use assists in delineating and standardizing the effects of NDEs as well as determining and confirming an NDE. It was employed as a quantitative measure for this study.

CONSIDERATIONS

Ring's and Greyson's quantitative and qualitative investigations have answered many questions, but they have also left many other scientists flummoxed. There have been many others who have followed in their footsteps and a multitude of theories and queries abound today regarding NDE and its mechanism. Some scientists aim to prove the NDE is the result of a dying brain while others concentrate on quantum theory as an explanation.⁸⁸ Regardless of whose version of NDE phenomena is correct, it does exist, and many positive attributes have been documented. The door is still wide open for further exploration, as a multitude of questions still exist regarding the totality of its significance.

THE ART OF INTEGRATIVE WELLNESS

The idea of integrative wellness has been described as the link between the body, mind, and spirit, but this model of holistic wellbeing and wellness is integrative wellness in its simplest form. It limits integrative wellness to a few shades of gray instead of encompassing the infinite continuum of factors that make up the infinite and ever-evolving whole of holistic wellness and the entirety that exists beyond the sum of holistic wellbeing.

The model of The Indivisible Self discussed in chapter one, expands the triune representation of body, mind, and spirit as holistic and integrative wellness. The Indivisible Self, as a representation of holistic wellness, compiles a clearer, albeit more intricate web, regarding the totality and meaning of

integrative and holistic wellness within body, mind, spirit, emotional, social, and cultural contexts. This section will attempt to broaden the definition of holistic and integrative wellness and incorporate several of the components presented in the model of The Indivisible Self with special emphasis on the role of emotions.

THE ROLE OF EMOTIONS

“Body, mind, and spirit.” This catchy phrase is used to describe and market integrative/holistic wellness in the West, and books, seminars, and spa packages are mass-marketed on its basis. Over the last decades, scientific research has presented evidence signaling emotions are a formidable component of the integrative paradigm, but rarely, if ever, do we encounter the words: body, emotion, mind, and spirit. It certainly is not as captivating as the phraseology of body, mind, and spirit, but it does acknowledge the role emotions play as a bridge between the mind and body.

Perhaps the reasoning for the exclusion of emotions as components of an integrative model is the way in which we think of “body” and “mind” in the holistic paradigm. Ken Wilber’s thoughts on the expression of these words “body” and “mind,” offer some insight into why it is so difficult to isolate emotions from the body and the mind.⁸⁹

In science, the word “body” can be defined as the biological organism as a whole. This includes the brain and all of its constituents such as the neocortex, limbic system, and the reptilian stem of the brain. So, in terms of

strict scientific terminology, the brain is in the body. Yet, in everyday use, the word “body” encompasses subjective feelings, emotions, and sensory information felt throughout the body and processed via the brain. Body, in this context, refers to the workings of emotions sensed within the physical body. Therefore, the term “body” may include one or both meanings according to the framework in which it is being used.

The usage of the word “mind” creates similar issues. Materialist scientists strictly equate the mind with the brain: no body, no brain, and no mind. The mind simply does not exist without the brain and body. Again, in everyday use, “mind” is most often used to identify our feelings and desires found within our interior dimensions but not necessarily in the mind of the physical brain.

When body and mind are used in the strictest materialist sense, the paradox of dualism is solved, but as most of us know, we can sense the difference between our thoughts and feelings and the distinction between the mind within and the material body presented to the physical, external world. Therefore, emotions and feelings are often lumped together with the “body” and “mind” because they are the bridge that transcends and includes all meanings of duality that exist between both. Placing emotions as part of the holistic and integrative paradigm acknowledges this connection and their significance as a bridge to both the body and mind.

Neuroscientist and pharmacologist Candace Pert seems to agree. She concludes: “We can no longer think of the emotions as having less validity than

physical, material substance, but instead must see them as cellular signals that are involved in the process of translating information in physical reality, literally transforming mind into matter. Emotions are at the nexus between matter and mind, going back and forth between the two and influencing both.”⁹⁰

Congruous with Pert’s remarks, emotional wellness has an influential impact on overall wellbeing. Our mind and its corresponding thoughts have physical ramifications on the biological processes of the body. Emotions are believed to be the connection between the mind and the body that assist in determining if an illness will fully manifest or heal.⁹¹ It is Pert’s conjecture that all emotions are a healthy part of human existence. It is when we repress emotions such as anger, sadness, or frustration that biological processes begin to become blocked at the cellular level, tax the body, and perhaps eventually emerge as a substantial illness.

Since our conscious mind is able to register cellular, chemical reactions within the body as emotions, and our minds are also capable of generating emotions and influencing cellular, chemical responses, Bruce Lipton proposes this feedback system is an essential factor in the art of self-awareness and self-reflection.⁹² It is postulated that the prefrontal cortex is responsible for the self-consciousness and self-reflection capabilities of human beings. Most of our daily functions are a result of some type of learned behavior, which we can self-observe and adjust, if we so choose. As examples, we can drive our car and listen to the radio and sing, or brush our teeth and walk at the same time. If we want to change this programming and drive the car and speak to our spouse or

brush our teeth and read the newspaper, we simply choose whether or not we wish to respond to the stimuli and thoughts being presented. The choosing, self-conscious mind is a wondrous thing when used appropriately.

However, as humans we have a few unique issues. Most organisms on our planet must learn directly from an experience to ingrain a behavior. For example, think of Pavlov's experiments where dogs were conditioned to salivate upon the ringing of a bell or the ability of gorillas learning to "speak" to their handlers through the use of sign language. In each of these cases, the behavior was accomplished through first-hand experience. Humans, on the other hand, are adept at acquiring behaviors from ubiquitous perceptions.

As an illustration, let us imagine you live in a climate where an encounter with a rattlesnake is not that unusual. From other's experiences, you have perceived rattlesnakes are dangerous as their venom is capable of creating all sorts of grotesque consequences, and they can be fatal!! No one needs to tell you to steer clear of a rattlesnake. The family dog, however, does not have the advantage of a learned perception. She does not understand how treacherous a rattlesnake can be until she both encounters one and is wounded, or she succumbs to the effects of its venom. In this case, an obvious advantage goes to the human's learned perception.

Problems with this remarkable ability arise when humans perceive a perception that is false. If we were raised in a family that believed clowns were evil and deadly, a trip to the circus could be a frightening event. It could trigger a host of emotions and thoughts that are chemically upsetting to the physical

body, and in turn, cause such reactions as heart palpitations, profuse sweating, fainting, or in an extreme case, a heart attack. If we were able to withstand our initial shock and choose to remain for the entire show, our understanding of clowns would seem downright silly to most individuals. Therefore, unless we are aware of our learned, inaccurate perceptions and begin to choose and challenge them, our false beliefs become our truth...and our biology.

Enter self-awareness and self-reflection. These tools give us the ability to acquaint ourselves with our false beliefs and question them. Once we are aware of the creatures in the attic, it is much easier to deduce which specific critter is a threat to our overall wellness and then determine action. As humans this is easier said than done, as sometimes, it takes many attempts investigating the dark corners and recesses of the attic before it is truly emptied. In fact, for most of us, it will take a lifetime, but in this process, our overall wellness will most likely improve.

This does not mean we will be free of illness or death, but it does mean we are more inclined to live a more congruent and integrated lifestyle full of ever increasing levels of satisfaction and happiness. General health may also improve dramatically as our thoughts and emotions become more mindful of the ways we are chemically altering and morphing the physical body. Too many rounds of the thinking-feeling roller coaster, and we will most likely become physically ill. Our beliefs and perceptions can also have the same effect if we choose never to get off. The art of integrative wellness is learning how to balance and embrace the whole of who we are at any given moment.

EMOTIONAL INTELLIGENCE AND SELF-AWARENESS

Psychologists, Peter Salovey and John Mayer were two of the first to propose a model of Emotional Intelligence.⁹³ Their model was based on the early works of Howard Gardner who proposed the Multiple Intelligences Theory, which is the belief that there are many types of intelligence ranging from musical intelligence to the intelligence of personal understanding.⁹⁴ In the model of Emotional Intelligence, Gardner's intelligence of self-understanding is encompassed and expanded. Interestingly, two imperative factors related to the keystones of self-awareness comprise this model: (1) Knowing one's emotions and (2) Successfully managing them.

Knowing one's emotions (self-awareness) is the ability to recognize a feeling when it happens. It is crucial both psychologically and physically to be aware you are angry, and it is also important to dissect and understand from where the emotion of anger originates. When we remain unaware of our feelings and thoughts, we are at the mercy of our false beliefs and the biological consequences they generate. Individuals who are self-aware are more apt at making wiser decisions based on the ability to recognize their feelings and the triggers that predispose them to a certain emotion. If they can choose to stop for a moment and shift their perception, they may very well alter the chemical reactions that predispose them to illness.

Managing emotions is an aptitude that builds on self-awareness. It includes mastering emotions to delay the immediate gratification that feelings such as rage present and the ability to balance the emotional tsunamis we

endure. It does not imply the suppression of emotions, but it does indicate the need for appropriate emotions proportionate to any given circumstance. Regulating emotions is also vital for the capacity to self-soothe when things are not going our way. In the scheme of wellness, to know thyself, both good and bad, is valuable in the artful wisdom of an integrative lifestyle.

HAPPINESS AND INTEGRATIVE WELLNESS

“Happiness is a journey, not a destination.”⁹⁵ Happiness plays a huge part in overall life satisfaction and wellbeing, but happiness is not something easily possessed through a magical formula or pill. It is a combination of qualities that fluctuate, intermesh, and interweave, allowing an individual the freedom to radiate an overall pattern of internal wellbeing to the external world. It is not a life that is completely trouble free nor is it found through the accumulation of goods, as culture often suggests. Happiness is contentment, peace, and acceptance with “what is” at any given moment.

Dan Baker, author of *What Happy People Know*, suggests happiness is comprised of twelve qualities that can be cultivated to assist in the inevitable bumps life will supply.⁹⁶ These characteristics parallel many of the factors of The Indivisible Self.

Baker proposes the twelve characteristics of happiness as:

1. **Love:** Human beings are capable of a wide range of emotions. Two of the most primal emotions are fear and love. Fear is necessary for our survival, and love is paramount for

thriving. The benefits of feeling love and other positive emotions have been documented for the heart, brain, and the immune system. Love, and the plethora of positive feelings associated with it, can have an enormous impact on overall wellbeing.

2. **Optimism:** Optimism is the strength to find the gifts in negative experiences. It is best reflected in the wise adage, “Good things come from bad experiences.”
3. **Courage:** This is the capability to take action in spite of our fear.
4. **A Sense of Freedom:** When we recognize the power to make our own choices and take action, self-responsibility becomes an inherent factor in determining where our quest for happiness and wellbeing will lead us. Freedom lets us explore many options, leading to the discernment of choices that are right for our individuality, while also uncovering those choices that are damaging to our wellbeing and happiness.
5. **Proactivity:** Being proactive is the basis of Preventive Medicine. It is the practice of taking care of one’s self before disease or injury presents itself, an important aspect in overall wellbeing. People who are proactive do not wait for

others or events to bring them happiness. They negotiate life as it unfolds and actively pursue their wellbeing.

6. **Security:** Happy people know nothing lasts forever. They do not measure security in a monetary amount, nor do they measure it by physical appearance or by the amount of letters next to their name. Those who find themselves safe and secure in happiness and wellbeing value themselves as a unique human being.
7. **Health:** Health and wellbeing go hand in hand. Unhappy individuals are often not healthy, nor do they enjoy the benefits of an overall sense of wellbeing.
8. **Spirituality:** Those who enjoy happiness and wellbeing often practice the belief that individuals are more than the boundaries of a physical reality. Dimensions of love, hope, optimism, and appreciation, as well as moral and ethical values are all essential components of spirituality and its connection with wellbeing and happiness.
9. **Altruism:** Altruism is kindness extended toward others. Happy people know how good it feels to give. This falls in line with the elements of health. When an individual feels good, they are more apt to enjoy a more peaceful, benevolent state and expand it toward others.

- 10. Perspective:** Happier people tend to see the events of life as lessons and possibilities. They do not personalize events nor do they view circumstances as being black and white. In any given situation, they are aware of the many inherent shades of gray.
11. **Humor:** Laughter is good for the soul. It has a wide range of positive psychological and physiological effects and reduces stress.⁹⁷ Humor allows us to laugh at our self and others, especially when we make mistakes. It also has the capability to bring levity and perspective to unfortunate circumstances.
12. **Purpose:** Those who are happiest and enjoy higher scores of wellbeing, have a sense of mastery and control regarding the direction of life. They spend most of their time living life in a manner that is satisfactorily purposeful and meaningful.

Happiness, as presented by Dan Baker, and integrative wellness, as perceived by the model of The Indivisible Self, have many interrelated factors. Many of these components lie on the foundations of human emotions. It is not enough to think our selves into happiness and wellbeing like our Western culture and the media believes. With the plethora of science pointing toward the role of emotions and their repercussions for both the body and mind, it is more advisable to *think and feel* our way into more positive ways of integrated and holistic being.

From the vast array of scientific data supporting the element of emotions as an important component of overall wellbeing, it is logical that emotions be added to the integrative-holistic medical model. This would afford emotions their rightful place as an alchemical agent existing between the body, mind, and spirit, offering a more unified paradigm of integrative and holistic wellness.

BODY, EMOTION, MIND, AND SPIRIT

In Moody's original work, the life transforming effects of NDE were noted, and Ring's early research acknowledged profound changes in the individual after an NDE. These effects were reported as a decreased fear of death, increased religiousness, and an increase in the belief that life exists beyond death.⁹⁸ Russell Noyes expanded this research, confirming Ring's initial conclusions, while also determining there are other consistent attitudinal shifts among NDErs and those who have had a brush with death without the characteristics of an NDE.⁹⁹ In Noyes' study, almost two-thirds of the participants experienced alterations in perceptions that comprised changes in invulnerability, feelings of a special importance or destiny, and a belief in having received a special favor from God or fate. Participants also reported a reevaluation of priorities, a decrease in reactivity when uncontrollable events arise, and an increase in the appreciation for life.

Even for skeptics, the transformative effects of NDE are difficult to refute, but many of the aftereffects of NDE have concentrated solely on spiritual and religious implications. Few have examined the holistic and integrative

impact of wellness of the NDE individual and how they can be made accessible to others. P. M. H. Atwater notes that the scientific climate towards NDE and its after effects is sometimes quite problematic for the survivor. She observes:

“Current researchers are quick to point out that near-death survivors, to a person, lose all fear of death afterwards. They usually become more loving, more peaceful, and much more content, with a less materialistic lifestyle.

It is easy to report findings such as these, for the general public is open and receptive to them. These findings seem to confirm traditional religious teachings and idealistic notions of that which constitutes “good.” Even if scientists deem the near-death phenomena unsettling, its purported aftereffects somehow make everything okay.

Little else is said.”¹⁰⁰

The positive effects of NDE flourish in its scientific literature. The dissection of these components and the potential for offering them as a tool to other individuals has meaningful implications for those who are inclined to seek avenues of awareness for their own wellbeing and wellness in all its forms, including the survivor of an NDE. This section will briefly explore several possible benefits and parallels of integrative and holistic wellness in relationship to a body, emotion, mind, and spirit holistic paradigm.

THE BODY

The role of exercise and nutrition in relationship to health and wellness is well documented and advertised. In the model of The Indivisible Self, and the measures of the FFWEL, these components are calculated as constituents of holistic wellness. They are assessed as nutrition and exercise under the heading of the Physical Self. In the Western culture, these are some of the first elements that come to mind when considering health. In the current medical paradigm, there is an enormous emphasis placed on these factors often to the exclusion of other aspects.

EMOTIONS

Emotions are rarely mentioned outright in Western medicine wellness models, and yet science has shown a considerable correlation between toxic emotions and illness.¹⁰¹ On the surface, the role of positive emotion seems subtle, but in studies with a large number of people, the role of positive emotions is hard to refute.¹⁰² In terms of wellness and the medical model, emotional wellness can save time and money for all parties.¹⁰³ For the patient, the components of self-awareness and emotional intelligence may very well promote their life.¹⁰⁴

The FFWEL recognizes the facet of emotions as an important consideration to overall wellness and the totality of the self. Emotions as defined by the FFWEL is as follows: “Being aware of or in touch with one’s feelings; being able to express one’s feelings appropriately; being able to enjoy

positive emotions as well as being able to cope with negative emotions; having a sense of energy; avoiding chronic negative emotional states.”¹⁰⁵ These qualities conform nicely with the concepts of self-awareness, managing emotions, and the foundations of happiness and emotional intelligence discussed under the previous sections. Emotions are an important bridge between the body, mind, and spirit.

In other psychological models, the importance of emotional wellness is also listed as among the characteristics of healthy, unified, or holistic individuals. Psychologist Abraham Maslow designates unified individuals as self-actualizers. He describes these individuals as being motivated by an “...ongoing actualization of potentials, capacities, and talents, as fulfillment of a mission (or call, fate, destiny, or vocation), as a fuller knowledge of, an acceptance of, the person’s own intrinsic nature, as an unceasing trend toward unity, integration or synergy with the person.”¹⁰⁶ Clinically, he observed self-actualized individuals were more inclined to have acquired the characteristics of:¹⁰⁷

1. A superior perception of reality.
2. Increased acceptance of self, of others, and of nature.
3. Increased spontaneity.
4. Increases in problem-centering.
5. Increased detachment and desire for privacy.
6. Increased autonomy, and resistance to enculturation.

7. Greater freshness of appreciation, and richness of emotional reaction.
8. Higher frequency of peak experiences.
9. Increased identification with the human species.
10. Changed and improved interpersonal relations.
11. More democratic character structure.
12. Greatly increased creativeness.
13. Certain changes in the value system.

Clearly, many of these characteristics are found not only as components of the FFWEL, but they are also included in models of happiness, emotional intelligence, integrative wellness, and the NDEr.

THE MIND

It was not long ago that science and mainstream medicine believed brain physiology was static. The common perception was after childhood, the brain did not change until the onset of a long mental decline began to take noticeable hold. It was also proposed, by adulthood, the brain contained a fixed number of cells, and if damage or death occurred to these organisms, they could not be replaced or retrained. Injured brain cells were to be lost forever, and the accepted myth was people who were born with brain dysfunction or those who sustained a traumatic brain injury (TBI) were wounded for the remainder of life.

Doidge suggests these mistaken views stem from three main origins: the observation that many patients with TBI rarely make full recoveries, the

inability to view the inner workings of the living brain, and the metaphor of the brain as a machine.¹⁰⁸ This analogy as the brain as a machine led to the misplaced notion, if machines cannot grow and morph, then how is it possible the human brain is any different? As an example, when brain circuitry is compared to the hardwiring of a computer with permanent pathways, assigned to specific operations, it is not a far jump in reasoning; if the brain is modeled like a computer, it has functions that are also unyielding due to its perceived rigid circuitry. In this illustration, the brain is reduced to a simple machine with no life or mystery of its own.

Thankfully, modern science is quickly dismantling these misconceived ideas, as science has learned the brain is capable of some very amazing and extraordinary reconstruction properties. It has been shown that the brain is capable of changing its wiring and structuring with different activities, and if certain parts of the brain fail, other areas of the brain will take over.¹⁰⁹ The brain is not a machine but a unique living organism capable of growth, evolution, and transformation.

Questions of the mind, and specifically cognition, are also enfolded within the context of the FFWEL. It is under the factor of the Creative Self and the sub factor of thinking. The FFWEL defines thinking as: “Being mentally active and open-minded; having the ability to be creative and experimental; having a sense of curiosity, a need to know and learn; the ability to think both divergently and convergently when problem solving; the capacity to change

one's thinking in order to manage stress; the ability to apply problem solving strategies in resolving conflicts.”¹¹⁰

Being flexible in one's thinking has many advantages for personal growth and wellbeing. Managing stress, creative problem solving, and being open-minded are valuable tools to negotiate the roadblocks that will most certainly be thrown our way. In the words of the poet Maya Angelou, “I did then what I knew how to do. Now that I know better, I do better.”¹¹¹ By being aware, open-minded, and curious, we assist in laying down new foundations for changing our perceived reality and the whole of who we are. When we know better, we do better.

Andrew Newberg concludes our neurological functioning plays a large part in shaping our reality to a great degree. He explains:

Our neurological findings have shown that different types of meditation and prayer affect different parts of the brain in different ways, and each one appears to have a beneficial effect on our neurological functioning and physical and emotional health. Some techniques increase blood flow to the frontal, parietal, temporal, and limbic areas of the brain, while others decrease metabolic activity in the same areas. Intensive meditation may also trigger an unusual form of neural activity—deafferentation—in which one part of the brain ignores the information being sent to it by other parts. When this happens, we radically alter our everyday perceptions of the world.¹¹²

Newberg has spent decades exploring the link between God, spirituality, and neural circuitry.¹¹³ He has found that intense, long-term spiritual practice has the capacity to cause permanent changes within the structures of the brain that control moods and sensory perception of the self and the physical world. These practices also have the propensity to strengthen specific neural pathways that propagate feelings of peace, compassion, and increased social awareness.

In addition, regardless if these practices are affiliated with any specific religious belief, neural functioning can be improved to enhance emotional and physical health.

As science has shown, thinking and feeling are clearly interrelated and have biological repercussions, but how one thinks also determines to a great degree our perceived reality by learned neural pathways. Author Joseph Chilton Pearce explains:

As neuroscience keeps pointing out, no claim can be made of a world unto itself; we are always speaking by default, of the world presented to us through our brain and body's neural system. The world my brain and body give me is approximately the same as that which you and others are given because our similar physiology draws on the same nonlocalized frequency fields. The slight variations in our worlds—which often lead to mayhem—are due to the minor variations in our neural system that, in turn, arise from the unique history and development of each of us.¹¹⁴

As the neural pathways of the brain are quite flexible and plastic, cognitive thoughts and behaviors are always being laid down with slight variations according to the conditions being perceived.¹¹⁵ A thought or behavior will follow a particular related neural track, and once it is laid down it can be very difficult to correct. It is a bit like driving to the store around the corner. You may take the same exact route every time because it is quick and efficient, but there are many factors that come into play that determine the trajectory your wheels will take and under what conditions you will arrive. If you do decide to take another route, or for some reason they are doing construction on the street, and you must detour, it can end up costing you time

and the trip could be very difficult, but perhaps in the end, the scenery has improved, and it truly is the more desirable way.

The cognitive thoughts of the mind have power in shaping our emotions, behaviors, and overall wellbeing, but our cognitive thoughts are not a one-way street leading to integrative wellbeing and wellness. In conjunction with other factors, they are part of the entangled web that makes up the perpetual evolutionary scale of holistic wellness.

PEAK EXPERIENCES

Abraham Maslow defined peak experiences as “cognitive happenings” in a Being state.¹¹⁶ He termed this state, B-love and observes, “I have found a particular kind of cognition for which my knowledge of psychology had not prepared me but which I have since seen well described by certain writers of esthetics, religion, and philosophy....The B-lover is able to perceive reality in the beloved to which others are blind, i.e., he can be more acutely and penetratingly perceptive.”¹¹⁷

Maslow coined the term “peak experiences” as an attempt to define the basic characteristics of this B-love experience, which occurred in a variety of circumstances, including the mystic realm.¹¹⁸ Maslow concluded there were several common characteristics between peak experiences whether or not they came from a mystical, intellectual, nature, sexual, athletic, or creative experience. He observed these peak experiences contain the following elements:¹¹⁹

1. The experience tends to be seen as whole, synonymous with the universe.
2. The subject is completely fascinated and absorbed by the experience. The subject becomes isolated from time and forgets their surroundings while perceiving the “whole of Being.”¹²⁰
3. The division between humanness and nature does not exist. They are one and the same.
4. Revisiting the experience seems to make it richer.
5. The sense of self disappears.
6. Peak experiences are self-validating. Any attempt to justify the experience seems to negate its worth.
7. There is a disorientation of time and space.
8. The peak experience is felt as positive.
9. The experience is ineffable, and there is a feeling of being “out there” beyond a reality of man and physical life.
10. Peak experiences are much more passive and receptive versus active.
11. There are feelings of awe, reverence, wonder, surrender, and humility, sometimes with laughter and tears.
12. Most often, those peak experiences that are mystical or philosophical in nature, the subject sees or feels the world as unity. In peak experiences that are deemed love or aesthetic

experiences, the subject may experience one small part of the world as if it were the entire world.

13. The ability to perceive objects and people in terms of wholes.
14. The ability to understand and resolve duality.
15. Complete non-judgment and acceptance of the world and others.
16. The ability to perceive all attributes simultaneously.
17. Complete and momentary loss of all fear, including the fear of death and the fear of surrendering to pleasurable emotions.
18. The world and the self become more reflective. For example, as the subject become more playful and stronger, the individual finds more strength and humor in the world.
19. The subject becomes more integrated at all levels.

Many of these markers are similar to the components of religious and spiritual experiences as explored in the following section.

RELIGIOUS AND SPIRITUAL EXPERIENCES

In 1962, Walter Pahnke studied the spiritual and religious experiences of a group of theological students at Boston University's Marsh Chapel facilitated by the use of LSD.¹²¹ He summarized these experiences as having the following similar properties:¹²²

1. A sense of cosmic unity as the participant felt that they are a part of everything or "all is one."

2. Transcendence of time and space: A three dimensional reality no longer existed and the subject felt as if past, present, and the future all exist simultaneously in a realm of infinity.
3. Deeply overwhelming positive emotions such as joy, peace, love, and blessedness, often resulting in tears.
4. Sense of non-rational sacredness, intuitions, awe, reverence and wonder, sometimes appearing with other inspiring realities.
5. Illuminating feelings of insight experienced on a non-rational, intuitive level, but with great certainty.
6. Complete understanding and integration of paradox and contradiction.
7. The experience was beyond words and highly ineffable, and the subject had difficulty finding words to language and convey the experience.
8. Students reported a sense of afterglow, and the experience remained as a lasting memory.
9. Long lasting positive changes in attitudes and behaviors toward the self, others, and life.

McNamara believes there are eight other characteristics that can be added to this list to assist in defining the features of a religious or spiritual experience.¹²³ These are:

1. An enhanced sense of personal power, sometimes the belief that their power has been specially blessed by God.
2. Enhanced capacity to understand and sense the intention and mental state of others.
3. Increases or decreases in sexual conduct.
4. Changes in reading and writing behaviors, most often manifesting as an increased interest in writing. These changes can be extreme and pathological and are known as hypergraphia.¹²⁴
5. An enhanced awareness and appreciation of music.
6. Complex visions and symbolic imagery.
7. Ritualization as the capacity to perform repeated actions when in the midst of the experience.
8. An encounter with God or other beings.

Whether a spiritually transformative experience (STE) or religious experience is generated by LSD, other entheogens, or traditional spiritual practices and/or other non-traditional means, virtually all spiritual, religious, and peak experiences share some or all of these characteristics. The common similarities among those individuals who use chemicals as a means for religious experience, and those who practice or experience other ways of getting there, such as an NDE, strongly suggests these experiences are tapping into the same neural circuitry with complementary results, as it appears NDErs and those who

have had a STE or a peak experience share similar characteristics and aftereffects.

WEB-BASED SURVEYS

COMPUTER OWNERSHIP AND INTERNET ACCESS

The utilization of the Internet as a potential tool for research and data collection has grown exponentially as computer ownership and Internet use continues to bridge the gap across the demographic domains of gender, age, ethnic, geographic, education, and socioeconomic status. For example, in 1984, only 8.2 percent of households had a computer, and in 1997, only 18 percent of households held any type of Internet subscription.¹²⁵ According to a recent report published in 2014 by the U.S. Census Bureau, 83.8 percent of U.S. households reported some type of computer ownership in 2013 and 74.4 percent use some type of Internet subscription.¹²⁶

Men and women use the Internet in equal numbers, and most users are under the age of 65, but a full 65.1 percent of those over the age of 65 reports some type of computer ownership.¹²⁷ ¹²⁸ Asian households report the highest rate of computer ownership at 92.5 percent with 86.6 percent reporting home Internet use, followed by White households reporting computer ownership at 85.4 percent with 77.4 percent using the Internet from their home.¹²⁹ Hispanics (of any race) and Black households' computer ownership is reported at 79.8 and 75.8 percent, respectively. Internet subscription for Hispanics is 66.7 percent and 61.3 percent for Blacks.

Geographically, the Northeast (84.1 percent) and West (86.8 percent) have the highest numbers of households with computers as well as the highest rates of Internet service with 76.8 percent in the Northeast and 78.1 percent in the West. Computer ownership in the Midwest is reported as 83.1 percent and 82.2 percent for the South. Internet use in the Midwest averages 73.4 percent with the South having 71.7 percent of households utilizing Internet service.¹³⁰

As expected, education and socioeconomic status also play a role in computer ownership and Internet access as presented in the following totals.¹³¹

Education	Percentage of households with a computer	Percentage of households with Internet Service
Less than high school	56.0	43.8
High School Graduate	73.9	62.9
Some college or associate's degree	89.0	79.2
Bachelor's degree or higher	95.5	90.1

Figure 3. Education, Computer Ownership, and Internet Service

Household Income	Percentage of households with a computer	Percentage of households with Internet Service
Less than \$25,000	62.4	48.4
\$25,000-\$49,999	81.1	69.0
\$50,000-\$99,999	92.6	84.9
\$100,00-\$149,999	97.1	92.7
\$150,000 and more	98.1	94.9

Figure 4. Household Income, Computer Ownership, and Internet Service

COMPARING WEB-BASED RESEARCH AND TRADITIONAL METHODS

As with any new method, the early years of Web-based research were fraught with suspicion and concern regarding the quality of Internet data collected from the Web.¹³² Some of the largest preconceptions were Internet samples were not diverse, nor were findings consistent with traditional methods of data collection. A large sample (N=361,703) Internet study published by *American Psychologist*, comparing data with a set of 510 published samples compiled from a year of traditional method studies published from the premier empirical social psychology journal of its time, the *Journal of Personality and Social Psychology*, suggests neither is the case.¹³³

After evaluating the demographic domains of gender, age, race, geographic, education, and socioeconomic status from data collected via the Internet versus traditional methodology, Internet sample collection for the aforementioned demographic domains fared better or comparable to traditional method and samples.¹³⁴ The study acknowledges Internet and random samples are often not representative of the general population, but neither are traditional samples used in most psychological studies.

The study also concluded their analyses continued to contribute to the growing body of evidence that psychological findings and data gathered by the Web are consistent with traditional methodology.^{135 136 137} Several studies also report that Web-based studies are more likely to be devoid of interviewer bias, and respondents are more likely to completely answer questions of a sensitive nature when anonymity is provided.^{138 139 140}

One large advantage to Internet surveys is the possibility of accessibility to unique samples well beyond the reach of traditional methodologies such as paper and pencil, telephone, and mail surveys.¹⁴¹ Examples of such samples would include victims of cyber-stalking, virtual dating, or individuals with specific conditions such as physical disabilities, eating disorders, spiritually transformative experiences (STEs) and NDEs.¹⁴² Other advantages include low costs as well as ease of data collection.¹⁴³ Web surveys can also be extremely fast as many responses can be gathered in a relatively short time frame.

Possible disadvantages to Web-based surveys are incomplete responses to the questionnaire, samples that are not representative of the general population, and some studies suggest discrepancy in results versus more traditional methods due to differences in administering contexts and modes such as the presence of an interviewer or facilitator, or the affective construct of the measurement.^{144 145 146 147}

CHAPTER 3: RESEARCH METHODS

We have to remember that what we observe is not nature herself, but nature exposed to our method of questioning.

Werner Heisenberg

THE RESEARCH PROCESS

The *NDE and Its Integrative Imprint* study utilized a “distance” research methodology created in conjunction with MindGarden’s Transform data collection system and a website custom created by the PI. This approach enabled participation both nationally and internationally without the time, costs, and obstacles associated with travel for both the participant and the PI. Ease of participation was enhanced as participants could gain access to the survey at a time and place convenient to their schedule. The modality also allowed easier access to a concentrated number of individuals who have had an NDE in a relatively short time frame. Data collection was limited by the use of a computer. No printed copy was made available to any potential participants.

The research was designed as a mixed methods study as it combined objective quantitative assessments with subjective qualitative supportive material, limited to a few questions regarding the participant’s perception of integrative wellbeing before and after NDE. The quantitative measures consisted of two phenomenological psychometric tests that were completed by the participant as a part of the custom survey.

RECRUITING PARTICIPANTS

Over a course of eight months, participants for the study were recruited from a wide array of areas. An initial long form recruitment request (Appendix A) was sent out by email using the databases of Holos University and the International Society for the Study of Subtle Energy Medicine (ISSSEEM). Several participants and fellow students requested permission to post the recruitment announcement on their Facebook page or announce the study in their respective organization. Other potential participants assisted by word of mouth or by forwarding the announcement to personal contacts. The PI had several personal contacts as well that assisted in recruitment. Long form and short form recruitment announcements (Appendix B) were utilized by the International Association for Near Death Studies (IANDS) quarterly newsletter and for local and nationwide IANDS chapters. An announcement was also made by the American Center for the Integration of Spiritually Transformative Experiences (ACISTE) to prospective participants.

Any interested, potential participant, who contacted the PI by email or phone prior to commencing the survey, was directed to the website: www.ndeandintegrativewellness.net to agree to the informed consent (Appendix C) and complete the survey to determine if they met the inclusion criteria. All participant information remained completely anonymous to the PI as all potential candidates were assigned a unique identifier by the MindGarden Transform system.

For the participant's information to be included in the study, all questions marked with an asterisk (*) had to be completed, as the Transform system would only allow collection of data from those surveys completed in their entirety. A total of 105 licensed surveys were used, and 87 surveys were completed. Nine participants were excluded due to a score below 7 on the Greyson NDE Scale as this eliminated the participant as having had a valid NDE. Of the 78 final participants that qualified for the study, fifty-seven participants were female, and twenty-one were male.

THE SURVEY

The custom survey was comprised of a total of 119 questions divided among three sections. The initial portion of the survey consisted of ten questions that were used to compile demographic data, number of NDEs, and mechanism of NDE. The second component of the survey utilized the sixteen questions of the Greyson NDE Scale as a part of the inclusion/exclusion criteria. Rounding out this section were two questions asking the participant to subjectively rate their perception of wellbeing on scale of 1-10, with 1=low and 10=high, before and after their NDE. The research survey concluded with 91 questions from the FFWEL.

INSTRUMENTATION USED IN DATA COLLECTION

The measurements for quantitative data for the study were garnered from the FFWEL and the Greyson Near-Death Experience Scale (Greyson NDE

Scale). Both instruments were administered as a part of the survey and the Greyson NDE Scale preceded the FFWEL. Once the participant completed the survey in its entirety, the data was instantly collected, calculated, stored on an Excel spreadsheet, and ready for review by a statistician.

THE GREYSON NEAR-DEATH SCALE

The Greyson Near-Death Experience Scale is a set of 16 questions with a weighted response ranging from 0-2 (Appendix I). A total overall score of 7 or higher is used to conclude if an individual has experienced a legitimate NDE. Questions 1-4 measure the cognitive (thought) component of the reported experience, 5-8 the affective (feeling) component, 9-12 the paranormal (preternatural) components and 13-16 the transcendental (mystical/spiritual) component. From the data within these items, the type of NDE is scored as cognitive, affective, paranormal, or transcendental. It is possible to score a total score of 7 on the scale, confirming an NDE, but the experience is deemed unclassifiable into one of the four components.¹⁴⁸ Only those participants scoring a 7 or higher on the Greyson NDE Scale were included for the study.

THE FIVE FACTOR WELLNESS INVENTORY (FFWEL)

The Five Factor Wellness Inventory (FFWEL) is a model for evaluating factors that are central to integrative wellbeing and holistic wellness. Three versions of the FFWEL have been developed. Version A is the most developed

and studied measure of the FFWEL (Appendix J). This was the version used for this research. The FFWEL was developed through the analysis of the Wellness Evaluation of Lifestyle (IS-WEL) and the theoretical Wheel of Wellness model.^{149 150} It is a ninety-four-item questionnaire using a four point Likert response scale: (a) strongly agree, (b) agree, (c) disagree, and (d) strongly disagree. It takes approximately 25 minutes to self-administer. It has a maximum 9th grade reading level and is appropriate for utilization in adult and high school populations.

The FFWEL assesses holistic wellness as represented by the integration of body, mind, emotion, and spirit. It may be used to enhance lifestyle choices for healthier living and can also be utilized for screening purposes to apprise if wellness interventions are needed. It is a self-administered wellness measure based on the following factors: the creative self, the coping self, the social self, the essential self, and the physical self.¹⁵¹ Each of these main categories is comprised of subsets that examine specific attributes of the five factors as follows:

1. Creative Self: Thinking, Emotions, Control, Work, Positive Humor.
2. Coping Self: Leisure, Stress Management, Self Worth, Realistic Beliefs.
3. Social Self: Friendship, Love.
4. Essential Self: Spirituality, Self-care, Gender Identity, Cultural Identity.
5. Physical Self: Exercise, Nutrition.

The higher order of Wellness is signified by the Total Wellness scores of the FFWEI and is comprised of the five factors of wellness and its corresponding subsets. The sum of the Total Wellness score is a measure of one's overall wellness and wellbeing. Differences in wellness have been demonstrated based on demographic indices related to age, gender, and ethnicity. Several studies by Chang, Myers and Bechtel, Sinclair, and Myers, Mobley, and Booth, as well as other researchers, have provided evidence for the external validity of the FFWEI and various demographic considerations.¹⁵²

CHOICE OF STATISTICAL ANALYSIS

After the quantitative data were collected on the survey, statistical analyses were implemented by the use of a one-way sample Z-test for the FFWEI, and a Pearson's correlation was utilized to calculate statistical significance in a comparison between participant's perceptions of integrative wellness before and after NDE and the Total Wellness scores of the FFWEI. Dr. Paul Thomlinson conducted all statistical measurements.

QUALITATIVE DATA

Qualitative data were limited to two questions asking the participant to score their perception of integrative wellness before and after the NDE. As discussed earlier, our perceptions create our reality, and sometimes, our perceptions are ambiguous or wrong.^{153 154} Research has shown most

individuals are often overly optimistic regarding their health risks and lifestyle choices.¹⁵⁵ However, those who are more inclined toward self-awareness generally are more accurate in self-reporting, especially with personalized or objective feedback.^{156 157} The objective of the qualitative data used in the survey was to explore if participants' subjective answers regarding perceived integrative wellbeing and wellness would correlate with the quantitative data of the Total Wellness scores provided by the FFWEL.

CHAPTER 4: RESEARCH FINDINGS

The philosopher should be a man willing to listen to every suggestion, but determined to judge for himself. He should not be biased by appearances; have no favourite hypothesis; be of no school; in doctrine have no master. He should not be a respecter of persons but of things. Truth should be his primary object. If these qualities be added to industry, he may indeed hope to walk within the veil of the temple of nature.

Michael Faraday (1791-1867)

DEMOGRAPHIC ANALYSIS

Extensive research has shown there are differences between individuals that agree to volunteer for studies and those who choose not to participate.¹⁵⁸ Analysis has shown that those who volunteer for research purposes tend to be better educated and have above average intelligence.¹⁵⁹ Subjects are more maladjusted when participating in unusual circumstances and have a higher need for social approval and interaction. These individuals often gravitate toward situations that offer higher sources of stimulation and are more unconventional in their behavior as well as less likely to conform. Volunteer subjects are also less authoritarian, more self-disclosing, more altruistic, and show a greater interest in religious matters. They are also most often younger and female.¹⁶⁰ Many of these characteristics were observed in the sample of participants collected for this research.

The demographic profile for the participants of the study in relationship to gender, age, relationship status, education, and ethnicity were as follows:

Gender, Age, and Ethnicity

A total of 78 participants met the criteria for the study. Fifty-seven (73%) were female and twenty-one (27%) were male. The age range of participants was from 31-87 years, with a mean score of 61 years. Seventy-one (91%) participants were white, and seven participants (9%) reported their ethnicity as other.

Relationship Status

Forty-three participants (55%) were married or in a committed relationship. Twenty-two (28%) were divorced, nine (12%) were single, and three (4%) individuals were widowed. One individual was separated and accounted for the last percentage (1%) of participants.

Education

The educational demographic consisted of four participants (5%) having a high school degree, diploma, or equivalent. Thirteen participants (17%) had acquired some college credit but no degree, and four participants (5%) had acquired some type of trade, technical, or vocational training. Those participants with some type of college degree were as follows: three participants (4%) had an associate degree, sixteen (20%) a bachelor's, nineteen (24%) a master's, two (3%) a professional degree, and seventeen (22%) a doctoral degree.

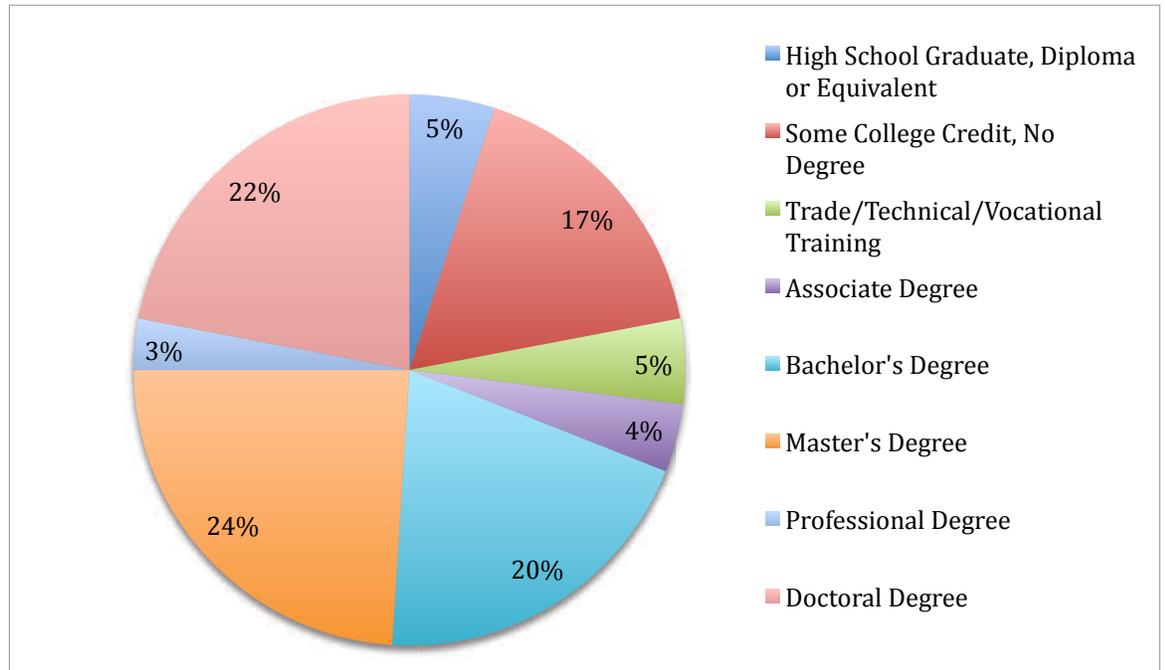


Figure 5. Education Demographics Distribution

QUANTITATIVE ANALYSIS

As previously discussed, *Near-Death Experience and Its Integrative Imprint* was a mixed methods study used to identify and examine the components that make the NDE population unique, especially in those factors related to the totality of holistic wellness. The quantitative measurements of the study were the Greyson NDE Scale and the FFWEL. These instruments were used to examine whether evidence exists for increased integrative and holistic wellness in the NDE population, in comparison to the normative data of the FFWEL.

The use of the Greyson NDE Scale is advantageous for standardizing the effects of NDEs as well as quantifying and confirming an NDE, especially when

examining those NDEs that may be questionable or only qualifiable. The scale can also be helpful as a clinical measurement “in differentiating NDEs from organic brain syndromes and nonspecific stress responses.”¹⁶¹ It was chosen for inclusion and exclusion criteria and its ability to distinguish the type of NDE of each participant as well as validate an authentic NDE.

The FFWEL was employed as a tool to derive statistical data via comparing the normative data of the FFWEL and its five factors of holistic wellness with those of the sampled NDE population. The multi-factorial approach of the FFWEL is valuable for measuring health and wellness well beyond physical parameters.

THE GREYSON NEAR-DEATH SCALE

COMPOSITION OF NDE CATEGORIES

Seventy-eight participants met the criteria for the study, scoring a 7 or higher on the Greyson NDE Scale. The number of participants by NDE category is depicted in figure 6 on the following page.

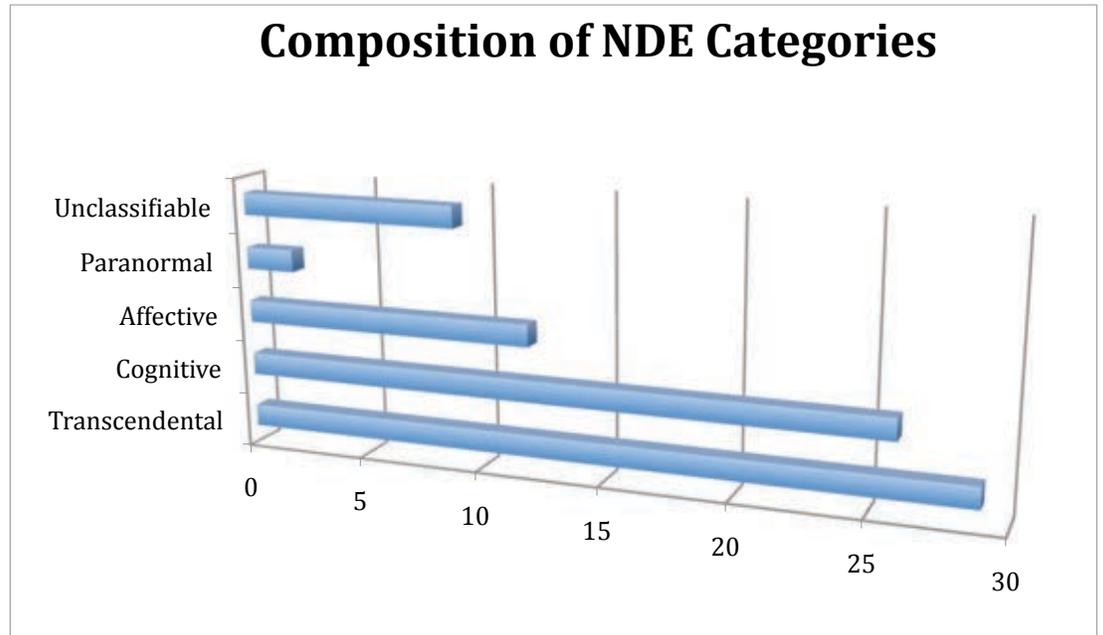


Figure 6. Composition of NDE Categories

Transcendental type NDEs accounted for 37% (29 of 78) of the sample, cognitive 33% (26 of 78), affective 15% (12 of 78), paranormal 3% (2 of 78), and 12% (9 of 78) were scored as unclassifiable.

CATEGORIES OF NDEs AND TOTAL WELLNESS SCORES

A one-way analysis of variance (ANOVA) was performed to determine if any statistical differences were present between the types of NDE and total wellness scores. It was determined that no statistical differences exist between the type of NDE and total wellness scores.

Descriptives

Total Wellness

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Transcendental	29	85.410	7.1324	1.3245	82.697	88.123	70.9	95.6
Cognitive	26	84.204	7.2551	1.4229	81.273	87.134	71.4	95.6
Affective	12	85.367	7.9729	2.3016	80.301	90.432	71.4	95.9
Paranormal	2	84.600	8.9095	6.3000	4.551	164.649	78.3	90.0
Unclassifiable	9	88.078	6.1532	2.0511	83.348	92.808	77.5	97.0
Total	78	85.288	7.1386	.8083	83.679	86.898	70.9	97.0

Figure 7. Categories of NDE and Total Wellness Scores

DEFINITIONS AND MEASUREMENTS OF THE FFWEL

The FFWEL includes 23 factor scores, four contextual scores consisting of local, institutional, global, and chronometrical contexts and a one-item validity index.¹⁶² The factors of the FFWEL and the definition of its measurements are presented in the following excerpts as delineated by the FFWEL manual.¹⁶³ The highest order of the FFWEL is:

Wellness: The sum of all items on the FFWEL; a measure of one's general; well being or total wellness.¹⁶⁴

The five factors of the FFWEL and their subsets are defined as:

Creative Self: The combination of attributes that each of us forms to make a unique place among others in our social interactions and to positively interpret our world.¹⁶⁵

Thinking: Being mentally active, open-minded; having the ability to be creative and experimental; having a sense of curiosity, a need to know and learn; the capacity to change one's thinking in order to manage stress; the ability to apply problem solving strategies in resolving social conflicts.¹⁶⁶

Emotions: Being aware of or in touch with one's feelings; being able to express one's feelings appropriately; being able to enjoy positive emotions as well as being able to cope with negative emotions; having a sense of energy; avoiding chronic negative emotional states.¹⁶⁷

Control: Beliefs about your competence, confidence, and mastery (i.e., "I can"); belief that you can usually achieve the goals you set out for yourself; being able to exercise individual choice through imagination, knowledge, and skill; having a sense of planfulness in life; being able to be direct in expressing one's needs (assertive).¹⁶⁸

Work: Being satisfied with one's work; having adequate financial security; feeling that one's skills are used appropriately; feeling that one can manage one's workload; feeling a sense of job security; feeling appreciated in the work one does; having satisfactory relationships with others on the job; being satisfied with activities in work and play which one chooses to perform;

having a playful attitude toward life's tasks; the ability to cope with stress in the workplace.¹⁶⁹

Positive Humor: Being able to laugh at one's own mistakes and the unexpected things that can happen; the ability to laugh appropriately at other's; having the capacity to see the contradictions and predicaments of life in an objective manner such that one can gain new perspectives; enjoying the idiosyncrasies and inconsistencies of life; the ability to use humor to accomplish even serious tasks.¹⁷⁰

Coping Self: The combination of elements that regulate our responses to life events and provide a means for transcending their negative effects.¹⁷¹

Leisure: Activities done in one's free time: satisfaction with one's leisure activities, importance of leisure, positive feelings associated with leisure, having at least one activity in which "I lose myself and time stands still," ability to approach tasks from a playful point of view; having a balance between work and leisure activities; ability to put work aside for leisure without feeling guilty.¹⁷²

Stress Management: General perception of one's own self-management or self-regulation; seeing change as an opportunity for growth rather as a threat to one's security; on-going self-monitoring and assessment of one's coping resources; the ability to organize and manage resources such as time, energy, setting limits, and need for structure.¹⁷³

Self Worth: Accepting who and what one is, positive qualities along with imperfections; acceptance of one's physical appearance; affirming the value of one's existence; valuing oneself as a unique individual.¹⁷⁴

Realistic Beliefs: Understanding that perfection or being loved by everyone are impossible goals, and having the courage to be imperfect; the ability to perceive reality accurately, not as one might want or desire it to be; separating that which is logical and rational from that which is distorted, irrational, or wishful thinking; controlling the "shoulds," "ought's," "dos," and "don't" which tend to rule one's life; avoiding unrealistic expectations or wishful thinking.¹⁷⁵

Social Self: Social support through connections with others in friendships and intimate relationships, including family ties.¹⁷⁶

Friendship: Social relationships that involve a connection with others individually or in a community, but which do not have a marital, sexual, or familial commitment; having friends in whom one can trust and who can provide emotional, material, or informational support when needed; not being

lonely; being comfortable in social situations; having a capacity to trust others; having empathy of others; feeling understood by others; having relationships in which non-judgmental caring is experienced; being comfortable with one's social skills for interacting with others; being involved in one or more community groups.¹⁷⁷

Love: The ability to be intimate, trusting, and self-disclosing with another person; the ability to give as well as express affection with significant others; the ability to accept others without conditions, to convey non-possessive caring which respects the uniqueness of another; having at least one relationship that is secure, lasting, and for which there is a mutual commitment; having concern for the nurturance and growth of others; experiencing physical and emotional satisfactions with one's sexual life; having a family or family-like support system characterized by shared spiritual values, the ability to solve conflict in a mutually respectful way, the ability to solve problems together, commitment to one another, healthy communication styles, shared time together, the ability to cope with stress, and mutual appreciation.¹⁷⁸

Essential Self: Our essential meaning-making processes in relation to life, self, and others.¹⁷⁹

Spirituality: Personal beliefs and behaviors that are practiced as part of the recognition that we are more than the material aspects of mind and body. Dimensions include belief in a higher power; hope, and optimism, worship, prayer, and/or meditation; purpose in life, love (compassion for others); moral values; and transcendence, or a sense of oneness with the universe.¹⁸⁰

Gender Identity: Satisfaction with one's gender; feeling supported in one's gender; transcendence of gender identity (ability to be androgynous).¹⁸¹

Cultural Identity: Satisfaction with one's cultural identity; feeling supported in one's cultural identity; transcendence of one's cultural identity (i.e., cultural assimilation).¹⁸²

Self-Care: Taking responsibility for one's wellness through self-care and safety habits that are preventive in nature; such habits include obtaining timely medical care, wearing a seat belt; limiting the use of prescribed drugs and avoiding the use of illegal drugs; avoiding the use of tobacco; abstaining from or moderately using alcohol; getting adequate sleep; minimizing the harmful effects of pollution in you environment.¹⁸³

Physical Self: The biological and physiological processes that comprise the physical aspects of our development and functioning.¹⁸⁴

Exercise: Engaging in sufficient physical activity to keep in good physical condition; maintaining flexibility in the major muscles and joints of the

body through work, recreation, or stretching exercises; regular exercise and not overdoing it are important guidelines.¹⁸⁵

Nutrition: Eating a nutritionally balanced diet, three meals a day including breakfast, consuming fats, cholesterol, sweets, and salt sparingly; maintaining a normal weight (i.e., 15% of the ideal) and avoiding overeating.¹⁸⁶

The four contextual factors are:

Local context: Those systems in which we live most often—our families, neighborhoods, and communities—and our perceptions of safety in these systems.¹⁸⁷

Institutional Context: Social and political systems that affect our daily functioning and serve to empower or limit our development in obvious and subtle ways, including education, religion, government, business, and industry, and the media.¹⁸⁸

Global Context: Factors such as politics, culture, global events, and the environment that connect us to others around the world.¹⁸⁹

Chronometrical Context: Growth, movement, and change in the time dimension that is perpetual, of necessity positive, and purposeful.¹⁹⁰

The one-item validity index is defined as follows:

Life Satisfaction Index: The extent to which one is satisfied with one's life, overall.¹⁹¹

STATISTICAL DATA

NORMATIVE SCORES OF THE FFWEL

Figure 8., on the ensuing page, illustrates the normative minimum, maximum, range, mean, and standard deviation of the 23 factors, four contextual components, and the one-item validity index of the FFWEL (n=3,343).¹⁹²

Descriptive	Minimum	Maximum	Range	Mean	Standard Deviation
Total Wellness	27.05	96.23	69.15	71.63	15.87
Creative Self	25.00	100	75.00	73.18	16.15
Thinking	25.00	100	75.00	73.46	17.75
Emotions	25.00	100	75.00	73.03	17.67
Control	25.00	100	75.00	73.69	18.36
Work	25.00	100	75.00	71.86	16.35
Positive Humor	25.00	100	75.00	74.00	19.74
Coping Self	29.17	98.68	69.52	68.73	12.73
Leisure	25.00	100	75.00	71.58	18.59
Stress Management	27.14	97.50	70.36	69.01	16.61
Self-Worth	25.00	100	75.00	74.62	21.31
Realistic Beliefs	25.00	100	75.00	60.71	12.35
Social Self	25.00	100	75.00	77.35	23.56
Friendship	25.00	100	75.00	76.21	22.88
Love	25.00	100	75.00	78.58	25.61
Essential Self	25.00	100	75.00	73.38	20.07
Spirituality	25.00	100	75.00	71.69	23.62
Self-Care	25.00	100	75.00	77.30	25.79
Gender Identity	25.00	100	75.00	73.58	20.21
Cultural Identity	25.00	100	75.00	70.71	20.65
Physical Self	25.00	100	75.00	66.56	18.13
Exercise	25.00	100	75.00	68.14	21.20
Nutrition	25.00	100	75.00	64.98	19.97
Local Context	25.00	100	75.00	71.02	17.86
Global Context	25.00	100	75.00	66.74	18.49
Institutional Context	25.00	100	75.00	65.37	18.33
Chronometrical Context	25.00	100	75.00	68.85	19.25
Life Satisfaction	25.00	100	75.00	67.76	24.25

Figure 8. Normative Scores of the FFWEL

COMPARISON OF MEAN SCORES

In the following figure and as utilized for statistical analysis, a side-by-side comparison of the means of the FFWEL (n=3,343) and the means collected by the study *NDE and Its Integrative Imprint* (n=78) are presented:

Descriptive	FFWEL Mean	Study Mean
Total Wellness	71.63	85.288
Creative Self	73.18	86.112
Thinking	73.46	89.62
Emotions	73.03	87.447
Control	73.69	84.192
Work	71.86	82.05
Positive Humor	74.00	86.954
Coping Self	68.73	83.150
Leisure	71.58	85.794
Stress Management	69.01	84.079
Self-Worth	74.62	91.365
Realistic Beliefs	60.71	72.69
Social Self	77.35	90.113
Friendship	76.21	87.923
Love	78.58	92.315
Essential Self	73.38	87.963
Spirituality	71.69	91.54
Self-Care	77.30	93.210
Gender Identity	73.58	83.271
Cultural Identity	70.71	81.309
Physical Self	66.56	84.808
Exercise	68.14	85.00
Nutrition	64.98	84.62
Local Context	71.02	89.17
Global Context	66.74	81.199
Institutional Context	65.37	72.458
Chronometrical Context	68.85	83.514
Life Satisfaction	67.76	83.65

Figure 9. Comparison of Mean Scores

STATISTICAL SIGNIFICANCE AND THE FFWEL

Analysis of each of the five factors of the FFWEL, and its corresponding sub factors, demonstrated statistical significance ($p < .0001$), as well as the total wellness and life satisfaction ($p < .0001$) scores. The local, institutional, and chronometrical contextual results also indicated statistical significance ($p < .0001$) with the only variance in the category of global context, which resulted in $p < .0006$. As all 23 factors of the FFWEL indicated statistical significance, the PI's hypothesis was supported. The NDE population does demonstrate increased scores in the factors of holistic wellness as defined by the FFWEL, in comparison to the normative data of the FFWEL.

The subsequent figures and tables present the results of the study's one sample Z-test analysis for each of the 23 factors of the FFWEL ($n=78$).

Descriptive	Minimum	Maximum	Mean	p value	z-statistic
Total Wellness	70.9	97.0	85.288	<.0001	7.60188
Creative Self	70.2	98.8	86.112	<.0001	7.07088
Thinking	75	100	89.62	<.0001	8.04063
Emotions	56.3	100	87.447	<.0001	7.20736
Control	50	100	84.192	<.0001	5.05084
Work	30	100	82.05	<.0001	5.5432
Positive Humor	50	100	86.954	<.0001	5.79389
Coping Self	65.8	100	83.150	<.0001	10.00424
Leisure	50	100	85.794	<.0001	6.75090
Stress Management	56.3	100	84.079	<.0001	8.01292
Self-Worth	62.5	100	91.365	<.0001	6.94190
Realistic Beliefs	35	100	72.69	<.0001	8.56717
Social Self	59.4	100	90.113	<.0001	4.78325
Friendship	50	100	87.923	<.0001	4.52010
Love	62.5	100	92.315	<.0001	4.73832
Essential Self	67.2	100	87.963	<.0001	6.41590
Spirituality	70	100	91.54	<.0001	7.42212
Self-Care	56.3	100	93.210	<.0001	5.44836
Gender Identity	37.5	100	83.271	<.0001	4.23453
Cultural Identity	41.7	100	81.309	<.0001	4.53349
Physical Self	52.5	100	84.808	<.0001	8.89022
Exercise	30	100	85.00	<.0001	7.02375
Nutrition	45	100	84.62	<.0001	8.81829
Local Context	35	100	89.17	<.0001	8.97517
Global Context	33.3	100	81.199	<.0006	3.41610
Institutional Context	37.5	100	72.458	<.0001	6.90683
Chronometrical Context	50.0	100	83.514	<.0001	6.72590
Life Satisfaction	50	100	83.65	<.0001	5.78708

Figure 10. Statistical Significance of the FFWEL

QUALITATIVE WELLBEING PERCEPTIONS AND TOTAL WELLNESS

SCORES

Results from the Pearson correlation, comparing participant's perceptions of integrative wellness before after NDE and the total wellness scores of the FFWEL, showed marginal statistical significance ($p < .08$). There appears to be a moderate correlation between the participant's perception of integrative wellbeing after NDE and the total wellness scores of the FFWEL.

Correlations				
		Total Wellness	What was your perception of your integrative wellbeing "before" your NDE?	What was your perception of your integrative wellbeing "after" your NDE?
Total Wellness	Pearson Correlation	1	.201	.154
	Sig. (2-tailed)		.077	.179
	N	78	78	78
What was your perception of your integrative well-being "before" your NDE?	Pearson Correlation	.201	1	.158
	Sig. (2-tailed)	.077		.166
	N	78	78	78
What was your perception of your integrative well-being "after" your NDE?	Pearson Correlation	.154	.158	1
	Sig. (2-tailed)	.179	.166	
	N	78	78	78

Figure 11. Perceptions of Wellbeing and Total Wellness

CHAPTER 5: SUMMARY, DISCUSSION, AND SUGGESTIONS

There is a new science of complexity which says that the link between cause and effect is increasingly difficult to trace; that change (planned or otherwise) unfolds in non-linear ways; that paradoxes and contradictions abound; and that creative solutions arise out of diversity, uncertainty, and chaos.

Andy Hargreaves and Michael Fullan

SUMMARY

The purpose of this research was to examine if near-death experiencers (NDErs) are imprinted with the factors of integrative and holistic wellness using the Five Factor Wellness Inventory (FFWEL) as a measure of physical, mental, emotional, and spiritual health. The Greyson NDE Scale and the FFWEL were used to examine whether evidence exists for increased integrative and holistic wellness in the near-death experience (NDE) population, in comparison to the normative data of the FFWEL.

Quantitative data, in conjunction with several qualitative questions, supports the PI's hypothesis that the NDE population is imprinted with an increased propensity toward integrative and holistic measures as defined by the FFWEL.

DATA ANALYSIS

Hypothesis: NDErs will score higher in factors of holistic wellness as defined by the FFWEL in comparison to the normative data of the FFWEL.

Analysis of each of the five factors of the FFWEL, and its corresponding sub factors, demonstrated statistical significance ($p < .0001$), as well as the total wellness and life satisfaction ($p < .0001$) scores. The local, institutional, and chronometrical contextual results also indicated statistical significance ($p < .0001$) with the only variance in the category of global context, which resulted in $p < .0006$. As all 23 factors of the FFWEL indicated strong statistical significance, the PI's hypothesis was supported.

Results from the Pearson correlation, comparing participant's perceptions of integrative wellness before after NDE and the total wellness scores of the FFWEL, showed marginal statistical significance ($p < .08$). There is a moderate correlation between the participant's perception of integrative wellbeing after NDE and the total wellness scores of the FFWEL.

DISCUSSION

From past research, it is known that NDErs often shift their perspectives regarding relationships, values, and spiritual/religious viewpoints; however, not every NDEr will claim they have been transformed.^{193 194} Atwater contends, "As a general rule, though, most near-death survivors do not recognize the

extent to which they have changed.”¹⁹⁵ Most often, it is those individuals who have consistent, meaningful contact with the NDE individual that discern the most transformative effects of the NDEr, and congruent with Atwater’s observations, personal NDEs, and research of the NDE community, it takes an average of seven years for the NDEr to fully integrate the experience.¹⁹⁶

Another intriguing aspect of NDE aftereffects is the desire for knowledge.^{197 198} The PI acknowledges this may play a factor in the results of the study and is in line with the known attributes of those who volunteer for such studies. Researchers Ring and Atwater explain NDErs generally demonstrate a strong longing to explore such subjects as physics, metaphysics, quantum physics, and the fabric of the cosmos and reality, and some will want to learn as much as they can regarding their experience.^{199 200}

Ring further mentions many NDErs are often placed on a path of a spiritual quest.²⁰¹ He observes the NDEr may aspire, “To live in accordance with what they learned in the Light, and, toward that end, to somehow recapture some of the knowledge they believe was implanted in them during their experience.”²⁰² The PI theorizes this implantation/imprint of “knowledge” is the same mechanism that provides the NDEr with an increased propensity toward integrative and holistic wellness, which can be measured by instruments such as the FFWEL.

Integrative wellbeing, holistic wellbeing, integrative wellness, and holistic wellness are all components of every human individual, and the whole of who we are is far more than the sum of our overall wellness. This is the

foundation of holism and the model of The Indivisible Self, which is the basis for the FFWEL. As Benjamin Franklin asserted, “There are three things extremely hard: steel, a diamond, and to know one’s self.”²⁰³ The FFWEL is useful for demonstrating the strengths and weakness of an individual’s overall wellness, and comparing the levels of wellness among various demographic populations, including the NDEr.

CONCLUSIONS

Approximately 66% of all deaths from the five leading causes: heart disease, cancer, chronic lower respiratory diseases, stroke, and unintentional accidents are potentially preventable by modifying lifestyle choices.²⁰⁴ There is no doubt our bodies are affected by the choices we make. Even our genes can be changed by integrating lifestyle and nutrition interventions in a relatively short amount of time as demonstrated by the Gene Expression Modulation by Intervention and Lifestyle study (GEMINAL) and others like it.²⁰⁵ Genes are not our destiny as science once believed.²⁰⁶

In fact, new fields of science are emerging exploring the link between subjective perceptions, gene expression, and disease.²⁰⁷ Psychoimmunology, Psychoneuroimmunology, Human Social Genomics, Neuroscience, and Metagenomics are all exploring the interconnection between social environment and the effect on biological processes. As many social conditions are entwined with the factors of wellness as described by the FFWEL, continued examination

of populations that enjoy an increased propensity toward wellness from a variety of specialties and disciplines will lead to a continued bridging of the gap between social, economic, and educational differences, and in turn, will move the public toward the discovery of more efficient methods for the prevention, treatment, and delivery of healthcare and wellness in all its forms.

The PI acknowledges this is not an easy task, especially as each new day seems to bring new information and understandings within the sciences that can be disseminated almost instantaneously. Like our bodies, which are constantly in a state of flux due to cellular transmutations that take place everyday, it may take some time for our physiological state to catch up with our molecular composition.²⁰⁸ Science and its dispersion of information also takes time to reach the masses and integrate, but by continually taking small steps, giant leaps in awareness and understanding can be made across many disciplines as well as within the individual.²⁰⁹

Just as the immune system can never be too healthy, one can never be too well or whole. Change and evolution are constant in nature and the cosmos, and it is the same within us. Holistic wellness is a lifetime process, and it is much, much more intricate than simply body, emotion, mind, and spirit. Holistic wellness is an infinite, evolutionary scale of wholes with an endless number of artful paths and circumstances propelling us toward integration and the essence of our human existence.

SUGGESTIONS FOR FUTURE RESEARCH

The analysis from this research has demonstrated there are strong indications that NDErs have an increased predisposition toward elevated levels of wellness as defined by the FFWEL as strong statistical evidence exists for all 23 factors. These data may lead to new questions of inquiry and discovery.

Suggestions for further investigation include:

- Research with a normative group of non-NDErs consisting of similar/identical demographics of the sample.
- Research comparing and contrasting the Holos University student population with NDErs and the FFWEL.
- Research comparing and contrasting Radical Remission survivors with NDErs and the FFWEL.
- Research examining those who have had a Spiritually Transformative Experience (STE) with the data of NDErs and the FFWEL.
- Research comparing those NDErs who have had less than seven years since their NDE with those NDErs who have had more than seven years pass with the FFWEL.
- Research to investigate body mass index (BMI) of the NDEr to confirm normal weights within 15% of the ideal.

- Research comparing those with a negative NDE versus those who have had a positive NDE with the wellness factors of the FFWEL.
- Research of children who have had an NDE in comparison to the normative data of the FFWEL-Teen and the FFWEL-Elementary.
- Research conducted on NDErs and Maslow's Personal Orientation Inventory.
- Kinesiologic testing of NDErs using Dr. David Hawkins' Levels of Consciousness scale.
- Studies examining the possible effects of the NDE on genes and telomeres.
- Research using quantitative electroencephalography (QEEG), functional magnetic resonance (fMRI), or positron emission tomography (PET) to examine neuropsychological function and the remembrance of the NDE.

Endnotes:

Chapter One

¹ J. Kane, "Health Costs: "How the U.S. Compares With Other Countries," *PBS Newshour*, October 22, 2012, <http://www.pbs.org/newshour/rundown/health-costs-how-the-us-compares-with-other-countries/>.

² Organization for Economic Co-operation and Development 2013 (OCED), *Health at a Glance 2013: OCED Indicators*, OECD Publishing, http://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2013_health_glance-2013-en.

³ Centers for Medicare and Medicaid Services, "National Health Expenditure Projections 2012-2022," <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/proj2012.pdf>.

⁴ K. Davis, K. Stremikis, D. Squires and C. Schoen, "Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compare Internationally," *The Commonwealth Fund: June 2014*, http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf.

⁵ Organization for Economic Co-operation and Development 2013 (OCED), *Health at a Glance 2013: OCED Indicators*, http://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2013_health_glance-2013-en.

⁶ M. Szalavitz, "What Does a 400% Increase in Antidepressant Use Really Mean?," *Time*, October 20, 2011, <http://healthland.time.com/2011/10/20/what-does-a-400-increase-in-antidepressant-prescribing-really-mean/>.

⁷ C. Pert, *Molecules of Emotion: The Science Behind Mind-Body Medicine*, (New York: Scribner, 1997).

⁸ M. Mumber and H. Reed, *Sustainable Wellness: An Integrative Approach to Transform Your Mind, Body, and Spirit*, (Pompton Plain, NJ: New Page Books, 2012), 19.

⁹ B. Fredrickson and T. Joiner, "Positive Emotions Trigger Upward Spiral Toward Emotional Well-Being," *American Psychological Society* 13, no. 2 (2002): 172-175.

¹⁰ A. Uskul and A. Horn, "Emotions and Health," To appear in the *International Encyclopedia of the Social & Behavioral Sciences*, January 2015, https://kar.kent.ac.uk/44743/1/Emotions_and_Health_final.pdf.

¹¹ J.C. Smuts, *Holism and Evolution*, (New York: The MacMillan Company, 1926), 108.

¹² E. Ferguson, *Adlerian Theory: An Introduction*, (Chicago: Alder School of Professional Psychology, 1999), 2.

¹³ J. Myers, T. Sweeney, and M. Witmer, *Five Factor Wellness Inventory: Manual and Sampler Set* (Mind Garden: www.mindgarden.com, 2005), 4.

¹⁴ *Ibid.*, 6.

¹⁵ *Ibid.*, 7.

¹⁶ *Ibid.*

¹⁷ *Ibid.*, 7-8.

¹⁸ *Ibid.*, 8.

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ *Ibid.*, 9.

²² *Ibid.*

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ CERN, "About CERN," <http://home.web.cern.ch/about>. Accessed August 4, 2014.

²⁶ T. Siegfried, "Einstein was Wrong about Spooky Quantum Entanglement," *ScienceNews*, February 19, 2014, <https://www.sciencenews.org/blog/context/einstein-was-wrong-about-spooky-quantum-entanglement>.

²⁷ C. Bennett, "Information is Quantum," *IBM Research Yorktown*, July 7, 2006, <http://researcher.watson.ibm.com/researcher/files/us-bennetc/QInfWeb.pdf>.

-
- ²⁸ D. Goldberg, *The Universe in the Rearview Mirror: How Hidden Symmetries Shape Reality*, (New York, Penguin Group, 2013), 196-204.
- ²⁹ Bennett, "Information is Quantum," *IBM Research Yorktown*.
- ³⁰ Ibid.
- ³¹ Ibid.
- ³² Ibid.
- ³³ E. Markham, "Outwitted," *Goodreads: Quotes*,
<http://www.goodreads.com/quotes/8703-he-drew-a-circle-that-shut-me-out—heretic>.
- ³⁴ D. Radin, *Entangled Minds: Extrasensory Experiences in a Quantum Reality*, (New York: Paraview Pocket Books, 2006), 19.
- ³⁵ W. Tiller, "Towards a Quantitative Science and Technology that Includes Human Consciousness," first published in: *The Journal of New Thinking for New Action* 1, no. 4, (2003): 2-7, <http://www.tillerfoundation.com/ToQuanSciTechIncHumCon.pdf>.
- ³⁶ Ibid.
- ³⁷ F. Faggini, interview by Mike Malone, San Francisco, Italy,
<http://sanfranciscoitaly.com/post/57614873633/federico-faggini-explores-the-fabric-of-consciousness>, Accessed July 30, 2014.
- ³⁸ Ibid.
- ³⁹ F. Faggini, "The Union of Science & Spirituality: A Conceptual Framework," *Subtle Energies Magazine* 25, No. 2 (2014): 4-8, <https://view.publitas.com/p222-665/subtle-energies-magazine-volume-25-issue-2/page/1>.
- ⁴⁰ Ibid.
- ⁴¹ Mind Garden, Inc., "Services," <http://www.mindgarden.com/services.htm>.
- ⁴² N. Salkind, *Statistics for People Who Think They Hate Statistics, 2nd Edition*, (Thousand Oaks, CA: Sage Publications, 2004), 104-105.
- ⁴³ Holden, J.M., "Veridical Perception in Near-death Experiences," In J.M. Holden, B. Greyson, and D. James, eds., *The Handbook of Near-Death Experiences*, (Santa Barbara, CA: Praeger, 2009),
- ⁴⁴ Radin, *Entangled Minds*, 14.
- ⁴⁵ Siegfried, "Einstein was Wrong about Spooky Entanglement."
- ⁴⁶ R. Dodge, A. Daly, J. Huyton, and L. Sanders, "The Challenge of Defining Wellbeing," *International Journal of Wellbeing* 2, no.3 (2012): 229-232,
<http://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/89/238>.
- ⁴⁷ F. Faggini, interview by Mike Malone, San Francisco, Italy,
<http://sanfranciscoitaly.com/post/57614873633/federico-faggini-explores-the-fabric-of-consciousness>.
- ⁴⁸ The Free Dictionary s.v. "Imprinting," <http://www.thefreedictionary.com/imprinting>.
- ⁴⁹ Merriam Webster s.v. "Integrate" <http://www.merriam-webster.com/dictionary/integrate>.
- ⁵⁰ E. Pinkney, "Is it 'Wellbeing' or Well-Being'? (And Why it Matters)," *Posts Tagged: Well-Being vs. Wellbeing from Edward Pinkney (blog)*, Edward Pinkney.com, May 3, 2013,
<http://edwardpinkney.com/?tag=well-being-or-wellbeing>.
- ⁵¹ Dodge, Daly, Huyton, and Sanders, "The Challenge of Defining Wellbeing," 229-232.
- ⁵² J. Myers, T. Sweeney, and M. Witmer, *Five Factor Wellness Inventory: Manual and Sampler Set*, 7.

Chapter Two

- ⁵³ Dictionary.com s.v. "Wellness," <http://dictionary.reference.com/browse/wellness>.
- ⁵⁴ Pim van Lommel, Ruud van Wees, Vincent Meyers, and Ingrid Elfferich, "Near-Death Experience in Survivors of Cardiac Arrest: A Prospective Study in the Netherlands," *The Lancet* 358, 9298 (2001): 2039-2045.
- ⁵⁵ Pim van Lommel, *Consciousness Beyond Life: The Science of the Near-Death Experience*, (New York: HarperOne, 2010), 17-43.

-
- ⁵⁶ J. Long and P. Perry, *Evidence of the Afterlife: The Science of Near-Death Experiences*, (New York: HarperOne, 2010), 7-17
- ⁵⁷ C. Carter, *Science and the Near-Death Experience: How Consciousness Survives Death*, (Rochester, Vermont, Inner Traditions, 2010), 108-121.
- ⁵⁸ R. Moody, *Life After Life: The Investigation of a Phenomenon—Survival of Bodily Death*, (San Francisco, CA: HarperSanFrancisco, 1975), 10-75.
- ⁵⁹ *Ibid.*, 15-16.
- ⁶⁰ C. Tart, *Transpersonal Psychologies: Perspectives on the Mind from Seven Great Spiritual Traditions*, (San Francisco, CA: HarperSanFrancisco, 1992), 50-51.
- ⁶¹ Long and Perry, *Evidence of the Afterlife*, 27.
- ⁶² Lommel, *Consciousness Beyond Life*, 144-146.
- ⁶³ *Ibid.*, 19.
- ⁶⁴ Long, and Perry, *Evidence of the Afterlife*, 83-92.
- ⁶⁵ Holden, “Veridical Perception in Near-death Experiences,” 193.
- ⁶⁶ *Ibid.*, 196.
- ⁶⁷ Lommel, *Consciousness Beyond Life*, 26.
- ⁶⁸ E. Alexander, *Proof of Heaven: A Neurosurgeon’s Journey into the Afterlife*, (New York: Simon & Schuster, 2012) 46-47.
- ⁶⁹ Lommel, *Consciousness Beyond Life*, 32.
- ⁷⁰ J. Lerma, *Into the Light: Real Life Stories About Angelic Visits, Visions of the Afterlife, and other Pre-Death Experiences*, (Franklin Lakes, NJ: New Page Books, 2007), 183.
- ⁷¹ Alexander, *Proof of Heaven*, 162-170.
- ⁷² Moody, *Life After Life*, 49.
- ⁷³ *Ibid.*, 50.
- ⁷⁴ *Ibid.*, 54-55.
- ⁷⁵ Carter, *Science and the Near-Death Experience*, 120.
- ⁷⁶ K. Ring, *Heading Toward Omega: In Search of the Meaning of the Near-Death Experience*, (New York: William Morrow, 1984), 183-192.
- ⁷⁷ Lommel, *Consciousness Beyond Life*, 38.
- ⁷⁸ *Ibid.*
- ⁷⁹ *Ibid.*, 39.
- ⁸⁰ Moody, *Life After Life*, 68-69.
- ⁸¹ Lommel, *Consciousness Beyond Life*, 39.
- ⁸² K. Ring, *Life at Death: A Scientific Investigation of the Near-Death Experience*, (New York: Quill, 1982), 68.
- ⁸³ S. Blackmore, *Dying to Live: Near Death Experiences*, (New York: Prometheus Books, 1993), 24-27.
- ⁸⁴ *Ibid.*, 137.
- ⁸⁵ *Ibid.*, 138-158.
- ⁸⁶ B. Greyson, “Near-Death Encounters With and Without Near-Death Experiences: Comparative NDE Scale Profiles,” *Journal of Near-Death Studies* 8, no. 3, Spring 1990: 151-152.
- ⁸⁷ B. Greyson, “The Near-Death Experience Scale: Construction, Reliability, and Validity,” *The Journal of Nervous and Mental Disease* 171, no. 6, (1983): 369-375.
- ⁸⁸ M. Shermer, *The Believing Brain: From Ghost and Gods to Politics and Conspiracies—How We Construct Beliefs and Reinforce Them as Truths*, (New York: Times Books, 2011), 152-162.
- ⁸⁹ K. Wilber, *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*, (Boston, MA: Shambhala, 2000) 177-182.
- ⁹⁰ Pert, *Molecules of Emotion*, 189.
- ⁹¹ *Ibid.*, 190-193.
- ⁹² B. Lipton, *The Biology of Belief: Unleashing the Power of Consciousness, Matter, and Miracles*, (Santa Rosa, CA: Elite Books, 2005), 131-143.
- ⁹³ P. Salovey and J. Mayer, “Emotional Intelligence,” *Imagination, Cognition, and Personality* 9 (1990): 185-211.

- ⁹⁴ H. Gardner, *Multiple Intelligences: New Horizons*, (New York: Basic Books, 1993), 3-63.
- ⁹⁵ A. Souza, *Happiness is a Journey*, QuoteArts.com, <http://www.quotearts.com/94.html>.
- ⁹⁶ D. Baker, *What Happy People Know: How the New Science of Happiness Can Change Your Life for the Better*. (New York: St. Martin's Griffin, 2003), 19-21.
- ⁹⁷ J. Wilkins and A. Eisenbraun, "Humor Theories and the Physiological Benefits of Laughter." *Holistic Nursing Practice* 23, no.6 (2009): 349-354.
- ⁹⁸ Ring, *Life at Death*, 203-205.
- ⁹⁹ R. Noyes, "Attitude Change Following Near-Death Experiences," *Psychiatry* 43, (1980), 234-242.
- ¹⁰⁰ P.M.H. Atwater, *Coming Back to Life: Examining the After-Effects of the Near-Death Experience, 2nd Edition*, (Kill Devil Hills, NC: Transpersonal Publishing, 2008) 63.
- ¹⁰¹ D. Goleman, *Emotional Intelligence: Why it Can Matter More Than IQ*, (New York: Bantam Books, 1995), 168-185.
- ¹⁰² J. Xu, and R. Roberts, "The Power of Positive Emotions: It's a Matter of Life or Death—Subjective Well-Being and Longevity Over 28 Years in a General Population." *Health Psychology* 29, no.1 (2010): 9.
- ¹⁰³ E. Guarneri, B. Horrigan, and C. Pechura, "The Efficacy and Cost Effectiveness of Integrative Medicine: A Review of the Medical and Corporate Literature," *Explore* 6, no. 5 (2010): 310.
- ¹⁰⁴ D. Danner, D. Snowdon, and W. Friesen, "Positive Emotions in Early Life and Longevity: Findings for the Nun Study," *Journal of Personality and Social Psychology* 80, no. 5 (2001): 804.
- ¹⁰⁵ J.E. Myers and T.J. Sweeney, *Five Factor Wellness Inventory: Manual and Sampler Set*, (retrieved from Mind Garden, 2005), <http://www.mindgarden.com>.
- ¹⁰⁶ A. Maslow, *Toward A Psychology of Being*, (Canada: D. Van Nostrand Company, 1962), 23.
- ¹⁰⁷ *Ibid.*, 23-24.
- ¹⁰⁸ N. Doidge, *The Brain that Changes Itself: Stories of Personal Triumph from the Frontiers of Science* (New York: Penguin Books, 2007), xviii.
- ¹⁰⁹ *Ibid.*, xviii-xix.
- ¹¹⁰ Meyers and Sweeney, *Five Factor Wellness Inventory*, 10.
- ¹¹¹ M. Angelou, "Maya Angelou Quotes," *Goodreads: Quotes*, <http://www.goodreads.com/quotes/9821-i-did-then-what-i-knew-how-to-do-now>.
- ¹¹² A. Newberg and M. Waldman, *How God Changes Your Brain: Breakthrough Findings from a Leading Neuroscientist* (New York: Ballantine Books, 2009), 63.
- ¹¹³ *Ibid.*, 6-7.
- ¹¹⁴ J. Pearce, *The Biology of Transcendence: A Blueprint of the Human Spirit*, (Rochester, Vermont: Park Street Press, 2004), 60.
- ¹¹⁵ Doidge, *The Brain the Changes Itself*, 208-210.
- ¹¹⁶ Maslow, *Toward a Psychology of Being*, 68.
- ¹¹⁷ *Ibid.*, 69.
- ¹¹⁸ *Ibid.*
- ¹¹⁹ *Ibid.*, 70-91.
- ¹²⁰ *Ibid.*, 70.
- ¹²¹ R. Doblin, "Pahnke's "Good Friday Experiment": A Long-Term Follow-Up and Methodological Critique," *The Journal of Transpersonal Psychology*, Vol. 23, No.1 (1991): <http://druglibrary.org/schaffer/lsd/doblin.htm>.
- ¹²² W. Pahnke, "LSD and Religious Experience," (Presentation at a public symposium at Wesleyan University, Middletown, Connecticut, March 1967), from: *LSD, Man and Society*, R. DeBold and R. Leaf's eds., (Middletown Connecticut, Wesleyan University Press, 1967), <http://www.drugtext.org/pdf/Psychedelics/lsd-and-religious-experience.pdf>.
- ¹²³ P. McNamara, *The Neuroscience of Religious Experience*, (New York: Cambridge University Press, 2009), 15.
- ¹²⁴ *Ibid.*, 89.

-
- ¹²⁵ T. File and C. Ryan, "Computer and Internet Use in the United States: 2013," *U.S. Department of Commerce Economics and Statistics Administration*, U.S. Census Bureau: November 2014: 4.
<http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf>
- ¹²⁶ T. File and C. Ryan, "Computer and Internet Use in the United States: 2013," 3.
- ¹²⁷ S. Gosling, S. Vazire, S. Srivastava, and O. John, "Should We Trust Web-Based Studies? A Comparative Analysis of Six Preconceptions About Internet Questionnaires," *American Psychologist* 59, no. 2 (2004): 96.
- ¹²⁸ T. File and C. Ryan, "Computer and Internet Use in the United States: 2013," 3.
- ¹²⁹ Ibid.
- ¹³⁰ Ibid.
- ¹³¹ Ibid.
- ¹³² S. Gosling, S. Vazire, S. Srivastava, and O. John, "Should We Trust Web-Based Studies? A Comparative Analysis of Six Preconceptions About Internet Questionnaires," 93-104.
- ¹³³ Ibid., 96-102.
- ¹³⁴ Ibid.
- ¹³⁵ Ibid.
- ¹³⁶ K. H. Braunsberger, H. Wybenga, and R. Gates, "A Comparison of Reliability Between Telephone and Web-based Surveys," *Journal of Business Research* 60 (2007): 758-764.
- ¹³⁷ C. Wang, K. Liu, C. Cheng, and Y. Cheng, "Comparison of a Web-based Versus Paper-and-Pencil Administration of a Humor Survey," *Computers in Human Behavior* 29, (2013): 1007-1011.
- ¹³⁸ K. H. Braunsberger, H. Wybenga, and R. Gates, "A Comparison of Reliability Between Telephone and Web-based Surveys," 758-764.
- ¹³⁹ C. Wang, K. Liu, C. Cheng, and Y. Cheng, "Comparison of a Web-based Versus Paper-and-Pencil Administration of a Humor Survey," 1007-1011.
- ¹⁴⁰ K. B. Wright, "Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services," *Journal of Computer-Mediated Communication* 10, no.3, (2005): <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2005.tb00259.x/full>.
- ¹⁴¹ Ibid., 93.
- ¹⁴² K. B. Wright, "Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services," <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2005.tb00259.x/full>.
- ¹⁴³ Ibid.
- ¹⁴⁴ Ibid.
- ¹⁴⁵ H. Gunn, "Web Based Surveys: Changing the Survey Process." *First Monday*, 7 no. 12 (2002). <http://www.unt.edu/rss/class/survey/gun.html>.
- ¹⁴⁶ C. Wang, K. Liu, C. Cheng, and Y. Cheng, "Comparison of a Web-based Versus Paper-and-Pencil Administration of a Humor Survey," 1007-1011.
- ¹⁴⁷ P. L. Hadré, H. M. Crowson, K. Xie, and C. Ly, "Testing Differential Effects of Computer-Based, Web-Based, and Paper-Based Administration of Questionnaire Research Instruments," *British Journal of Educational Technology* 38 (2007): 5-22.

Chapter Three

- ¹⁴⁸ Greyson, "Near-Death Encounters With and Without Near-Death Experiences: Comparative NDE Scale Profiles," 161.
- ¹⁴⁹ J. Hattie, J.E. Meyer, and T.J. Sweeney, "A Factor of Structurel Wellness: Theory, Assessment, Analysis and Practice," *Journal of Counseling and Development* 82 (2004): 354-364.
- ¹⁵⁰ J.E. Myers, T.J. Sweeney, and J.M. Witmer, *The Wellness Evaluation of Lifestyle* (Redwood City, CA: Mind Garden Inc., 1996).

-
- ¹⁵¹ J.E. Myers and T.J. Sweeney, *Five Factor Wellness Inventory*, 21.
- ¹⁵² J.E. Myers, T.J. Sweeney, and J.M. Witmer, *The Wellness Evaluation of Lifestyle*, 16.
- ¹⁵³ L. Mlodinow, *Subliminal: How Your Unconscious Mind Rules Your Behavior*, (New York: Vintage Books, 2012), 202.
- ¹⁵⁴ D. Dunning, C. Heath, and J. Suls, "Flawed Self-Assessment: Implications for Health, Education, and the Workplace," *Psychological Science in the Public Interest* 5, no. 3 (2004): 69-106.
- ¹⁵⁵ *Ibid.*, 79.
- ¹⁵⁶ F. Gibbons, T. Smith, R. Ingram, K. Pearce, S. Brehm, and D. Schroeder, "Self-Awareness and Self-Confrontation: Effects of Self-Focuses Attention on Members of a Clinical Population," *Journal of Personality and Social Psychology* 48, no. 3 (1985): 662-675.
- ¹⁵⁷ Dunning, Heath, and Suls, "Flawed Self-Assessment: Implications for Health, Education, and the Workplace," 80-97.

Chapter Four

- ¹⁵⁸ A. Kazdin, *Research Design in Clinical Psychology*, (Boston, MA: Allyn & Bacon, 2003), 102.
- ¹⁵⁹ *Ibid.*, 103.
- ¹⁶⁰ *Ibid.*, 103.
- ¹⁶¹ Greyson, "The Near-Death Experience Scale: Construction, Reliability, and Validity," 369.
- ¹⁶² Myers and Sweeney, *Five Factor Wellness Inventory: Manual and Sampler Set*, 10.
- ¹⁶³ *Ibid.*, 10-11.
- ¹⁶⁴ *Ibid.*
- ¹⁶⁵ *Ibid.*
- ¹⁶⁶ *Ibid.*
- ¹⁶⁷ *Ibid.*
- ¹⁶⁸ *Ibid.*
- ¹⁶⁹ *Ibid.*
- ¹⁷⁰ *Ibid.*
- ¹⁷¹ *Ibid.*
- ¹⁷² *Ibid.*
- ¹⁷³ *Ibid.*
- ¹⁷⁴ *Ibid.*
- ¹⁷⁵ *Ibid.*
- ¹⁷⁶ *Ibid.*
- ¹⁷⁷ *Ibid.*, 11.
- ¹⁷⁸ *Ibid.*
- ¹⁷⁹ *Ibid.*
- ¹⁸⁰ *Ibid.*
- ¹⁸¹ *Ibid.*
- ¹⁸² *Ibid.*
- ¹⁸³ *Ibid.*
- ¹⁸⁴ *Ibid.*
- ¹⁸⁵ *Ibid.*
- ¹⁸⁶ *Ibid.*
- ¹⁸⁷ *Ibid.*
- ¹⁸⁸ *Ibid.*
- ¹⁸⁹ *Ibid.*
- ¹⁹⁰ *Ibid.*
- ¹⁹¹ *Ibid.*
- ¹⁹² *Ibid.*, 21.

Chapter Five

¹⁹³ K. Ring, *Lessons from the Light: What We Can Learn from the Near-Death Experience*, (Needham, MA: Moment Point Press, 2000), 124-127.

¹⁹⁴ P. M. H. Atwater, *Beyond the Light, What Isn't Being Said about Near-Death Experience, Revised Edition*, (Kill Devil Hill, NC: Transpersonal Publishing, 2009), 121-122.

¹⁹⁵ Ibid.

¹⁹⁶ Ibid., 200.

¹⁹⁷ Atwater, *Beyond the Light*, 126.

¹⁹⁸ Ring, *Lessons from the Light*, 126.

¹⁹⁹ Ibid., 126.

²⁰⁰ Atwater, *Beyond the Light*, 126.

²⁰¹ Ibid., 200.

²⁰² Ibid.

²⁰³ B. Franklin, *BrainyQuote*,

<http://www.brainyquote.com/quotes/quotes/b/benjaminfr151664.html>.

²⁰⁴ P. W. Yoon, B. Bastian, R.N. Anderson, J.L. Collins, H.W. Jaffe, "Potentially Preventable Deaths from the Five Leading Causes of Death—United States, 2008-2010," *Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report*, 63 no. 17, May 2, 2014: 369-374, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6317a1.htm>.

²⁰⁵ D. Ornish, M.J.M. Magbanua, G. Weidner, V. Weinberg, C. Kemp, C. Green, M.D. Mattie, R. Marlin, J. Simko, K. Shinohara, C.M. Haqq, and P.R. Carroll, "Changes in Prostate Gene Expression in Men Undergoing an Intensive Nutrition and Lifestyle Intervention," *Proceedings of the National Academy of Sciences of the United States of America*, June 17, 2008: 105 no.24, 8369-8374, <http://www.pnas.org/content/105/24/8369.full>.

²⁰⁶ B. Lipton, *The Biology of Belief: Unleashing the Power of Consciousness, Matter, & Miracles*, (Santa Rosa, CA: Elite Books, 2005), 49-73.

²⁰⁷ G. Slavich and S. Cole, "The Emerging Field of Human Social Genomics," *Clinical Psychological Science* 1, no. 3 (2013): 331-348.

²⁰⁸ Ibid., 332.

²⁰⁹ R. Mauer, *One Small Step Can Change Your Life: The Kaizen Way*, (New York: Workman Publishing, 2004), 15-20.

REFERENCES AND BIBLIOGRAPHY

- Abrahams, S. and Balkin, R. "Review of the Five Factor Wellness Inventory." *NewsNotes* 46 no. 2 (2006): <http://www.theaaceonline.com/wel.pdf>.
- Alexander E. *Proof of Heaven: A Neurosurgeon's Journey into the Afterlife*. New York: Simon & Schuster, 2012.
- Angelou, M. "Maya Angelou Quotes." *Goodreads: Quotes*.
<http://www.goodreads.com/quotes/9821-i-did-then-what-i-knew-how-to-do-now>.
- Atwater, P.M.H. *Beyond the Light: What Isn't Being Said about the Near-Death Experience, Revised Edition*. Kill Devil Hills, NC: Transpersonal Publishing, 2009.
- _____. *Coming Back to Life: Examining the After-Effects of the Near-Death Experience, 2nd Edition*. Kill Devil Hills, NC: Transpersonal Publishing, 2008.
- Baker, D. *What Happy People Know: How the New Science of Happiness Can Change Your Life for the Better*. New York: St. Martin's Griffin, 2003.
- Bennett, C. "Information is Quantum." *IBM Research Yorktown*, July 7, 2006.
<http://researcher.watson.ibm.com/researcher/files/us-bennetc/QInfWeb.pdf>.
- Blackmore, S. *Dying to Live: Near-Death Experience*. New York: Prometheus Books, 1993.
- Bradberry, T. and Greaves, J. *Emotional Intelligence 2.0*. San Diego, CA: TalentSmart, 2009.
- Braden, G. *The Divine Matrix: Bridging Time, Space and Miracles, and Belief*. Carlsbad, CA: Hay House, 2007.
- Braunsberger, K., Wybenga, H., and Gates, R. "A Comparison of Reliability Between Telephone and Web-based Surveys." *Journal of Business Research* 60 (2007): 758-764.
- Burris, F. M. "Drawing the Unconscious: A Research Study to Examine the Effects of Using a *Metaphoric Life Portrait*™ to Reduce Anxiety and Enhance Physical, Mental, Emotional, and Spiritual Well-Being." Doctoral dissertation, Holos University, 2011.
http://www.holosuniversity.org/content/uploads/files/dissertations/Burris_Faith_Dissertation.pdf.
- Carter, C. *Science and the Near-Death Experience: How Consciousness Survives Death*. Rochester, Vermont: Inner Traditions, 2010.
- Centers for Medicare and Medicaid Services. "National Health Expenditure Projections 2012-2022." <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/proj2012.pdf>.
- CERN. "About CERN." <http://home.web.cern.ch/about>.
- Davis, K., Stremikis, K., Squires, D. and Schoen, C. "Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compare Internationally." *The Commonwealth Fund*: June 2014.
http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf.
- Danner, D., Snowdon, D., and Friesen, W. "Positive Emotions in Early Life and Longevity: Findings for the Nun Study." *Journal of Personality and Social Psychology* 80, no. 5 (2001): 804-812.

- Doblin, R. "Pahnke's "Good Friday Experiment": A Long-Term Follow-Up and Methodological Critique." *The Journal of Transpersonal Psychology*, Vol. 23, No.1 (1991): 1-16. <http://druglibrary.org/schaffer/lsd/doblin.htm>.
- Dodge, R., Daly, A., Huyton, J., and Sanders, L. "The Challenge of Defining Wellbeing." *International Journal of Wellbeing* 2, no.3 (2012): 222-235. <http://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/89/238>.
- Doidge, N. *The Brain that Changes Itself: Stories of Personal Triumph from the Frontiers of Science*. New York: Penguin Books, 2007.
- Dunning, D., Heath, C., and Suls, J. "Flawed Self-Assessment: Implications for Health, Education, and the Workplace." *Psychological Science in the Public Interest* 5, no. 3 (2004): 69-106.
- Faggin, F. Interview by Mike Malone, San Francisco, Italy. <http://sanfranciscoitaly.com/post/57614873633/federico-faggin-explores-the-fabric-of-consciousness>.
- _____. "The Union of Science & Spirituality: A Conceptual Framework." *Subtle Energies Magazine* 25, No. 2 (2014): 4-8. <https://view.publitas.com/p222-665/subtle-energies-magazine-volume-25-issue-2/page/1>.
- Faraday, M. "Wisdom." *Wisdom Parenting: Timeless and Universal Ideas for a Good and Happy Life*. <http://www.wisdomparenting.org/wisdom/>.
- Ferguson, E. *Adlerian Theory: An Introduction*. Chicago, IL: Adler School of Professional Psychology, 1999.
- File, T. and Ryan, C. "Computer and Internet Use in the United States: 2013." *U.S. Department of Commerce Economics and Statistics Administration*. U.S. Census Bureau, November 2014. <http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf>.
- Franklin, B. *BrainyQuote*. <http://www.brainyquote.com/quotes/quotes/b/benjaminfr151664.html>.
- Fredrickson B. and Joiner, T. "Positive Emotions Trigger Upward Spiral Toward Emotional Well-Being." *American Psychological Society* 13, no. 2 (2002): 172-175.
- Gardner, H. *Multiple Intelligences: New Horizons*. New York: Basic Books, 1993.
- Gibbons, F, Smith, T., Ingram, R., Pearce, K., Brehm, S., and Schroeder, D. "Self-Awareness and Self-Confrontation: Effects of Self-Focuses Attention on Members of a Clinical Population." *Journal of Personality and Social Psychology* 48, no. 3 (1985): 662-675.
- Goldberg, D. *The Universe in the Rearview Mirror: How Hidden Symmetries Shape Reality*. New York, Penguin Group, 2013.
- Goleman, D. *Emotional Intelligence: Why It Can Matter More Than IQ*. New York: Bantam Books 1995.
- Good Reads. "Quotes About Greatness." <http://www.goodreads.com/quotes/tag/greatness>.
- Gosling, S., Vazire, S., Srivastava, S., and John, O. "Should We Trust Web-Based Studies? A Comparative Analysis of Six Preconceptions About Internet Questionnaires." *American Psychologist* 59, no. 2 (2004): 93-104.
- Goswami, A. *The Self-Aware Universe: How Consciousness Creates the Material World*. New York: Penguin Putnam, 1995.

- Greyson, B. "Consistency of Near-Death Experience Accounts Over Two Decades: Are Reports Embellished Over Time?" *Resuscitation* 72 (2007): 407-411.
- _____. "The Near-Death Experience Scale: Construction, Reliability, and Validity." *The Journal of Nervous and Mental Disease* 171, no. 6, (1983): 369-375.
- _____. "Near-Death Encounters With and Without Near-Death Experiences: Comparative NDE Scale Profiles." *Journal of Near-Death Studies* 8, no. 3 (Spring 1990): 151-161.
- Guarneri, E., Horrigan, B., and Pechura, C. "The Efficacy and Cost Effectiveness of Integrative Medicine: A Review of the Medical and Corporate Literature." *Explore* 6, no. 5 (2010): 308-312.
- Gunn, H. "Web Based Surveys: Changing the Survey Process." *First Monday*, 7 no. 12 (2002). <http://www.unt.edu/rss/class/survey/gun.html>.
- Hadré, P.L., Crowson, H. M., Xie, K., and Ly, C. "Testing Differential Effects of Computer-Based, Web-Based, and Paper-Based Administration of Questionnaire Research Instruments." *British Journal of Educational Technology* 38 (2007): 5-22.
- Hargreaves, A. and Fullan, M. "Streams of Consciousness." *GaiamLife*.
<http://blog.gaiam.com/quotes/authors/andy-hargreaves-michael-fullan/67232>.
- Hawkins, D.R. *Power vs. Force: The Hidden Determinants of Human Behavior*. Carlsbad, CA: Hay House, 2002.
- HeartQuotes™: Quotes of the Heart. *Albert Einstein Quotes*.
<http://www.heartquotes.net/Einstein.html>.
- Holden, J.M. "Veridical Perception in Near-Death Experiences." In J.M. Holden, B. Greyson, and D. James, eds. *The Handbook of Near-Death Experiences*. Santa Barbara, CA: Praeger, 2009.
- Kandel, E., Schwartz, J., Jessell, T., Siegelbaum, S., and Hudspeth, A.J. *Principles of Neural Science*, 5th ed. New York: McGraw Hill, 2013.
- Kane, J. "Health Costs: How the U.S. Compares With Other Countries." *PBS Newshour*, October 22, 2012. <http://www.pbs.org/newshour/rundown/health-costs-how-the-us-compares-with-other-countries/>.
- Kazdin, A. *Research Design in Clinical Psychology*. Boston, MA: Allyn & Bacon, 2003.
- Lehma, J. *Into the Light: Real Life Stories About Angelic Visits, Visions of the Afterlife, and other Pre-Death Experiences*. Franklin Lakes, NJ: New Page Books, 2007.
- Lipton, B. *The Biology of Belief: Unleashing the Power of Consciousness, Matter, and Miracles*. Santa Rosa, CA: Elite Books, 2005.
- Long, J., and Perry, P. *Evidence of the After-Life: The Science of Near-Death Experiences*. New York: HarperOne, 2010.
- Lommel van P. *Consciousness Beyond Life: The Science of the Near-Death Experience*. New York: HarperOne, 2010.
- _____, Wees, Ruud van, W., Myers, V., and Elfferich, I. "Near-death experience in survivors of cardiac arrest: a prospective study in the Netherlands." *The Lancet* 358, 9298 (2001): 2039-2045.
- Markham, E. "Outwitted." *Goodreads: Quotes*.
<http://www.goodreads.com/quotes/8703-he-drew-a-circle-that-shut-me-out—heretic>.
- Maslow, A. *Toward A Psychology of Being*. New York: D. Van Nostrand Company, 1962.

- Mauer, R. *One Small Step Can Change Your Life: The Kaizen Way*. New York: Workman Publishing, 2004.
- McNamara, P. *The Neuroscience of Religious Experience*. New York: Cambridge University Press, 2009.
- McNeil, M. and Rodriguez, A. *Mdesign-Design & Branding for Web & Print*. <http://mdesignaz.com/>.
- Mlodinow, L. *Subliminal: How Your Unconscious Mind Rules Your Behavior*. New York: Vintage Books, 2012.
- Moody, R. *Life After Life: The Investigation of a Phenomenon—Survival of Bodily Death*. San Francisco, CA: HarperSanFrancisco, 1975.
- Moss, D. “Heart Rate Variability (HRV) Biofeedback.” *Psychophysiology Today: The Magazine for Mind-Body Medicine* 1, 4-11.
- Mumber, M., and Reed, H. *Sustainable Wellness: An Integrative Approach to Transform Your Mind, Body, and Spirit*. Pompton Plains, NJ: New Page Books, 2012.
- Myers, J. and Sweeney, T. “Wellness in Counseling: An Overview.” *Professional Counseling Digest*, 2007. <http://counselingoutfitters.com/vistas/ACAPCD/ACAPCD-09.pdf>.
- Myers, J., Sweeney, T., and Witmer, M. “Five Factor Wellness Inventory: Manual and Sampler Set.” *MindGarden*, 2005. <http://www.mindgarden.com>.
- Newberg, A. *Principles of Neurotheology*. Burlington, VT: Ashgate Publishing, 2010.
- Newberg, A. and Waldman, M. *How God Changes Your Brain: Breakthrough Findings from a Leading Neuroscientist*. New York: Ballantine Books, 2010.
- Nicolai, J. *Integrative Wellness Rules: A Simple Guide to Health Living*. Carlsbad, CA: Hay House, 2013.
- Noyes, R. “Attitude Change Following Near-Death Experiences.” *Psychiatry* 43, (1980): 234-242.
- Ornish D., Magbanua, M.J.M., Weidner, G., Weinberg, V., Kemp, C., Green, C., Mattie, M.D., Marlin, R., Simko, J., Shinohara, K., Haqq, C.M., and Carroll, P.R. “Changes in Prostate Gene Expression in Men Undergoing an Intensive Nutrition and Lifestyle Intervention.” *Proceedings of the National Academy of Sciences of the United States of America*, 105 no.24, June 17, 2008: 8369-8374. <http://www.pnas.org/content/105/24/8369.full>.
- Organization for Economic Co-operation and Development 2013 (OCED). *Health at a Glance 2013: OCED Indicators*. OECD Publishing. http://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2013_health_glance-2013-en.
- Pahnke, W. “LSD and Religious Experience.” Presentation at a public symposium at Wesleyan University, Middletown, Connecticut, March 1967. From: *LSD, Man and Society*, DeBold R. and Leaf, R. eds. Middletown Connecticut, Wesleyan University Press, 1967. <http://www.drugtext.org/pdf/Psychedelics/lsd-and-religious-experience.pdf>.
- Pearce, J. *The Biology of Transcendence: A Blueprint of the Human Spirit*. Rochester, Vermont: Park Street Press, 2004.
- Pert, C. *Molecules of Emotion: The Science Behind Mind-Body Medicine*. New York: Scribner, 1997.

- Pinkney, E. *Posts Tagged: Well-Being vs. Wellbeing from Edward Pinkney (blog)*. Edward Pinkney.com, May 3, 2013. <http://edwardpinkney.com/?tag=well-being-or-wellbeing>.
- Radin, D. *Entangled Minds: Extrasensory Experiences in a Quantum Reality*. New York: Paraview Pocket Books, 2006.
- Reynard, G. *The Disappearance of the Universe: Straight Talk about Illusions, Past Lives, Religion, Sex, Politics, and the Miracles of Forgiveness*. Carlsbad, CA: Hay House, 2004.
- Ring, K. and Lawrence, M. "Further Evidence for Veridical Perception During Near-Death Experiences." *Journal of Near-Death Studies* 11, no. 4, (1993): 223-229.
- Ring, K. *Heading Toward Omega: In Search of the Meaning of the Near-Death Experience*. New York: William Morrow, 1984.
- _____. *Life at Death: A Scientific Investigation of the Near-Death Experience*. New York: Quill, 1982.
- _____. *Lessons from the Light: What We Can Learn from the Near-Death Experience*. Needham, MA: Moment Point Press, 2000.
- Ruprecht, M.A. "The Therapeutic Effect of Symbolic Intuitive Sessions™ on Anxiety and Characteristics of Wellness." Doctoral dissertation, Holos University, 2012. http://www.holosuniversity.org/content/uploads/files/dissertations/Ruprecht_Dissertation.pdf.
- Salkind, N. *Statistics for People Who Think They Hate Statistics, 2nd Edition*. Thousand Oaks, CA: Sage Publications, 2004.
- Shermer, M. *The Believing Brain: From Ghost and Gods to Politics and Conspiracies—How We Construct Beliefs and Reinforce Them as Truths*. New York: Times Books, 2011.
- Siegfried, T. "Einstein was Wrong about Spooky Quantum Entanglement." *ScienceNews*, February 19, 2014. <https://www.sciencenews.org/blog/context/einstein-was-wrong-about-spooky-quantum-entanglement>.
- Slavich G. and Cole, S. "The Emerging Field of Human Social Genomics." *Clinical Psychological Science* 1, no. 3 (2013): 331-348.
- Smuts, J.C. *Holism and Evolution*. New York: The MacMillan Company, 1926.
- Souza, A. *Happiness is a Journey*. QuoteArts.com. <http://www.quotearts.com/94.html>.
- Sutton, R. *The No Asshole Rule: Building a Civilized Workplace and Surviving One That Isn't*. New York: Business Plus, 2010.
- Sweeney, T. *Adlerian Counseling and Psychotherapy: A Practitioner's Approach, 5ed*. New York: Routledge, 2009.
- Szalavitz, M. "What Does a 400% Increase in Antidepressant Use Really Mean?" *Time*, October 20, 2011. <http://healthland.time.com/2011/10/20/what-does-a-400-increase-in-antidepressant-prescribing-really-mean/>.
- Tart, C. *Transpersonal Psychologies: Perspectives on the Mind from Seven Great Spiritual Traditions*. San Francisco, CA: HarperSanFrancisco, 1992.
- Tiller, W. "Towards a Quantitative Science and Technology that Includes Human Consciousness." First published in: *The Journal of New Thinking for New Action* 1, no. 4, (2003): 1-35. <http://www.tillerfoundation.com/ToQuanSciTechIncHumCon.pdf>.

- Turner, K. *Radical Remission: The Nine Key Factors That Can Make a Real Difference*. New York: Harper One, 2014.
- Uskul A. and Horn A. "Emotions and Health." To appear in the *International Encyclopedia of the Social & Behavioral Sciences*, January 2015.
https://kar.kent.ac.uk/44743/1/Emotions_and_Health_final.pdf.
- Wade, J. *Changes of Mind: A Holonomic Theory of the Evolution of Consciousness*. Albany, NY: State University of New York Press, 1996.
- Wang, C., Liu, K., Cheng, C., and Cheng, Y. "Comparison of a Web-based Versus Paper-and-Pencil Administration of a Humor Survey." *Computers in Human Behavior* 29, (2013): 1007-1011.
- Wilber, K. *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*. Boston, MA: Shambhala, 2000.
- _____. *Sex, Ecology, Spirituality: The Spirit of Evolution*. Boston, MA: Shambhala, 2000.
- Wilkins, J., and Eisenbraun, A. "Humor Theories and the Physiological Benefits of Laughter." *Holistic Nursing Practice*, 23, no.6 (2009): 349-354.
- Wright, K. B. "Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services." *Journal of Computer-Mediated Communication* 10, no.3, (2005). <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2005.tb00259.x/full>
- Xu, J., and Roberts, R. "The Power of Positive Emotions: It's a Matter of Life or Death—Subjective Well-Being and Longevity Over 28 Years in a General Population." *Health Psychology* 29, no.1 (2010): 9-19.
- Yoon, P.W., Bastian, B., Anderson, R.N., Collins, J.L., Jaffe, H.W. "Potentially Preventable Deaths from the Five Leading Causes of Death—United States, 2008-2010." *Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report* 63, no. 17, May 2, 2014: 369-374.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6317a1.htm>.

APPENDIX A : Recruiting Flyer Long Form

My name is Marie Maddox, and I am a doctoral candidate requesting participants for a study on near-death experience (NDE) and integrative wellness through Holos University Graduate Seminary.

The purpose of my research is to identify components that may make the NDE population unique, especially in regard to the totality of holistic wellness (wholeness). Using the Five Factor Wellness Inventory (FFWEL), the integrative wellness components of the body, mind, emotions, and spirit will be evaluated as a measure of overall holistic wellbeing. The data from the study will examine whether evidence exists for increased integrative and holistic wellness (wholeness) in the near-death experience (NDE) population, in comparison to the normative data of the FFWEL.

Participants will use the Internet to complete the FFWEL Questionnaire. The time commitment is approximately 35 minutes or less.

Participants are required to:

- Have had valid a near-death experience;
- Have access to the Internet
- Be between the ages of 18-100;
- Agree to the consent form, and
- Agree to answer ALL survey questions at:
<http://www.ndeandintegrativewellness.net>.

Participants are guaranteed anonymity. If you are interested in participating, please contact:

Marie Maddox at MMaddoxthm@gmail.com or 602.692.9165

APPENDIX B : Recruiting Flyer Short Form

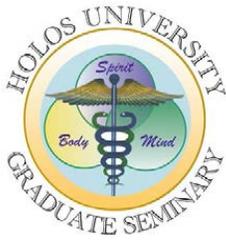
Have you had a near-death experience (NDE)? If so, you are invited to participate in an integrative wellness study to examine if near-death experiencer's (NDER's) are imprinted with factors of integrative and holistic wellbeing using the Five Factor Wellness Inventory (FFWEL).

To participate, you must be between the ages of 18-100, agree to the consent form, and answer all survey questions found at: <http://www.ndeandintegrativewellness.net>. Your time commitment will be 45 minutes or less.

If you have any questions or are interested in participating, please contact:

Marie Maddox at MMaddoxthm@gmail.com or 602.692.9165

APPENDIX C : Informed Consent



Near-Death Experience and Its Integrative Imprint

RESEARCH STUDY
INFORMED CONSENT FORM

Primary Investigator: Marie S. Maddox, Th.M.

Committee Chair: Patricia A. Norris, Ph.D.

Please scroll down and agree to the consent form. You will then be taken directly to the survey.

Near-Death Experience and Its Integrative Imprint

Holos University Graduate Seminary supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time by not completing any of the participant material.

PURPOSE: This study will use two measures to examine holistic and integrative wellness in the near-death experience (NDE) population. These are the Greyson Near-Death Scale and the Five Factor Wellness Inventory (FFWEL).

POTENTIAL RISKS: The discomforts and risks with this study are minimal, as all measurements and procedures are performed anonymously, online. Should you find the questions uncomfortable, you may opt out of the study immediately by not answering any question.

POTENTIAL BENEFITS: Although participation will not directly benefit you, it is possible this information may be useful in demonstrating measures of holistic and integrative wellness in various populations. The dissection of holistic wellbeing into its various integrative components is helpful to understand how these components relate to the interacting whole of wellbeing, allowing happier and healthier lives for all individuals.

TESTING: As a participant 18 or older, you will be required to fill out and submit to all testing and questionnaires online.

TIME COMMITMENT: The time commitment for this study is approximately 45 minutes, or less, to be performed at your convenience. Please be aware not all the testing must be done in one session. However, all testing must be performed from the same computer within 30 days of initial activation.

CONFIDENTIALITY: Participation in this study is strictly voluntary and anonymous. Your name will not be associated in any manner with research information. All data, names, and results will be identified through a unique identifier code. Results of this study may be reported in scientific presentations or publications, but in no manner will you be indentified to either the principal investigator or the public.

I appreciate your participation. If you would like additional information concerning this study before or after it is complete, please feel free to contact me by phone or email. If you have concerns or questions regarding your rights as a research participant, you may contact Patricia Norris, Ph.D. at Holos University Graduate Seminary at 1.888.272.6109, 1501 E. Broadway, Suite 2, P.O. Box 297, Bolivar, MO 65613.

Sincerely,

Marie Maddox, Th.M.
Principal Investigator
1.602.692.9165
MMaddoxthm@gmail.com

By clicking the button below, I affirm that I am at least 18 years of age, and I indicate my voluntary, anonymous agreement to participate in the online study with full knowledge of the nature and purpose of the procedures as rendered above.

APPENDIX D : Website Content-Main Page

Dramatic events often change lives, and for some, the near-death experience (NDE) serves as an incentive for growth and transformation toward more integrative and holistic wellbeing. The purpose of this website is to identify components that may make the NDE population unique, especially in those factors related to integrative wellness and the totality of holistic wellness.

If you have had an NDE, your participation in this study would be greatly appreciated and will assist in continued examination and exploration of the NDE. Please scroll on the left side of this page under the heading, For Participants, for more information on how to participate. Thank you for your consideration and visiting the website *Near Death Experience and Its Integrative Imprint*.

APPENDIX E : Website Content- Study Description

Study Description:

This study will use two measures to examine holistic and integrative wellness in the near-death experience (NDE) population. These are the Greyson Near-Death Scale and the Five Factor Wellness Inventory (FFWEL).

The objective of this research is to examine if near-death experiencers (NDErs) are imprinted with the factors of integrative and holistic wellbeing using the Five Factor Wellness Inventory (FFWEL) as a measure of physical, mental, emotional, and spiritual health. These measurements will be used to examine whether evidence exists for increased integrative and holistic wellness in the near-death experience (NDE) population, in comparison to the normative data of the FFWEL. The purpose of this research is to identify and study the components that make the NDE population unique, especially in those factors related to the totality of holistic wellness.

APPENDIX F : Website Content-Privacy Policy

Privacy Policy:

- Participation in this study is strictly voluntary. Your name will not be associated in any manner with research information. All data, names, and results will be identified through a unique identifier code. Results of this study may be reported in scientific presentations or publications, but in no manner will you be identified.
- Participant information is not sold, traded, or bartered for use to any other entity or organization.
- Collection of information on the servers is not utilized unless it is required for on-going operation of services.
- A range of security practices are in place to secure web access to data, limit database access to essential staff members, and undertake efforts to address security vulnerabilities. However, in providing any online study or service, there is no guarantee of absolute anonymity.
- No personal information will be shared at any time with anyone unless ordered to do so by law.

APPENDIX G : Website Content-Research Results

Research Results:

Please check back here for the complete dissertation, *Near-Death Experience and Its Integrative Imprint*, and the study's findings. Results will be posted in their entirety for a period of six months upon completion. The dissertation will also be available indefinitely, online at <http://www.holosuniversity.net>.

APPENDIX H :
Website Content-Study Closed

Thank you for your interest in *Near-Death Experience and Its Integrative Imprint*. At this time, the study is closed.

When completed, the entire study and its results will be located under the heading Research Results, which is located on the left side of the home page.

Many thanks to all who have participated.

APPENDIX I :
Greyson Near-Death Scale

1. Did time seem to speed up or slow down?

0 = No 1 = Time seemed to go faster or slower than usual 2 = Everything seemed to be happening at once; or time stopped or lost all meaning

2. Were your thoughts speeded up?

0 = No 1 = Faster than usual 2 = Incredibly fast

3. Did scenes from your past come back to you?

0 = No 1 = I remembered many past events 2 = My past flashed before me, out of my control

4. Did you suddenly seem to understand everything?

0 = No 1 = Everything about myself or others 2 = Everything about the universe

5. Did you have a feeling of peace or pleasantness?

0 = No 1 = Relief or calmness 2 = Incredible peace or pleasantness

6. Did you have a feeling of joy?

0 = No 1 = Happiness 2 = Incredible joy

7. Did you feel a sense of harmony or unity with the universe?

0 = No 1 = I felt no longer in conflict with nature 2 = I felt united or one with the world

8. Did you see, or feel surrounded by, a brilliant light?

0 = No 1 = An unusually bright light 2 = A light clearly of mystical or other-worldly origin

9. Were your senses more vivid than usual?

0 = No 1 = More vivid than usual 2 = Incredibly more vivid

10. Did you seem to be aware of things going on elsewhere, as if by extrasensory perception (ESP)?

0 = No 1 = Yes, but the facts have not been checked out 2 = Yes, and the facts have been checked out

11. Did scenes from the future come to you?

0 = No 1 = Scenes from my personal future 2 = Scenes from the world's future

12. Did you feel separated from your body?

0 = No 1 = I lost awareness of my body 2 = I clearly left my body and existed outside it

13. Did you seem to enter some other, unearthly world?

0 = No 1 = Some unfamiliar and strange place 2 = A clearly mystical or unearthly realm

14. Did you seem to encounter a mystical being or presence, or hear an unidentifiable voice?

0 = No 1 = I heard a voice I could not identify 2 = I encountered a definite being, or a voice clearly of mystical or unearthly origin

15. Did you see deceased or religious spirits?

0 = No 1 = I sensed their presence 2 = I actually saw them

16. Did you come to a border or point of no return?

0 = No 1 = I came to a definite conscious decision to “return” to life 2 = I came to a barrier that I was not permitted to cross; or was “sent back” against my will.

APPENDIX J :
Sample Questions from the FFWEL

I am satisfied with how I cope with stress.

Strongly Agree ____ Agree: ____ Disagree: ____ Strongly Disagree: ____

When I have a problem, I study my choices and possible outcomes before acting.

Strongly Agree ____ Agree: ____ Disagree: ____ Strongly Disagree: ____

I do not use tobacco.

Strongly Agree ____ Agree: ____ Disagree: ____ Strongly Disagree: ____

I look forward to growing older.

Strongly Agree ____ Agree: ____ Disagree: ____ Strongly Disagree: ____

I like myself even though I am not perfect.

Strongly Agree ____ Agree: ____ Disagree: ____ Strongly Disagree: ____

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