“THE TREES WERE OUR CATHEDRAL”—A NARRATIVE INQUIRY INTO HEALING FROM ADDICTION THROUGH A RELATIONSHIP WITH NATURE

by

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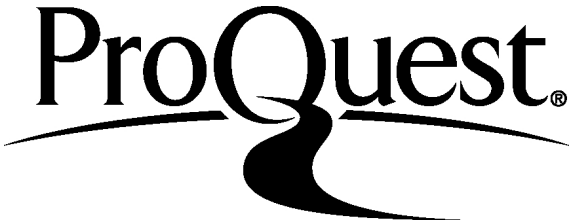

CERTIFICATE OF APPROVAL

I certify that I have read "THE TREES WERE OUR CATHEDRAL"—A NARRATIVE INQUIRY INTO HEALING FROM ADDICTION THROUGH A RELATIONSHIP WITH NATURE by Michelle Black and that in my opinion this work meets the criteria for approving a dissertation submitted in partial fulfillment of the requirements for the Doctor of Psychology in Clinical Psychology at the California Institute of Integral Studies.

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"THE TREES WERE OUR CATHEDRAL"—A NARRATIVE INQUIRY INTO HEALING FROM ADDICTION THROUGH A RELATIONSHIP WITH NATURE

ABSTRACT

This qualitative study explored and analyzed the narrative experiences of individuals whose spiritual relationships with nature have supported them in overcoming addiction. This project sought to investigate the sparsely researched intersection of ecopsychology and addiction recovery. Semi-structured interviews were conducted among six participants to shed light on the question: How can ecopsychological values and approaches help addicts to achieve and sustain recovery?

I implemented a thematic analysis of the interview material, using a multiphasic coding process to organize the common themes that surfaced across participants' narratives, as well as highlight distinct experiences. The results yielded a total of 11 subthemes distributed among the following three master themes: Evolving Relationship with Nature, Levels of Integration with Nature, and Healing Effects of the Relationship.

Key findings from the study include the following: (a) all participants reported feeling an innate connection with nature that began in childhood, which in some cases, became less important as the years passed; (b) in seeking sobriety, each of the participants connected with nature to serve as the higher power they

needed in order to apply the 12-step approach in their lives; (c) this relationship with nature has been central in helping participants to be successful in recovery; over time, the relationship transcended the utilitarian purpose of "working the program" and led to significant shifts in participants' lifestyles and value systems; (d) in sustaining this relationship, participants have woven nature into their lives to varying degrees; many expressed that they generally yearn for more contact with nature than their current lifestyle permits; and (e) participants found that their relationships with nature resulted in deep healing that extended far beyond addiction, and across physical, intellectual, emotional, and spiritual realms.

It is my hope that this initial study will lead to further research exploring the value of incorporating nature into addiction treatment, as well as seeking effective solutions to humankind's increasingly addictive and exploitative relationship with the natural world.

ACKNOWLEDGMENTS

I would like to express my gratitude to the many people who have supported me during my journey on this long and winding road.

Most importantly, I would like to acknowledge the six participants of the study, who made this research possible. Each participant offered a unique perspective and shared memories of some very profound and moving experiences, which greatly contributed to the richness of this project. To each of the participants, I am deeply grateful for your willingness to openly and courageously share your stories, and I hope to make this study available to a wider audience so your experiences will inspire others.

From the beginning, it was my intention that this project would reflect my highest values and best work. I was able to accomplish this thanks to a number of tremendously supportive professional and personal relationships.

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As the external reviewer of this dissertation, Raymond Buscemi offered valuable insights rooted in his many years of experience in addiction treatment.

Raymond, thank you for contributing your dynamic thinking and sharp insights to this project. Your deep appreciation for the subject matter truly enriched the final result.

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DEDICATION

I would like to dedicate this dissertation to all stewards of the Earth: Those who are working to restore balance to the planet, those who live in reciprocal relationship with the natural world, and those who practice the value of leaving enough for the next several generations in order to ensure the survival of humankind.

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CHAPTER 1: INTRODUCTION

There is a natural link between addiction recovery and ecopsychology, though initially this connection may not seem apparent and has scarcely been explored or researched. Ecopsychologists have cited population growth and our addictive and exploitative relationship with the natural environment as the two most impactful factors in the current ecological crisis (Erlich, 1995). Our culture reinforces dissociation, and many of us remain "asleep at the wheel" in the face of a dilemma that increasingly threatens the survival of our species (Glendinning, 1994).

As modernization has taken hold and swept us into the technological era, feelings of dissatisfaction and meaninglessness along with mental illness and addiction have become increasingly widespread (Hillman & Ventura, 1993). Confusion abounds in Western culture, where certain addictive behaviors such as consumerism and materialism are promoted (at the cost of decimating the natural world), yet other types of addiction such as substance use are stigmatized. No longer can we continue to address mental health and addiction issues solely as problems of the individual, for we may in fact be helping individuals adjust to a sick society (Fromm, 1990).

Research Topic and Purpose

Research in the newly emergent fields of ecopsychology, ecotherapy, and ecospirituality have explored how these approaches can benefit individuals struggling with anxiety, depression, PTSD, psychosis, dementia, and a slew of other disorders, finding nature-based interventions to be highly effective

(Chalquist, 2009). Only a handful of studies have explored how ecopsychology and similar nature-based approaches to healing might benefit individuals struggling with substance and behavioral addictions, and this research tends to be narrowly focused in terms of population and intervention (Annerstedt & Wahrborg, 2011; Cornille et al., 1987; Haubenhofer et al, 2010; Selhub & Logan, 2012).

The interaction between ecopsychology and addiction recovery has yet to be explored from a depth psychology–oriented, spiritual perspective. Sobriety-based recovery groups such as Alcoholics Anonymous and Narcotics Anonymous hold a spiritual component as central to their healing process, and whereas most individuals in recovery believe in a traditional notion of God, many others create their own unique conceptualizations of a "higher power" (Alcoholics Anonymous [AA], 1939 / 2001). Among the more frequently identified alternative higher powers are nature, music, the universe, and the recovery community at large (Hazel & Mohatt, 2001).

The purpose of this narrative study is to explore the connection between recovery and ecopsychological values and approaches, by collecting and presenting personal stories from individuals in recovery who identify nature as their higher power. This inquiry will offer a unique contribution to the field by interviewing individuals in recovery who cite an emotional or spiritual relationship with nature as a central facet of their healing process. The study seeks to explore what we might learn from these individuals regarding overcoming

substance and behavioral addictions, as well as how, as a culture, we might address our addictive, exploitative relationship with the natural world.

Definition of Terms

Ecopsychology: The study of the relationship between humans and the rest of the natural world through both ecological and psychological principles for the purpose of facilitating reconnection, thereby assisting individuals in developing sustainable lifestyles and remedying alienation from nature (Roszak, 1992).

Ecotherapy: The applied practice of ecopsychological principles and values for the sake of alleviating mental health issues; an umbrella term for several types of nature-based therapy such as wilderness therapy, horticultural therapy, and animal-assisted therapy (Clinebell, 2013).

Ecospirituality: Ecospirituality connects the science of ecology with spirituality, bringing together spiritual practices and environmental activism. Ecospirituality seeks to help people experience "the holy" in the natural world and to recognize the relationship between human beings and all creation (Gore, 1993). It shares much in common with indigenous beliefs, paganism, animism, and other nature-based spiritual traditions.

Addiction: The continued repetition of a behavior despite adverse consequences. The current edition of the Diagnostic and Statistical Manual (*DSM-5*) recognizes substance addictions, such as drugs and alcohol, as well as behavioral addictions, such as eating, gambling, sex, and shopping (American Psychiatric Association, 2012; Jellinek, 1960).

Recovery: A process of community-supported transformation in which an individual achieves abstinence from addictive behaviors, improved health, increased well-being, newfound abilities, a different form of consciousness, and a spiritual connection (White & Kurtz, 2006).

Higher Power: A term coined by Alcoholics Anonymous which refers to an open-ended conceptualization of God, a spiritual force, or any tangible or intangible entity greater than oneself (Anonymous, 1939 / 2001).

CHAPTER TWO: REVIEW OF THE LITERATURE

The following chapter provides a comprehensive review of the current research on ecopsychology, addiction, and the intersection of these areas. The literature review has been divided into three primary sections: The Environmental Crisis and Ecopsychology, Addiction and Recovery, and Integrating Ecopsychology and Addiction Healing.

Part I: The Environmental Crisis and Ecopsychology

Ecopsychology and ecospirituality have arisen relatively recently in response to the contemporary emotional and ecological challenges with which we are confronted. They hold that there is a "synergistic interplay between planetary and personal well-being" (Roszak, 1992, p. 23). Mental health professionals have been pivotal in creating psychologically informed solutions to the ecological crisis, believing that reconnecting with the natural world is central to healing ourselves and meaningfully addressing ever-intensifying environmental challenges (Roszak, 2009).

The Emergence of Ecopsychology

> Many years later, as he faced the firing squad, Colonel Aureliano Buendia was to remember that distant afternoon when his father took him to discover ice. At that time, Macondo was a village of twenty adobe houses, built on the bank of a river of clear water that ran along a bed of polished stones, which were white and enormous, like prehistoric eggs. (Marquez, 2006, p. 1)

In the evocative first lines of Gabriel Garcia Marquez's novel *One Hundred Years of Solitude*, moments before his death a man reflects on a culture-wide death experienced in his community when he was a child. The seemingly harmless arrival of manufactured ice in his idyllic tropical village in fact marked

the onset of a dramatic shift. In a relatively short period of time, Macondo transformed from a harmonious indigenous village to an industrialized, urbanized, capitalist society—and in the process, their community, traditions, and interrelatedness with nature unraveled.

Such a drastic turning point may sound personally unfamiliar to many of us, yet nearly every culture across the globe has experienced a similar shift relatively recently in human history. During the 10,000−15,000 years that Homo sapiens have existed, we have evolved to live in direct relationship with nature predominantly as hunter-gatherers and more recently as agriculturists (Frumkin, 2001; Herman, 2013). If a distance of 100 feet (approximately the length of a basketball court) represents the entirety of human ancestry, only one-fifth of an inch on this hundred-foot timeline marks the amount of time that we have lived in industrial and technological civilizations (Glendinning, 1994). The assumptions about life, reality, and the nature of man that today we accept as normal are in fact severely misaligned with the ways in which we evolved during the past million years (Glendinning, 1994; Herman, 2013).

"The astounding material success of the human endeavor hasn't brought happiness, wisdom, or enlightenment; instead, there's a profound disturbance in our collective human psyche. The best evidence of that disturbance is to be found in our suicidal abuse of nature" (Anderson, 2009). The natural world is currently being decimated at unprecedented rates, due to the increasingly global consumerist value system demanding that we extract raw materials from nature and transform them into saleable forms (Mander, 1992). We live dissociated from

the reality that what goes up must come down, believing in the capitalist promise of indefinite growth rather than accepting the stark reality that our planet's resources are limited (Gray, 1995).

Some ecopsychologists have argued that engaging in therapy without addressing the ecological crisis of our times and its impact on our wellness is, at best, a harm reduction approach: "I felt as if I were a therapist on the Titanic. We might be doing fine work in the therapy room, but nobody was mentioning the sinking of the ship" (Rust, 2009, p. 39).

We are inseparable from the rest of nature, as a part of the greater organism that is planet Earth (Buzzell & Chalquist, 2009; Hillman, 1995). "Salt remnants of ancient oceans flow through our veins, ashes of expired stars rekindle in our genetic chemistry" (Roszak, 1992, p. 319). Ecopsychology seeks to repair the separation between humankind and the natural world, which requires an "awakening to beauty, which often comes in the company of defeat and loss and grief" (Robinson, 2009, p. 28), and would lead to a "fundamentally non-dual, seamless unity in which both nature and psyche flow as expressions of the same ground or source" (Harris, 2009, p. 87).

Seeking healing by living in direct relationship with plants and animals has been encourages across eras and cultures (Dyer, 2002). Indigenous peoples have used plant-based medicines for millennia, and Ayurvedic and traditional Chinese medicine practices remain in use today. Even during the Victorian era, a trip to the seaside was often prescribed as a factor in addressing physical and emotional problems. Trees, plants, wild animals, and bodies of water have long

been considered to be filled with vital, healing energy that can be transferred to a person (Selhub & Logan, 2012). “Everybody needs beauty as well as bread, places to play in and pray in, where Nature may heal and cheer and give strength to body and soul alike” (Muir, 1912, p. 256).

The Contemporary Influence of Ancient Wisdom

Time was not passing...it was turning in a circle. (Marquez, 2006, p. 272)

It is important to appreciate that while ecopsychology and ecospirituality may be at the cutting edge of the mental health field, they are in fact a return to the approaches and value systems of indigenous, nature-based peoples—cultures who have lived in relationship with the forces and cycles of the natural world, who have sustained themselves through a combination of hunting, fishing, gathering, and scattering seeds, and who practice the value that the Earth is a sacred place (Glendinning, 1994). In an attempt to legitimize itself as a science, the nascent field of psychology cast out spirituality and traditional healing methods. It is only during the past decade that there has been movement toward reintegrating some of the nature-based approaches that were interwoven with human culture for millennia (Abram, 1996; Roszak, 1992). Ecopsychology and ecospirituality seek to integrate the deepest indigenous wisdom with the latest scientific understandings of our universe (Buzzell & Chalquist, 2009).

Indigenous cultures existed across the planet for tens of thousands of years (and in some remote corners, still exist today) without hierarchical classes or slavery, and in relative comfort compared with many parts of the industrialized world. Australian Aboriginal culture, for example, existed for at least 40,000

years unchanged prior to European colonization (Cowan, 1992). Indigenous peoples live in solidarity with the lands they inhabit, and feel a reverence toward the plants and animals with which they coexist (Abram, 1996). The first Neolithic civilizations of Europe were peaceful, egalitarian, nature-worshipping and goddess-worshiping societies (Herman, 2013). These cultures, which were much smaller in scale and far less centralized than modern Western civilization, maintained a relatively homeostatic relation with their local ecologies for vast periods of time (Abram, 1996).

The practice of living in balance with the natural world and taking only what one needs is fundamental to the indigenous way of life. Other central values include respect for life in all forms, harmony with nature's cycles, gratitude, balance, and reciprocity (Gray, 1995). The Hopi believe that nature's laws mandate that land mustn't be opened up for the sake of taking anything from within in, and certainly must never be bought or sold (Mander, 1992). Alaska Natives personify their surroundings, believing that the natural world feels, can be offended, and must be treated with appropriate respect (Abram, 1996).

Perhaps most central to the indigenous way of life is the acute awareness that nothing exists in isolation, and all is interconnected. The indigenous concept of the self sees humans as inhabiting a larger living body (Rust, 2009). Australian Aboriginals see land and self not as separate entities, but as a relationship in which the more-than-human world is incorporated as part of an ecological self (Ward & Styles, 2007). Similarly, Native American cosmology views the

individual as a part of all creation, living life as one system rather than in separate units that are objectively relating with each other (Duran & Duran, 1995).

Relationships with the self, family, community, and the environment must all be in balance in order to experience physical, mental, emotional, and spiritual health (Gray, 1995). In !Kung society, if someone falls ill or a marriage unravels, the responsibility does not fall on the individual; rather it's an indication that something is amiss between the community and the entire cosmos (Glendinning, 1994). Indigenous peoples make little distinction between levels of healing—physical, spiritual, social, and cosmic. Health is achieved through the rebalancing of what is imbalanced, and the reconnection of what has been separated. A healthy mind requires a healthy body, which together depend on a healthy society in harmonious relation to heaven and earth (Herman, 2013). Through this lens, psychological dysfunction and the ecological crisis are one and the same (Glendinning, 1994).

It is clear that this integrative, non-dual belief system lies in stark contrast with Western, technological society. The Yurok people of Northern California believe that nature's balance was disrupted by people's greed, which is the root cause of most of the problems we face today (Glendinning, 1994). The idea of a world existing for the purpose of human dominion and exploitation is a notion that is absent in indigenous thinking (Duran & Duran, 1995). Natives traditionally engaged in cooperative production, viewed nature as a living being, did not practice private ownership of land, and had goals of subsistence. Technological societies compete with one another, view nature as a resource to exploit,

commodify land, and seek to create a surplus for profit (Mander, 1992). Colonization certainly played a role in this imbalance, forcing the value system of "the conquering, displacing pioneer who moves around a lot but soaks up little and tends even less" (Berry, 2003). Decolonization through the adoption of a starkly different value system is essential to healing the planet as well as ourselves (Glendinning, 2005b).

Today, human survival may depend on our ability to step lightly on the planet, and observe its natural rules and modes of organization (Mander, 1992). Ideally, we might integrate the wisdom of nature-based societies with the achievement of the classical civilizations and the past 400 years of science and industry (Herman, 2013). Michael Serres (1995) suggests creating a contract with nature that acknowledges its rights as a living being with equal protection under the law. Such an agreement would enforce a mutually beneficial, symbiotic relationship between humankind and nature, putting an end to the parasitic relationship that humanity currently holds with the natural world.

According to the Dalai Lama, only a spiritual revolution will enable us to face the destruction of the planet without succumbing to cynicism, anger, burnout, and despair (Thornton, 1996). For nature-based cultures, spirituality cannot be separated from everyday life. Perhaps once we rediscover the spiritual significance of nature, we will bring about a peaceful and harmonious relationship with the natural world (Nasr, 1997).

Humans and Nature: Separation and Domination

The shift away from a nature-based way of life has had many repercussions for humankind as well as the planet itself. The ecological emergency we are faced with today is largely the result of our epidemic dissociation from the impact of environmental issues—our implicit belief that we somehow exist independently of nature rather than being immersed in and interwoven with it (Clinebell, 2013). Ecopsychologists seek to understand the origins of this separation from nature and ensuing superior attitude toward to the rest of the natural world, for the purpose of learning how to repair this damaged bond (Buzzell & Chalquist, 2009).

Some theorists suggest that the original separation between humans and nature was marked by the transition from hunter-gatherer to agrarian societies. Cultivating land and domesticating animals allowed people to remain in one location rather than follow the migration of herds, which resulted in the creation of more permanent shelters. A stark duality was established between "indoor" and "outdoor." Over time, the outdoors became associated with the wild, chaotic, dangerous, soiled, and evil, whereas the indoors was perceived as tame, orderly, safe, clean, and good (Glendinning, 1994; Shephard, 1992).

Dualities of this nature tend to be very tantalizing to humans, as we are a self-conscious animal that lives "simultaneously as worms and Gods" (Becker, 1997, p. 51). Our animal bodies require nourishment and protection, yet our higher consciousness is capable of transcending animal instincts, and is the point of contact with God (Bunge, 2001). Our own death anxiety causes us to over-

identify with the God-like facets of ourselves, and to dissociate from decay, death, and destruction not only within ourselves, but also in the natural world at large (Becker, 1997; Matthews, 1994). Humans in permanent shelters were more protected from the elements and wild animals, and it felt as if the threatening facets of nature could finally be kept at bay. Land ownership and the development of formal numbering and measurement systems resulted in the quantification of land, which shifted our relationship with it and ultimately led to the commodification of land and resources (Abram, 1996; Rousseau, 1992).

The rise of monotheistic religions replaced humankind's belief in earthly Gods—animal Gods, plant Gods, rock and water Gods, male and female Gods—with a belief in one deity who resembles humans, and is perfect (Ehrenreich, 2014; Mander, 1992). The Book of Genesis in the Old Testament gives humans dominion over the plants and animals on earth. Some have interpreted this passage as a call to act as stewards of the earth, whereas others have used it to justify anthropogenic abuses of the environment such as pollution and resource exploitation: "We have dominion over the plants, the animals, the trees. God said, 'Earth is yours. Take it. Rape it. It's yours'" (Coulter, 2008, p. 104). One might argue that such a detached and superior relationship with the natural world has all the markings of narcissistic personality disorder (Robinson, 2009).

The Age of Enlightenment further complicated humankind's relationship with nature by favoring reason and skepticism over tradition, including indigenous, nature-based practices (Kors, 2003). Touting the scientific method as the *only* method came at a cost, for indigenous peoples had been using an

experimental trial-and-error approach for millennia. While some of their approaches were superstitious, most were time-tested and highly effective (Gray, 1995). Indigenous people were painted as primitive, childlike, and savage (Glendinning, 1994), and the dichotomy of civilized meaning "good" and "safe," and wild indicating "danger" and "evil" became more deeply carved in the mainstream praxis. Today the pendulum has swung back to the center, and we see that we are capable of rigorous thinking without forfeiting our sensory and intuitive knowledge, our "animal kinship with the world around us" (Abram, 1996, p. 264).

After the Enlightenment, Darwin's discoveries of natural selection and evolution arose. While most scientists accepted these theories, the public was "reluctant to relinquish the assumption of human specialness" (Abram, 1996, p. 78). Today we continue to cling to the belief that we are superior to all other species on earth, in spite of ever-mounting evidence that certain animals possess advanced cognitive, linguistic, and sensorial abilities, which in some cases surpass those of humans (Chalquist, 2009).

The Industrial Revolution replaced farming with indoor work, causing people to be more isolated from nature than ever before in human history. The shift from local barter economies to consumerist, market economies resulted in natural resources being exploited at unprecedented rates (Mander, 1992). "The natural rhythms of our reactions gave way to industrial rhythms. We learned to interact with mechanical speeds, as assembly line workers and most auto drivers

know. Now that machines move at electronic speeds, the wheel of activity turns faster, with us on it" (p. 65).

Today in the age of corporate cyber globalism, "the system" permeates everything but appears to be located nowhere, leaving individuals feeling confused, unsettled, and helpless (Berman, 2001). Freud (1962) argued that modern civilization is largely responsible for our misery, saying we would be much happier if we returned to a primitive, land-based culture. He forewarned that our greatest suffering would ironically be rooted in our attempts to avoid the threats of nature.

Attachment Disorder with the Natural World

> Original trauma is the disorientation we experience, however consciously or unconsciously, because we do not live in the natural world. It is the psychic displacement, the exile, that is inherent to civilized life. It is our homelessness. (Glendinning, 2005b, p. 94)

Interwoven with this history of drastic cultural shifts is an extraordinarily powerful psychological component. More than 99 percent of human evolution occurred embedded in the natural world, in relationship with local plants, animals, and terrain. Consequently, nature continues to have a fundamental role in our cognitive, emotional, and spiritual development (Frumkin, 2001; Kellert & Wilson, 1993). Similar to the bond between an infant and a primary caregiver, an equally complex biological, psychological, and emotional attachment exists between humans and the natural world (Louv, 2005; Shepard, 1992).

Psychologist Harold Searles argued that Freud's writings (and those of his successors) neglected to account for the influence of the environment on the development of the human psyche (Searles, 1960). The relationship between

infant and caregiver is held within the even greater caregiving and holding force of the natural world, which provides the sustenance that furthers life.

> In the evolution of humankind this setting took the form of living plants, wild birds, rain, wind, mud and the taste and texture of earth, and bark, the sounds of animals and insects….These surroundings were swallowed, internalized, incorporated as the self (Shepard, 1995, p. 27).

A secure attachment with the environment provides us with a sense of meaning and of belonging (Louv, 2005).

Attachment theory indicates that one's early attachment style strongly shapes relationships later in life (Ainsworth, Blehar, Waters, & Wall, 1978). In the ideal case of a secure attachment, consistent care and stimulation help an infant learn to regulate feelings, and when ruptures in the bond occur they are soon repaired (Bowlby, 1983). Unfortunately, the aforementioned ruptures in humankind's relationship with the environment resulted in the deterioration of what once was a secure attachment with the natural world. Illuminating this inter-generationally experienced disorganized attachment enables us to more deeply understand our own "disregard for the very air we breathe," (Abram, 1996, p. 260).

Avoidant and ambivalent attachment styles lead to trust issues, difficulty relying on and feeling close with others, fears of abandonment, and a fundamental belief that one's basic needs will not be met (Klein, 1987). In the face of helplessness, argues Klein, an infant will strive to feel almighty in order to gain a sense of power and control in the midst of a terrifying situation. "The West is a

vast testimony to childhood botched to serve its own purposes, where history, masquerading as myth, authorizes men of action to alter the world to match their regressive moods of omnipotence and insecurity" (Shephard, 1992, p. 126).

Through an attachment lens, our attempts to dominate nature are an enactment of our defenses. "If humankind is to flourish without destroying the living world that sustains us, then we must grow out of our adolescent aspiration to encompass and control all that is" (Abram, 1996, p. 272). Our deepest vulnerabilities in the face of our dependence on nature and its indifference toward us are reflected in our attempts to bring nature under our total control (Jordan, 2009). This deep wound prevents us from opening to our innate interdependence with the natural world, as well as with one another.

Psycho-Spiritual, Emotional, and Social Impacts

This disturbance in our attachment with nature continues to be transmitted inter-generationally throughout the world today, and is manifested broadly on a cultural level as well as deeply on an individual basis. "Since 1600AD, and most visibly since the Industrial Revolution, the West has been in a perpetual crisis, an unstable society in a state of extreme alarm" (Berman, 1981, p. 297). Ecopsychologist Paul Shepherd believes that Western industrialized humans possess a flimsy identity structure that by Paleolithic standards would be considered childish, and the consequence is a "readiness to strike back at a natural world that we dimly perceive as having failed us" (Shephard, 1992, p.124).

Cultural and individual issues as diverse as crises of values, spiritual confuse, social and economic inequities, racism and injustice, violence toward

one another and toward the environment, community and family dysfunction, and mental illness and addiction can be traced back to our collective original trauma—our division from the natural world (Clinebell, 2013; Glendinning, 1994). In repressing nature's destructive capacity and favoring light, reason, and civilization, we attempt to suppress our own dark side. It seeps through the cracks manifesting in human violence and destructiveness, often projected out onto the environment (Matthews, 1994; Shepard, 1995). Our culture-wide denial enables many of the global crises we face including famine, deforestation, pollution, and extinction.

Without a secure attachment to nature, an inevitably resulting "ontogenetic crippling," or handicapping of our ability to reach our full developmental potential freezes us in states of adolescent narcissism, oedipal fears, ambivalence, and inconsistency (Louv, 2005; Shepard, 1995, p. 15). The absence of a feeling of belonging and connection with our environment leads to profound disembodiment, repression, loneliness, and disorientation (Glendinning, 2005b). Feeling alienated from the self, community, and nature is dehumanizing and breeds the insecurity, anxiety and guilt that inevitably arise "when human separateness cannot be overcome" (Fromm, 1956, p. 80). These qualities are witnessed in Sherry Turkle's ongoing studies on children and teenagers who have grown up in networked culture. Her research consistently finds that in spite of technology's promises to bring greater connection, an underlying fear of isolation and abandonment pervades the lives of today's youth (Turkle, 2011).

Dissociation seems to be the central defense mechanism that has enabled us to move forward in spite of these deeply felt emotional and spiritual wounds. Erich Fromm believes that a person who has remained sensitive and human rather than become a cog in the great machinery of our capitalist, industrialist, materialist culture will be unable to help but feel lonely, powerless, and isolated in present-day society (Fromm, 1956). Ecopsychologist Larry Robinson asks, "Why do these human machines keep breaking down, why do they develop symptoms such as substance abuse, antisocial behavior, anxiety, phobias, and depression?…Because human beings are not machines" (Robinson, 2009, p. 25). There is a tendency in contemporary mental health to focus on symptom reduction in individuals; however as clinicians we must be wary of the possibility that we are helping clients adjust to a sick society rather than addressing the underlying culture-wide illness that is at the root of individual distress. This shift might occur one-on-one in therapy rooms, or could take shape as a greater socio-cultural movement or even a revolution. A paradigm shift as such would seek to reshape societal norms to support the qualities that are most fundamentally human, rather than continuing to quash our humanness to become further enmeshed with industry and technology.

Attachment disorder and dissociation also result in disembodiment. By alienating ourselves from our natural state, "we have created a chasm between ourselves and our own bodies. Like our relationship to the rest of the Earth, our relationship to our bodies has become one of function and utility rather than one of reverence and respect" (Morrison, 2009, p. 102). Sensation and perception are

gateways to our engagement with the "wild and animate earth," and our fixation with technology has led us to collapse the "sensorial reciprocity between our breathing bodies and the bodily terrain" (Abram, 1996, p. 267). For example, each time we cross a city street when the "walk" sign is displayed without looking to see whether danger is approaching, we are relying on technology at the expense of dulling our senses. Human awareness has folded in upon itself, as is witnessed in our denial regarding our current ecological catastrophe which does not feel personally impactful until it intensifies enough to be perceived by our senses.

Perhaps most painful of all are the oppressive dualities that have replaced what was once a deep sense of interconnectedness, fluidity, and embeddedness in the world: "matter and spirit, feelings and thoughts, yours and ours, us and them. Walls around the heart parallel walls around the Other, barricading our experience against what we fear and cannot tolerate" (Chalquist, 2009, p. 82). We are coming to understand that "falling asleep" to our problems only exacerbates them, and our only way out of this mess is to take an honest look at the heart of the matter.

Research on The Human-Nature Relationship & its Impact on Mental Health

In response to these struggles, ecopsychology and ecospirituality research seeks to rigorously support the intuitive sense that spending time around plants and animals brings feelings of balance and relief from everyday stressors, alleviates a range of mental health symptoms, and rekindles a sense of belonging in the natural world (Chalquist, 2009).

Research consistently finds that our environments have a tremendous impact on our physical, emotional, and psychological state. The presence of trees

and plants, particularly in wilderness environments untouched by the humans, are found to enhance mental health, while manicured environments have the opposite effect (Kaplan & Kaplan, 1989; O'Brien, 2005). When urban children were asked to make a drawing of their favorite place, nearly all the drawings were of outdoor spaces such as lawns, playgrounds, trees, parks, and gardens (Moore, 1986). Several studies have found that contact with nature is central to our ability to maintain and restore positive psychological mood states (Kaplan, 1995; Shibata & Suzuki, 2001, 2004; Van den Berg, Hartig, & Staats, 2007).

Incorporating facets of nature into human-made environments has shown positive results. For example, adding plants to an office boosts creativity and decreases the amount of sick leave employees take (Selhub & Logan, 2012). In hospital settings, the presence of interior plants, or a window that looks out onto natural scenery led patients to experience less anxiety, a shorter recovery time, and declined painkiller use (Chalquist, 2009; Herman, 2013).

Many studies have focused specifically on depression, finding that outdoor exercise proves as effective as taking anti-depressants, whereas walking through a shopping mall has been shown to raise stress and lower self-esteem (Chalquist, 2009). Participants who took vacations in the wilderness demonstrated positive affective states, improved cognitive performance, and calm physiological states, as compared with people who took urban vacations or no vacation at all (Hartig, Meng, & Evans, 1991).

Nature counters the emotional and physiological effects of stress. Simply looking at a photograph of a nature scene as opposed to an urban scene for 20

minutes lowers heart rate (Selhub & Logan, 2012). Completing mental activities in a garden results in significantly lower levels of cortisol being released than doing mental activities in an indoor classroom (Selhub & Logan, 2012). Several studies found that after taking a stressful exam, looking at photos of nature decreased muscle tension and feelings of anger and aggression in students, whereas looking at urban scenes had the opposite effect (Ulrich et al., 1991). One study found that the presence of plants in a room enhanced recovery from watching a stressful video, helping to bring EEG beta wave activity back to normal (Selhub & Logan, 2012). Depression and stress accelerate the aging process of the brain, and being exposed to nature reshapes our plastic brain and can influence the production of neurotransmitters responsible for maintaining cognitive health throughout the lifespan (Selhub & Logan, 2012).

Environmental psychology supports the harmonious design of buildings, rooms and landscapes, but many theorists believe this type of band-aid approach is more often the problem than the solution when it comes to our alienation from nature (Roszak, 2009). Having potted plants in the office as opposed to immersing oneself among wild plants and animals might be considered a harm reduction intervention. Regardless, the research finds time and again that increasing the presence of plants and animals in any environment facilitates healing and fosters well-being.

Applied Ecotherapy

Ecotherapy is defined as the practical application of ecopsychological and ecospiritual research and theory. It is an umbrella term for nature-based methods

of physical and psychological healing that are founded in healthy interaction with the earth (Buzzell & Chalquist, 2009; Clinebell, 2013).

In wilderness therapy, a group expedition into the wilderness serves as a mental health intervention. Meta-analyses indicate a high efficacy of wilderness therapy, finding that it improves self-esteem and clinical functioning, increases internal locus of control, and decreases problem behaviors (Cason & Gilis, 1994). Specifically in studies with juvenile delinquents, wilderness therapy has proven more effective than traditional therapeutic programs in promoting self-esteem, positive behavior changes, and interpersonal skills (Chalquist, 2009).

The efficacy of horticultural therapy, which involves participating in gardening projects to achieve specific therapeutic treatment goals, has been supported by numerous studies (Chalquist, 2009). It has been found to curtail stress and obesity, aid in treating alcoholism and substance abuse, foster emotional restoration, enhance self-esteem in partially blind adults and children, ease the shock of displacement and resettlement for refugees, support healthcare providers struggling with burnout, and diminish social isolation and enhance emotional expressiveness in the elderly (Annerstedt & Währborg, 2011; Gigliotti, Jarrott, & Yorgason, 2004).

Animal-assisted therapy is stemmed in the biophilia theory. Biophilia suggests that our attachment to animals is rooted in the history of human survival as being partly dependent on signals from animals in the environment, who helped us to determine whether an environment was safe or threatening (Kellert & Wilson, 1993). After spending time with a dog, Alzheimer's patients experienced

decreased loneliness, agitation, aggression, and lethargy, and better nutritional habits, healthy weight gain, and greater alertness and social interaction (Chalquist, 2009). Equine therapy has proven effective in addressing symptoms of depression and anxiety, helping children with autism to better communicate, and alleviating PTSD symptoms (Burgon, 2014; DeMayo, 2009). Dolphin therapy, involving playing and snorkeling with dolphins and relaxing on the beach, showed a significant decrease in depression compared with a control group who relaxed on the beach and snorkeled (Antonioli & Reveley, 2005). After working with farm animals twice a week for 12 weeks, clients diagnosed with a range of disorders including schizophrenia, anxiety, affective disorders, and personality disorders showed improvement in coping ability, self-efficacy, symptom reduction, and improved quality of life (Chalquist, 2009).

In sum, direct contact with plants and animals alleviates unpleasant emotional and psychological symptoms, and enhances well being. Incorporating plants and animals into the human-made world yields positive results; however most effective are the approaches that foster a relationship between humans and the wilderness, so that we may experience a sense of reconnection and more deeply heal our severed bond with the natural world.

Attachment Healing Through Contact

> I feel like I am spread out over the landscape and inside things, and am myself living in every tree, in the splashing of the waves, in the clouds and the animals that come and go, in the procession of the seasons. (Jung, 1965, p. 252)

Attachment research has found that an insecure attachment can be healed through intimate contact, by experiencing a secure attachment in a holding

environment (Solomon, 2003). It is only by repairing our disrupted attachment with nature that we will be able to reestablish harmony with the natural world and with our own deep selves (Hillman, 1995). A self rooted in healthy attachments to human and nonhuman worlds leads to emotional wellness and stable adjustment, and this positive contact with nature facilitates symbiotic healing (Clinebell, 2013; Spitzform, 2001).

Opening ourselves to a deeper relationship with the natural world comes with significant psychological and emotional challenges. The Hindu goddess Kali is a more appropriate archetypal image for the natural world than that of the attuned caregiver, for nature does not privilege life over death and is equally likely to destroy life as it is to sustain it (Puhakka, 2013). Similar to arriving at Klein's "depressive position," (Klein, 2002) we must come to terms with the destructive and dangerous facets of nature and integrate them with its creative, life sustaining aspects. We must also accept our vulnerability, mortality, and relative insignificance as individuals and even as a species.

Refining our senses and becoming re-embodied is one of the most simple and straightforward ways we can open up the process of reconnection, as our bodies are the most direct link to the natural world: "It takes an awakening of the senses, which is only possible when we fully inhabit the body. An effective ecotherapy must continually engage the body, because that is the basis of our life and the source of our connection" (Robinson, 2009, p. 28).

Simply put, it is time that we stop behaving as if we are nature's damaged children, and take responsibility for our own healing and maturation processes.

We must develop what Martin Buber would call an “I-thou” relationship with the natural world (Buber, 1970), in which we live in a realm of interacting subjectivities rather than exploiting the environment as an inanimate object. “In such a relationship, we and the world come alive and neurosis melts away” (Robinson, 2009, p. 28).

Culture-Wide Addiction & Its Environmental Impacts

As ecopsychology and indigenous transitions indicate, in order to reach our full potential as humans we must live embedded in a community, be in relationship with plants and animals, and feel connected to a place. We can survive without these bonds, but we often feel a sense of profound emptiness that we attempt to fill in a variety of unhealthy ways (Buzzell, 2009). In the Western modernized world (and other areas of the globe that are rapidly Westernizing), we are bombarded with messages that teach us to fill this void by consuming: “Man’s happiness today consists of having fun, and having fun lies in the satisfaction of consuming and taking in....Spiritual as well as material objects become objects of exchange and of consumption” (Fromm, 1956, p. 80). Americans are urged through ubiquitous advertising to construct their identities and be positive economic actors through consumerism (Acker, 1993). We are constantly delivered messages that the feeling of something missing or lacking can be remedied by acquiring products and experiences. When the fulfillment derived from these acquisitions proves to be only temporary, feelings of emptiness return and the cycle perpetuates (Robinson, 2009).

Anne Wilson Schaef first presented the radical idea that the society in which we live is an "addictive system" (Schaef, 1987, p. 4). Indeed, our culture-wide obsession with consumerism and materialism bears all the markings of an addiction: insatiability, compulsivity, denial, omnipotence, and an implicit belief in limitless supply (Campbell, 2010).

> The overwhelming 'need' in the West for non-essential consumables, with the ensuing loss of personal well being, increasing environmental degradation, and the loss of native land-based lifestyles worldwide, does…qualify as addiction, as much as the misuse or abuse of drugs or alcohol (Fish, 2009, p. 47).

Similar to an alcoholic or drug user destroying his or her own body in the throes of addiction, consumerism has wreaked havoc on our earth home. "The disharmony in our relationship to the earth, which stems in part from our addiction to a pattern of consuming ever-larger quantities of the resources of the earth, is now manifest in successive crises" (Gore, 1993, p. 223). He goes on to cite the loss of acres of rain forest every second, the acceleration of the natural extinction rate, the thinning of the ozone layer, and the possible destruction of the climate balance that makes our earth livable. Given this cultural and global context, attempting to explain addiction as an isolated problem experienced by certain individuals would be incomprehensive. To understand the ecological crisis as well as individual addiction, we must take into account our culturally sanctioned addictive behaviors and their dire impact on the natural world on which we so intimately depend.

Part II: Addiction and Recovery

"It is better to conquer yourself than to win a thousand battles. Then the victory is yours. It cannot be taken from you, not by angels or by demons, heaven or hell" (Byrom, 2011, p. 8).

The Cultural Context of Individual Addiction

Our embeddedness in a culture that essentially encourages addiction to consumption lays the groundwork, to a large degree, for addictions in individuals. In a society that expects its members to be effective consumers, messages pushing unregulated consumption and out-of-control behavior resonate powerfully (Acker, 1993, p. 203). Acknowledging that substance and behavioral addictions are more extreme versions of modern-day consumerism illuminates the unconscious dynamics underlying addiction (Zoja, 1989).

In addition to explicitly promoting addictive behavior, Western free-market societies inevitably dislocate people from traditional sources of psychological, social, and spiritual support. The resulting isolation is a central precursor to addiction (Alexander, 2000). Similarly, Victor Frankl suggested that drug and alcohol abuse are symptoms of a collective sense of meaninglessness and purposelessness (Frankl, 1985). The existential crisis he depicts is ubiquitous in industrial and technological societies.

Regardless of the tremendous cultural shifts experienced in recent centuries, certain aspects of a nature-based way of life remain with us—one in particular is the need for rituals. In most traditional societies including indigenous Europe, the primary functions of consciousness-altering substances have been

positive, symbolic, and generally restricted for ceremonial use (Jellinek, 1977). The symbolic or ritualistic quality of drinking and drug use practices are still prevalent in Western society today, though without the structure and support necessary to facilitate a spiritual experience (Adler, 1991). Our ancient need for sacred rituals remains, yet there has been a loss of division between the sacred and the profane (Zoja, 1989). We no longer uphold the communal systems that in the past "provided context and ritual whereby life was given meaning and reason" (Severns, 2004, p. 162), leading our relationship with substances to devolve into one of abuse and imbalance.

Scope, Diagnosis, and Progression of Addiction

> Addiction is running from reality…the reality you have that something is stronger. Something that's greater than you. Instead of admitting it and saying that something scares me—this thing scares me, or I don't know how to do this, or I don't know how to live—instead of just saying that, you do drugs. So you coexist with the people that are nonexistent. (Maté, 2010, p. 344)

Addiction is a disease that leads to a process of "nonliving" that is progressively death-oriented (Schaef, 1987). The Narcotics Anonymous basic text describes addiction as surrendering one's life to a substance with the dedication of a servant to a master (Anonymous, 1988). Put simply, addiction is an excessive, unhealthy, dependency that disintegrates and destroys (Maté, 2010). Addiction ultimately results in a life completely out of control—vacillating between feeling worthless and feeling invincible; being unable to acknowledge and express feelings appropriately; prioritizing addictive behaviors over family, job, and health; and failing to take personal responsibility for one's problems (Glendinning, 1994).

Approximately 16.7%, or 22 million individuals in the United States develop a drug or alcohol problem at some point in their lives (Regier et al.,1990; Substance Abuse and Mental Health Services Administration [SAMHSA], 2011). Over a third of these individuals are dually diagnosed, meaning they have a co-occurring mental health disorder (Regier et al., 1990).

Alcoholics Anonymous defines addiction (to drugs or alcohol) as an inability to control the amount an individual consumes, and a powerlessness to maintain abstinence even with knowledge of loss of control (Anonymous, 1939 / 2001). The World Health Organization divides problematic and non-problematic substance use into four categories: “Unsanctioned Use” is the use of a substance that is not approved by one’s society. “Hazardous Use” is the use of a substance that involves risky behavior and will probably lead to harmful consequences for the user, such as smoking one pack of cigarettes a day. “Dysfunctional Use” is the use of a substance that leads to impaired psychological or social functioning, such as marital problems or being fired from a job. At the most extreme end of the spectrum, “Harmful Use” is the use of a substance that is known to cause tissue damage or mental illness (Kleber, 1990, p. 59).

The *DSM-5* expanded the definition of addiction to include non-substance related behavioral addictions such as shopping, gambling, and internet use. Additionally, it replaced the prior categories of substance abuse and substance dependence with a spectrum of measures of severity: mild (two to three symptoms), moderate (four to five symptoms), and severe (six or more symptoms) (American Psychological Association [APA], 2012).

The 11 substance use criteria are as follows: taking the substance in larger amounts or for longer than the you meant to; wanting to cut down or stop using the substance but being unable to; spending a lot of time getting, using, or recovering from use of the substance; feeling cravings and urges to use the substance; failing to take care of your work, home or school responsibilities due to substance use; continuing to use when it causes problems in relationships; giving up important social, occupational or recreational activities because of substance use; repeatedly finding yourself in dangerous situations relating to substance use; continued use with the awareness that you have a physical or psychological problem that might have been caused or made worse by the substance; needing more of the substance to get the effect you want (tolerance); and development of withdrawal symptoms, which can be alleviated by taking more of the substance (APA, 2012).

The expansion of the definition of addiction includes any drug associated with compulsive use or dependence, as well as any kind of impulsive or destructive behavior (Milkman & Sunderwirth 1987). Behavioral addictions are similarly destructive to physical health, psychological well-being, and interpersonal relationships (Maté, 2010). This more-encompassing definition also helps to address the issue of transfer addictions, in which a person achieves sobriety from one specific addiction but suddenly develops another type of addiction. It also accounts for the fact that all addictions, whether to substances or to behaviors, involve the same brain circuitry and chemicals (Maté, 2010).

Research clearly indicates that problematic substance consumption inevitably results in progression of use (Jellinek, 1960). In relatively rare cases, addicts have been able to control or lessen their substance use or addictive behavior. However this phenomenon has occurred specifically among those who have shown mild to moderate symptoms (previously referred to as substance abuse), rather than severe symptoms (also known as substance dependence) (Vaillant, 2003).

Research clearly indicates that symptoms worsen over time unless one becomes completely abstinent. As use progresses, there is a symbolic line that, once crossed, renders one incapable of using substances in moderation at any point in the future (Vaillant, 2003). This is predominantly due to alterations in the brain that occur as a direct result of addiction. Repeated drug use results in lasting changes in the brain that undermine choice and control (Volkow & Li, 2004). Recreational drug use may be volitional, but once a more deep-seated addiction develops, control diminishes.

Etiology of Addiction

Neurological research has found that humans and animals have an intoxication drive that is as fundamental to human functioning as is the sex drive (Siegel, 1989). However whereas most people are able to moderate their intoxication experiences, some are far more likely to develop an addiction. The *DSM-5* recognizes that people are not all equally vulnerable to developing substance related disorders, and that some individuals have neurological differences that predispose them to developing an addiction (APA, 2012).

Through the mid 1900s, it was believed that alcoholics were simply morally depraved people who intentionally existed on the fringes of society in a state of perpetually altered consciousness (Schaef, 1987). Dr. Benjamin Rush first introduced the disease concept of alcoholism in the 1870s, asserting that chronic drunkenness is a progressive medical condition (White, 1998). To some degree, it served to depathologize addiction as a moral issue. However it wasn't until 1960 that physician Jellinek's research on addiction more thoroughly supported the disease concept of alcoholism. For the next several decades, his findings informed much of the research on and treatment of addiction (Jellinek, 1977). More recently, neurobiologists have found addiction to be a dysfunction of the reward circuitry of the brain, adding a new dimension to the disease model (Erickson, 2009; Nestler & Malenka, 2004).

A long-standing debate in the field of addiction studies has sought to determine whether the biological basis of addiction is rooted in genetics, or in brain differences shaped by one's early childhood environment. Extensive research (including twin studies) indicates that like most nature-nurture debates, both genetics and environment play significant roles in brain development (Maté, 2010). In many cases these factors compound one another, for an individual growing up with family members who struggle with addiction is more likely to experience trauma such as abuse, or neglect (Hogan, 1998; Jaudes, Ekwo, & Van Voorhis, 1995). Childhood trauma is highly correlated with diminished executive functioning and impulse control, resulting in a susceptibility to addiction (Schore, 2001).

The environment undoubtedly plays a significant role in shaping brain development and ability to self-regulate, particularly in early childhood (Siegel, 2007). A child's newly forming capacity to handle psychological stress is completely dependent upon its relationship with its caregivers, which in turn depends upon the ability of the caregivers to self-regulate (Perry & Pollard, 1998).

A consistently misattuned caregiver will lead an infant to ultimately possess a diminished capacity for self-regulation, which is a direct precursor to addiction (Felitti, 2003; Rado, 1933). "The three dominant brain systems in addiction—the opioid attachment-reward system, the dopamine-based incentive-motivation apparatus, and the self-regulation areas of the prefrontal cortex—are all exquisitely fine-tuned by the environment" (Maté, 2010, p. 197). In adulthood, those who historically struggled to establish emotionally regulating attachments are more inclined to turn to drugs and alcohol to experience relief from their deficiency in intimacy (Flores, 2011).

Trauma experienced at any point in life can contribute to the development of an addiction. Both animals and humans have been found to use drugs in order to cope with inhuman conditions, regardless of their psychological inclination toward addiction or the addictive properties of the substance (Alexander, Coambs, & Hadaway, 1978; Alexander, Hadaway, & Coambs, 1980). In the aftermath of a traumatic experience, if the psyche cannot find its way to healing it searches for any way to self-medicate in order to numb PTSD symptoms and avoid emotional pain (Glendinning, 2005a; Herman, 1992; Khantzian, 1985).

In the 1950s, the newly emergent school of behaviorism explained addiction purely in terms of social learning and operant conditioning (Skinner, 1953). Whereas today we understand addiction through a wider lens, there are undeniably many behavioral factors at play. Researchers have found that many of the environmental cues surrounding ones addiction trigger dopamine release, which leads users to feel a rush simply from obtaining and preparing the substance (Maté, 2010). Indeed, many addicts report that they are equally afraid of giving up the activities and relationships surrounding drug use as they are of giving up the substances themselves. As previously mentioned, behavioral addictions such as gambling, sex, or shopping alter brain chemicals even though no substances are ingested (Maté, 2010).

Many sociologists have tended to favor a more socio-cultural explanation for addiction rather the disease model (Szasz, 1985). These theorists have highlighted our culture's tendency to encourage certain addictive behaviors such as consumerism, yet shun others such as substance use (Room, 1983). These contributions led to the integration of several addiction theories, resulting in the biopsychosocial model. This model, which is widely accepted and utilized in addiction research and treatment today, sees addiction as a resulting from a combination of genetic, environmental, and societal factors (Engel, 1977; Peele, 1986). Similar to the diathesis-stress model of mental illness, the biopsychosocial model paints the "addiction syndrome" as a genetic vulnerability to addiction that is activated by various psychological and social factors (Shaffer et al., 2004). The

biopsychosocial model is supported by the APA, and is applicable to behavioral addictions as well as substance addictions.

From a phenomenological standpoint, addiction has long been explained as a misguided attempt to fill a deep spiritual void within. This perspective sees incompleteness as the basic state of the addict—a feeling of being ill-equipped to face life's demands (Maté, 2010). Carl Jung, who heavily influenced the philosophy of AA through his letters with founder Bill Wilson, believed that when Gods are banished, they return as symptoms (Addenbrooke, 2011). Other theorists have described addiction as a hunger for ecstatic connectedness and wholeness (Wilshire 1998); a spiritual emergency that contains within it the seeds of transformation (Grof, 1994); and a quest similar to that of a mystic in his search for enlightenment (Zoja, 1989). "Alcoholics want to know who they are, what life is about, whether they have a divine origin, and whether there is a system of cosmic justice and love" (Grof, 1994, p. 105).

Unfortunately due to the inevitable tendency of any addiction to spin out of control, what might have begun as an impulse toward personal and spiritual growth becomes obscured by "a growing self-destructive and misguided obsession with a substitute" (Grof, 1994, p. 107). Whereas the object of the addiction may have initially felt fulfilling, it can never provide the deeper satisfaction and sense of wholeness the seeker initially longed for. This disappointing reality combined with the self-perpetuating nature of addiction leads many people to continue down the addiction spiral, still holding onto the illusion that wholeness and spiritual connection will one day be delivered, yet

accelerating in the wrong direction. This tragic compulsion is shielded from awareness by denial: pretending everything is normal, being unable to admit pain or vulnerability, and holding up appearances at all costs (Glendinning, 1994).

Recovery: More Than Abstinence

Healing from a severe addiction involves engaging in a lifelong process known as recovery, which entails far more than simply achieving abstinence from substances or addictive behaviors. The harm reduction approach seeks to achieve some semblance of safety for people who are active in their addiction (Denning & Little, 2011), and the moderation management approach aids individuals with mild to moderate addictions in decreasing their use (Humphreys, 2003). This study will focus exclusively on the recovery approach, which is most appropriate for individuals with severe cases of addiction hoping to achieve lifelong sobriety (White & Kurtz, 2006).

An addict who stops using substances without achieving the deeper transformations brought about by recovery is colloquially referred to as “dry,” and is considered to be at a high risk of relapse because they have addressed the underlying causes of the addiction (McLellan, McKay, Forman, Cacciola, & Kemp, 2005; Metzger, 1988). Recovery is a process of community-supported transformation in which an individual achieves abstinence, improved health, increased well-being, newfound abilities, a different form of consciousness, and a spiritual connection (Anonymous, 1939 / 2001; SAMHSA, 2007).

Researchers have explored different phases of recovery, finding that the recovery process mirrors an individual’s prior decline into addiction in reverse,

with changes occurring across several dimensions (Bacon, 1973; Brown, 1985). Some researchers have delineated phases such as early recovery and sustained recovery (Bean, 1975), whereas others have created a series of specific stages, specifically pretreatment, stabilization, early recovery, middle recovery, late recovery, and maintenance (Gorski, 1986). Progression through the stages leads to marked physical, behavioral, and psychological changes.

The 12-Step Recovery Model

Alcoholics Anonymous pioneered the recovery model and the 12-step sobriety-based approach. Since its founding in 1935 it has grown into a loose-knit worldwide organization, and has branched off into similarly structured groups centered around addiction to narcotics, overeating, sex, gambling, and other substance and behavioral addictions (Zweben, 1995). Whereas some of these groups have modernized the original language, the 12 steps and focus on spirituality remain the same. There are currently approximately 1.3 million members participating in 12-step groups in the United States (Anonymous, 2012, p. 1).

Whereas having a spiritual connection is central to the 12-step approach, the concept of "higher power" may be loosely defined based on individual preferences (Anonymous, 1939 / 2001). The membership includes followers of all major world religions, as well as significant numbers of atheists and agnostics (Kurtz, 1979; Zwebin, 1995). Some frequently used conceptualizations of "higher power" include God, the universe, humanity, nature, music, and the 12-step community. This open interpretation of higher power is a centrally held value of

AA, in addition to values of inclusivity and non-judgment as well as encouragement of self-discovery and personal process.

Healing Mechanisms & Outcomes of Recovery

In his communications with Bill Wilson, the founder of AA, Carl Jung wrote that treating a chronic alcoholic is hopeless. He believed that in rare cases, recovery could be possible if the alcoholic underwent a spiritual transformation (Jung, 2006). Jung's words struck a chord with Wilson, along with the writings of William James, and he ultimately underwent his own spiritual transformation and overcame his alcoholism. In a letter, Wilson wrote:

> It is the experience of many of us in early stages of drinking to feel that we have had glimpses of the Absolute and a heightened feeling of identification with the cosmos. While these glimpses and feelings doubtless have a validity, they are deformed and finally swept away in the chemical, spiritual, and emotional damage wrought by alcohol itself (as cited in Grof, 2004, p. 105).

After experiencing his own transformation, Wilson created the 12-step approach as a guide to recovery and spiritual reconnection (Finlay, 2000).

Dante Alighieri's work *The Divine Comedy,* an epic journey to hell and back, is an allegory for the devastating experience of addiction, the arduous process of recovery and healing, and the experience of ultimately uniting with a divine presence (Alghieri, 2003). Perhaps most central to the recovery process is the addict's ability to transcend his/her own ego as well as the addictive substance by cultivating a personal relationship with a "higher power" which is greater than both the individual and the addiction (Metzger, 1988). The 12-step program is designed to address the "soul sickness" or "spiritual bankruptcy" of the addict by

facilitating a personally transformative spiritual experience (Grof, 1994; Haynes, 1988; Moran, 2003; Washton, 1995).

Indeed, having a spiritual life is a significant facet of what it means to be human, as is evidenced across world cultures. “Throughout history, the connection between the divine and the individual or the community has been encouraged and celebrated in a multitude of ways, through various forms of spiritual practice, rituals, and creative expression” (Grof, 1994, p. 15). Psychiatrist and social critic Thomas Szasz (1985) has pointed out the commonalities between addiction rituals and sacred or religious rituals, further supporting the theory that addiction is an attempt to fill the spiritual void created by our modern way of life. If addiction is a journey into spiritual death, recovery is a spiritual rebirth (Zoja, 1989).

Research on the process of achieving long-term sobriety has found AA’s spiritual component to be most central to its success as the most effective approach to facilitating sustained recovery (Kelly, Stout, Magill, Tonigan, & Pagano, 2011). Hansen, Ganley, & Carlucci (2008) identified the interaction between the factors of spirituality and community support to be at the core of the 12-step model’s transformative ability. Recovering addicts who participated in 12-step groups and reported higher levels of spiritual connectivity were found to be more optimistic, experience less stress and anxiety, and have greater social support (Pardini, Plante, Sherman, & Stump, 2000).

In addition to the spiritual facet, 12-step groups foster healing by providing unwavering community support as well as encouragement to change

problematic behaviors. The 12-step program draws from oral traditions, featuring storytelling as the main component of meetings (Humphreys, 2000). Sharing personal stories aids individuals in integrating spiritual experiences, asking for help and advice, experiencing non-judgment, and practicing inter-dependence (Cheever, 2005; Kurtz & Ketcham, 1992).

Over time, the supportive interpersonal connections experienced in 12-step groups serve to heal the attachment and self-regulation issues that addicts so frequently suffer. An interpersonal landscape that was previously defined by isolation or codependence can evolve into one of healthy attachment, inter-dependence, and self-regulation (Flores, 2011).

The development of an increased capacity for self-regulation is greatly aided by mindfulness, an approach that has been adopted by many 12-step groups in recent years (Witkiewitz, Marlatt, & Walker, 2005). Recent neurological research indicates that neuroplasticity continues throughout the lifespan and though it declines with age, is never completely lost (Kempermann, Kuhn, & Gage, 1998). Positive brain development can be induced through an enriched external environment (Kolb & Whishaw, 1998), or by modifying the internal landscape—specifically through mindful awareness. Mindfulness, or a meta-cognitive ability to step outside of one's thoughts and observe them, unlocks the automatic patterns that encumber the addicted brain (Maté, 2010) and aids addicts in developing the ability to self-soothe without the aid of substances.

In addition to regular 12-step meetings, many recovering addicts also attend individual therapy. A therapeutic relationship provides a more

individualized space for healing, and can be fundamental in helping an addict to resolve past trauma, address early childhood attachment disorders, develop the ability to self-regulate, and expand capacity to tolerate a range of emotions.

The healing effects of reconnecting with the natural world, as described by ecopsychology theorists and practitioners, mirror the most fundamental needs of addicts: spiritual connectivity, healing from attachment disorder and trauma, and experiencing re-embodiment through self-regulation. Given that addiction is one of the many mental health issues that have emerged as a result of our disrupted relationship with the natural world, incorporating ecopsychology into the recovery process is an intuitive next step.

Part III: Integrating Ecopsychology and Addiction Healing

"Humankind's relationship to wilderness is strained and ambiguous. I think that addictions stem from breaking the participatory bond our species has had with a regenerative source, with wild nature" (Wilshire, 1998, p. x).

Research on Ecotherapy and Addiction

Ecopsychological research has explored the beneficial effects of spending time around plants and animals on a variety of mental health issues and emotional states including anxiety, depression, schizophrenia, dementia, stress, and self-esteem (Chalquist, 2009). However there is a dearth of research exploring the intersection between ecopsychology or ecospirituality, and addiction.

The few existing studies on ecopsychology and addiction have typically quantitatively assessed the efficacy of particular nature-based interventions among specific populations. One study found that wilderness therapy was highly

effective in reducing problematic substance use and depression in adolescents (Cohen, 1995). Several studies found that among adult alcoholics and addicts, regularly engaging in horticultural therapy led to decreased cravings and a greater likelihood of maintaining long-term sobriety (Annerstedt & Wahrborg, 2011; Cornille et al., 1987; Haubenhofer et al., 2010). A neuropsychological study found that viewing nature scenes (as opposed to urban scenes) activated the areas of the brain governing addictions and rewards, confirming the existence of a direct neurological link between nature and addiction recovery (Selhub & Logan, 2012).

These studies have illuminated the efficacy of nature-based interventions in alleviating certain symptoms of addiction. However there is no existing research on the deeper healing that occurs among individuals who sustain their recovery through a self-created relationship with nature. Such a study has the potential to shed light on the healing mechanisms that impact the underlying causes of addiction, specifically trauma, disorganized attachment, disembodiment, absence of culturally held rituals, and embeddedness in a culture that promotes certain types of addiction. Because ecopsychology innately addresses so many of these areas, it is an intuitive approach in addiction healing.

Addressing the Root Causes of Addiction through Ecopsychology

Chellis Glendinning (1994) has named humankind's separation from the natural world our "original trauma," suggesting that the profound loss resulting from this broken bond manifests in individuals in a multitude of ways, particularly addiction. Lorraine Fish (2009) sees addiction as rooted in a culture-

wide dysfunctional relationship with self, community, and the natural world—the aftereffects of massive social upheaval and geographical dislocation. It is unsurprising that the culture-wide issues stemmed in our separation from the earth parallel the symptoms underlying addiction. Through an intimate relationship with the natural world, it is possible to experience healing from trauma and attachment issues, increased ability to self-regulate, reembodiment, and reestablishment of ritual

Perhaps this journey begins by acknowledging that our original trauma has had a drastic impact. Glendinning (1994) suggests that the effects of this original trauma are witnessed in our dissociation, emotional numbing, and tendency to retraumatize ourselves through exposure to violence and destruction. Given that addicts typically achieve long-term sobriety only after healing from their past trauma (Maté, 2010), it seems prudent to give significant weight to the original trauma of our separation from the natural world as a factor in addiction recovery. As nature-based cultures have believed for millennia, it is impossible to heal an individual without rebalancing the greater spheres within which that individual exists, namely family, community, and the natural world (Duran & Duran, 1995). Healing from the collective “original trauma" of having severed our emotional and spiritual connection with the earth has the potential to impact the healing journeys of individuals struggling with substance and behavioral addictions.

Attachment healing is experienced interpersonally, and can also occur in relationship with the natural world—a greater source of holding and containment on which we vitally depend. Speaking to attachment issues, Gabor Maté (2010)

understands substance and behavioral addiction as an attempt to address "the problem of isolation from our true selves and from the rest of creation" (p. 396). Seeking to heal our disorganized attachment with our greater "earth body" provides an opportunity through which individuals can experience secure attachment, which in turn fosters healthy self-regulation and interconnectivity. In Kleinian terms, such a shift would require leaving behind our current paranoid-schizoid position in which nature is experienced in black-and-white extremes such as threatening and dangerous or healing and tranquil. This stance has led us to sever our connection with nature and seek to control it, undermining our ability to feel a deep sense of belonging and embeddedness in something greater.

A graduation to Klein's depressive position would entail fully accepting nature's capacity to caretake as well as to destroy us, and being willing to heal from hurt rather than lash out in anger or terminate the relationship (Klein, 2002). Carving out one's own relationship with nature allows a process of discovery and growth to unfold that is in many ways similar to an infant exploring the world. Direct contact is the straightest path to a secure attachment with nature, and leads to the feeling perhaps most sought out by addicts—belonging as a tiny yet significant part of the grand fabric of the universe.

Attachment healing brings about an increased ability to self-regulate (Strong, Bean, & Feinauer, 2010). Self-regulation is a significant struggle of addicts that typically results from adverse early childhood experiences or adulthood trauma. On a physiological level, substances frequently serve to self-medicate this condition (Maté, 2010). Like addiction, a central symptom of

ADD/ADHD is an affect-regulation problem (Wasserstein, 2005). Whereas research has not yet examined the impact of ecopsychology on self-regulation specifically in addicts, several recent ecopsychological studies on ADD/ADHD have illuminated nature's ability to aid in self-regulation (Burgon, 2014; Stein, 2003). Robert Louv renamed attention deficit disorder "nature deficit disorder" after finding that children who do not have the opportunity to spend time in the wilderness are more prone to anxiety, depression, and difficulty self-regulating (Louv, 2005). Another groundbreaking study found that daily 20 minute walks in nature (as compared with an urban setting or suburban neighborhood) help to self-regulate and alleviate ADD/ADHD symptoms. These nature walks were found to be more effective than typically prescribed medications (Taylor & Kuo, 2009). The research to date supports the idea that that nature-based interventions would have similarly positive self-regulating effects on addicts.

Among individuals who experience attachment disorder and difficulty self-regulating, the experience of being present in one's body can feel threatening or even intolerable. In a roundabout way, many drugs provide a self-medicating feeling of reembodiment and heightened senses, which provide temporary respite from the dissociation and disembodiment experienced by addicts (Herman, 1992). However, these self-medicating qualities quickly decline due to tolerance, and what once enlivened the body and sharpened awareness ultimately dulls perception. Cocaine, for example, can never provide the same quality of alertness that hunter-gatherers experienced in the wild (Glendinning, 1994).

The body is the channel through which we can most directly reconnect with the natural world (Berman, 1990). Reembodiment enables us to experience mutuality with nature, by getting our own needs met and simultaneously perceiving the needs of nature: “It is only at the scale of our direct, sensory interactions with the land around us that we can appropriately notice and respond to the immediate needs of the living world” (Abram, 1996, p. 268). Becoming reembodied and awakening the senses also fosters mindfulness (Michalak, Burg, & Heidenreich, 2012), which, according to neurological research, moderates the intrusive urges and repetitive behaviors connected with addiction (Siegel, 2007).

Thomas Szasz (1985) chronicles the devolution of sacred communal rituals (sometimes involving consciousness-altering substances) into rituals surrounding addiction such as acquiring substances, using and maintaining paraphernalia, and designating the time and place of use. We are descended from thousands of generations who practiced rituals acknowledging our interconnectedness with the earth (Seed, Macy, Fleming, & Naess, 2007), and it is only relatively recently in human history that altered states have been pursued outside of a culturally supported ritual container.

Historically and today, indigenous cultures have affirmed their intricate bond with the environment through rituals and ceremonies (Jensen, 2004). “When explored within a container of ceremonial rites, altered states have been crucial to humanity for their contributions to individual development, collective survival, and species evolution” (Glendinning, 2005a, p. 60). In addressing addiction in individuals, replacing the rituals affiliated with addictive behaviors with nature-

based healing rituals is an intuitive fit. Ceremonies and rituals performed in relationship with nature affirm our connectivity with the earth and with one another, leading to an authentic experience of wholeness that substances may have promised but never delivered (Grof, 1994; Seed et al., 2007).

Reconnecting with nature also has the potential to moderate our culture-wide addiction to consumerism, as intentionally being in relationship with the earth means holding our needs equal with nature's needs. Psychologist Bruce Alexander (2000) asserts that wherever free-market capitalism goes, addiction follows in its wake. An attitude of mutuality, reciprocity, and balance in relation to nature is the antidote to the current status quo in which resources are overexploited and addictive consumerism is promoted.

An orientation toward sobriety in regards to our culture-wide addiction to consumerism and materialism would acknowledge that nature's precious resources exist in limited supply. According to Native American tradition, in taking from nature we must be mindful to leave enough for the next seven generations (Duran & Duran, 1995). Adopting this value system would provide a parallel process of culture-wide recovery for addicts seeking to heal from substance or behavioral addictions.

Research Question

Glendinning (1994) calls attention to certain attributes present in nature-based peoples, that "manifest the very qualities that contemporary psychotherapy, the recovery movement, and spiritual practices continually aim for: a visible sense of inner peace, unselfconscious humility, an urge to communal cooperation, and

heartfelt appreciation for the world around them" (p. 197). Could these qualities be cultivated in contemporary addicts by restoring their lost connection with nature? There is a need for research that seeks to understand the ways in which reconnecting with nature has the potential to heal substance and behavioral addictions in individuals, as well as moderate our culture-wide addictive and exploitative tendencies. By utilizing a narrative approach to interview individuals in recovery who identify nature as their "higher power," the proposed study will explore the following overarching question: *How can ecopsychological values and approaches help addicts to achieve and sustain recovery?*

This question potentially covers a number of considerations: How does an emotional or spiritual connection with the natural world facilitate recovery? Does a self-created relationship with nature have a different impact than organized ecotherapeutic approaches such as wilderness therapy or horticultural therapy? What are the nature-based healing mechanisms that affect the root causes of addiction, namely trauma, disorganized attachment, and difficulty self-regulating? How can the natural world facilitate reembodiment, and what role does this play in recovery? How does the practice of nature-based rituals aid in recovery? And finally, how might the wisdom of addicts in recovery help to shift our culture-wide exploitative relationship with the natural world?

CHAPTER THREE: METHODOLOGY

The intention of this study was to see what emerged in an expansive space where participants' stories could unfold organically, rather than to collect measurable data. The research question sought to explore and conceptualize theories about the quality of individuals' relationships with nature, and how this particular connection aids in addiction recovery.

Narrative Research

The narrative approach to qualitative research was utilized in this study. Drawn from the field of humanities, the narrative approach focuses research on lived human experience. This strategy of inquiry entails a process of collecting personal stories about events, their causes, and effects, and is most useful when the intention of the study is to investigate the ways in which people story their experiences and the themes that arise (Creswell, 2007). A narrative inquiry supports the researcher's intention to collect and present personal stories about the ways in which addicts have found that being in relationship with nature facilitates their recovery.

This study was founded upon the researcher's worldview, central to which is an ontological assumption that there is no single objective truth or experience of reality. In accordance with this perspective, the study used the epistemological approaches of postpositivism and constructivism to support the stance that "gender, race, class, culture, and economics are not merely lenses through which we see reality, they are agents shaping how we construct our visions of what constitutes our individual realities" (Campbell & Wasco, 2000, p. 780). The

narrative approach supported the goal of "gathering rich data from the perspective of those who have traditionally been marginalized within the culture and excluded from their own documented representation" (Hesse-Biber & Leavy, 2011, p. 159)—in this case, individuals struggling with addiction.

Narrative research is in alignment with both ecopsychological values and recovery-based traditions. The narrative approach honors the oral traditions of nature-based peoples, given that interpersonal communication occurred face-to-face for the vast majority of human history (Abram, 1996). Additionally, a storytelling component is central in 12-step literature and meetings (Jensen, 2000; Kurtz, 1979). Meetings typically involve one individual sharing a personal story of struggling with and overcoming addiction, followed by attendees commenting and sharing experiences of their own (Humphreys, 2000).

Research has found that sharing one's experiences directly with another aid in integration and meaning-making, pointing to a healing component embedded in the storytelling process itself (Mehl-Madrona, 2005). In a manner that is familiar and comfortable to research participants who have regularly attended 12-step meetings, this study's narrative approach facilitated the collection of rich data derived from experiences and perceptions not previously explored or documented.

Inclusion and Exclusion Criteria

Criterion based sampling, in which participants are screened based on select criteria designed to determine eligibility (Creswell, 2007), was utilized in

recruiting participants for this study. No exclusions based on age, ethnicity, gender, sexuality, or socio-economic status were made.

Participants were chosen based on meeting the following three criteria: (a) Self identify as being in continuous recovery (specifically including consistent participation in sobriety-based 12-step groups) for a period of at least one year; (b) Identify nature or a synonymous term (i.e. the natural world, Mother Earth, planet Earth) as their "higher power" and be willing to discuss how this connection has impacted their recovery and everyday life; (c) Consent to allow the interview to be used and presented for this study, with all identifying information deleted.

The first criterion was necessarily based on self-definition. "Being in recovery" is a subjective experience that is difficult to define, but is generally understood as completely abstaining from illicit and non-prescribed substances and all addictive behaviors, in addition to engaging in an ongoing process of personal growth and transformation (Laudet, 2008). The stipulation of one year of continuous abstinence from substances and addictive behaviors was chosen because within the recovery community, one year is considered to a be a significant milestone and a marker of stable recovery (Berensen, 1987). This parameter also serves to exclude individuals who have recently relapsed or are in the earlier (and less stable) stages of recovery.

The second criterion was also based on self-definition, and sought to draw individuals who identify nature or a synonymous term as their "higher power." This conceptualization of a higher power is in contrast with more conventional

notions of God stemmed in organized religion, or a different non-traditional higher power such as music, humanity, or the 12-step community. Hearing from addicts in recovery who identify nature as their higher power facilitated the exploration of a unique approach to recovery that parallels and incorporates ecopsychological and ecospiritual values and traditions.

To ensure that participants met the third criterion, they were read the Informed Consent, Participant Bill of Rights, and Confidentiality Statement forms during the initial phone contact, and were provided with written copies of these documents at the time of meeting (Appendices A, B, and C). The initial phone call also served to ensure that the participant fulfilled the first two inclusion criteria.

The exclusion criteria of the study included serious mental illness and suicidality. Potential participants who self-reported having been hospitalized for serious mental illness or who had made a suicide attempt within the past two years were excluded from the study. I utilized the initial phone contact as an opportunity to screen for these exclusion criteria.

Procedure

The following section provides an in-depth look into the design of the study. It illustrates how the participant interviews were carried out, as well as how the results were subsequently analyzed and interpreted.

Recruitment

Recruitment was conducted within the San Francisco Bay Area through two techniques: posting flyers, and “snowball” or “chain” sampling (Patton, 2001,

p. 182). Flyers seeking participants (Appendix D) were posted at several 12-step meeting locations, as well as on Facebook. Additionally, through the snowball sampling process, I approached personally known individuals in recovery, and asked for the names of several other people who might be interested in participating. These individuals were contacted to see if they met the eligibility requirements, and if so, were invited to participate in the study (Atkinson & Flint, 2001).

At any point throughout the recruitment process, each potential participant had the opportunity to inquire about the qualifications of the researcher, the nature and intention of the study, and other relevant questions. Recruiting was complete once interviews had been scheduled with six participants who appropriately satisfied the inclusion and exclusion criteria.

Informed Consent & Participant Bill of Rights

Participants who met all eligibility requirements and agreed to participate in the study were informed that the research is to be conducted via a 60- to 90-minute in-person interview by this researcher. To address concerns about participant confidentiality, all identifying information was changed and participants' shared personal experiences were used exclusively for research purposes (Appendix A).

Before the interview began, each participant was read and given a copy of the Informed Consent form, Participant Bill of Rights, and Confidentiality Statement (Appendices A, B, and C). Any questions they had about the study, the interview process, or confidentiality were addressed.

Ethical Considerations

As the researcher, it is my responsibility to anticipate any ethical issues that might arise during the research process (Creswell, 2007). Researchers must protect their research participants by establishing trust with them, promoting the integrity of the research, guarding against misconduct, and coping with challenges as they arise (Creswell, 2007). Qualitative research can touch on sensitive and deep material, and I acknowledge an obligation to support the rights, needs, and values, of the research participants. At the close of the interview, participants were offered referrals to therapy, a crisis hotline, and local AA meetings. Therapy referrals were directed to The Liberation Institute, a collective of therapists who provide sliding scale therapy for as low as $1 (The Liberation Institute [withheld for privacy]). The crisis hotline that was provided is the 24 hour San Francisco crisis hotline, [withheld for privacy].

Data Collection

Within the framework of this study six participants were interviewed about their relationship with nature and how it has impacted their recovery. The in-person interview lasted between 60 and 90 minutes. Care was taken to create an atmosphere that facilitated openness and trust, and ensure that interview procedures were comfortable for each participant. I refrained from taking notes and focused my attention completely on empathic listening. A digital recorder was used to record the interviews.

The interview protocol (Appendix E) was designed in the tradition of a semi-structured interview. A semi-structured interview enables the researcher to

plan the specific topics that will be covered in the interview, making data collection both systematic and conversational (Patton, 2001). Structured questions can be followed up with open-ended inquires as deemed appropriate by the researcher (Creswell, 2007). I chose to keep these interventions at a minimum so as to allow the narrative to flow organically.

I transcribed each interview within one week, then read the transcript while listening to the interview in order to ensure accuracy. Any information that could have potentially identified the participant was altered or deleted from the written record, and the audio recording was securely stored and will be erased after one year elapses. Audio files and transcribed interviews were labeled according to participants' initials, and were password protected on the researcher's personal computer. Once all interviews were conducted and transcribed, data analysis and interpretation began.

Data Analysis & Interpretation

Consistent with the study's narrative strategy, the analysis reports the experiences of individuals, restorying them into a framework that accounts for commonalities, and analyzes them for overlapping as well as distinct elements (Creswell, 2007).

The main research question and sub-questions of the study informed the data analysis and interpretation. Most central was the question, *How can ecopsychological values and approaches help addicts to achieve and sustain recovery?* This study was designed to let the narrative experiences of the participants flow, and to see what elements emerge from that process that might

address the central question. More specific interview questions shed light on multiple facets of the main question, seeking to explore areas such as emotional and spiritual connectivity with nature, healing from trauma and attachment issues, reembodiment, the role of ritual, and examining addiction through a culture-wide lens.

A thematic analysis of narrative data allows elements to emerge naturally (Creswell, 2007; Riessman, 2008). It facilitates the understanding of major events in the narrative, and the effect those events have had on the individual constructing the narrative (Labov, 1972). I used a multiphasic coding process to organize the common themes that surfaced across participants' narratives (Chase, 2003).

In Phase 1, I re-read the interviews several times and began to formulate preliminary codes. Phase 2 entailed collapsing the data into labels in order to create categories, and renaming or combining preliminary codes to more accurately represent the data. In Phase 3, codes were interpreted and combined into overarching themes that captured the data. Data that did not fit into the themes was also noted. Phase 4 involved assessing to what degree the themes supported the overall data and told an accurate story about the data. If the analysis seemed incomplete, I returned to Phase 3 for a more thorough examination. In Phase 5, I prepared each theme for presentation to the readers by labeling and defining the themes, providing illustrative quotes for each theme, and explaining the meaning and significance of the themes (Braun & Clarke, 2006).

After developing codes and themes, I collaborated with two colleagues (internship-level doctoral students) who served as readers. They looked over the data and corroborated the procedure and findings of the coding process. Once the coding process was complete and the results and discussion of the research were written up, the interview transcripts were deleted.

Validity

Validity determines whether the research truly measures that which it was intended to measure, and how truthful the research results are (Creswell, 2007). The application of the notion of rigor in qualitative research should differ from that in quantitative research by reconceptualizing rigor to include exploring subjectivity, reflexivity, and the social interaction of interviewing (Davies & Dodd, 2002, p. 281). The intention of this study was to learn how a self-created relationship with nature impacts recovery, and what ecopsychological principles or practices might be extrapolated from these stories to inform a union of ecopsychology and addiction treatment.

The co-researchers who analyzed the process of coding and developing themes provided fresh perspectives and helped to illuminate “blind spots” in the coding process, adding to the overall validity of the study.

Delimitations

In order to make this investigation as effective as possible, the research was delimited in several ways. The project focused specifically on individuals in recovery who adhere to a sobriety-based, 12-step approach. This study did not include individuals that practice other approaches to recovery or sobriety such as

harm reduction methods. By recruiting participants who identify their higher power as nature or some variation of it, the study sought to explore the healing properties of a connection with nature, not taking into account other notions of higher power or other types of emotional or spiritual connection that foster recovery.

To facilitate a thorough and in-depth analysis of all findings, I chose to gather and present data from a workable number of subjects (six participants). By design this inquiry was very homogeneous, which set up a particular delimitation to the study in that it is very narrow in its scope.

Because this study was designed as a qualitative inquiry seeking to explore a specific topic in depth, there are limits to the replicability and generalizability of the study. This research was not intended to result in declarative and generalizable findings; rather it was meant to be an explorative pilot study that would lead to several new questions that might be explored through further research. To have a significant or widespread impact on addiction treatment, extensive follow-up research would have to be conducted.

Limitations

There are several limitations to this research project. The study did not seek to control for different demographics, characteristics, or degrees of addiction in participants. This led to a wide variety in age, gender identity, culture, ethnicity, sexual orientation, socio-economic status, and other demographics. Participants self-identified as individuals who had experienced a significant

struggle with an addictive substance or behavior, and the study did not seek to deeply explore the etiology, nature, or extent of participants' addictions.

Participants also self-identified as individuals who have a meaningful relationship with nature. No moderators explored whether participants live in urban or rural areas, how much time they spend in nature, if they are alone or with others when in nature, or if their interactions with nature are structured or free-form.

These limitations did not detract from the study because the participants were united by the central and most salient factors the research seeks to examine: being in recovery for a significant period of time, and having an emotional or spiritual relationship with nature that is central to maintaining recovery.

Assumptions

Assumptions serve as the basic foundation for any proposed research and constitute what the researcher takes for granted (Leedy & Ormrod, 2005). The researcher's view and interpretation of the stories collected may have been informed or biased by current understandings, previous experiences, and expectations for the future of this topic. The central assumption of the study was that a connection with nature can contribute to one's recovery process. Several additional assumptions were: (a) Participants will openly and honestly respond to interview questions; (b) Narrative inquiry is an effective method of acquiring and understanding the material which I sought to explore in this study; (c) Ecopsychology and ecospirituality are appropriate lenses through which to interpret and understand participants' connections with nature.

My own perspective, informed by life experiences, is that the 12-step approach facilitates healing from addiction, and that being in relationship with the natural world facilitates psychological and spiritual healing as well as interconnectedness. In interpreting the data, I was sure to remain aware of how my subjective beliefs might influence the ways in which I coded and thematically analyzed the data. I was vigilant to remain as objective as possible and, when appropriate, acknowledge the role my subjectivity played in the analysis.

The aforementioned assumptions did not threaten the validity or detract from the value of this research, because it was not the intent of this study to prove or disprove a theory, provide results that are replicable or generalizable, or create a new model for addiction treatment. Rather, the purpose was to explore the self-reported experiences of individuals in recovery who identity nature as their higher power, and to see what qualitative data emerged from their stories.

CHAPTER FOUR: RESULTS

The following research findings are the results of interviews conducted in the winter and spring of 2015, with six selected participants of this study. Given that all participants have been successful in maintaining their recovery through a spiritual relationship with nature, their responses to the interview questions served to shed light on the central research question, *How can ecopsychological values and approaches help addicts to achieve and sustain recovery*?

Carrying out the qualitative data analysis described in the previous chapter resulted in the emergence of a number of themes and subthemes derived from participants' narratives, organized into three primary sections. The first section, Evolving Relationship with Nature, delves into participants' stories regarding the ways in their relationships with nature have shifted, grown, and transformed over time. The second section, Levels of Integration with Nature, depicts the ways in which participants have incorporated nature into their lives in a manner that supports recovery and well-being. The third master theme, Healing Effects of the Relationship, explores how participants' relationships with nature helped them to overcome many of the issues and root causes underpinning addiction, and enhanced life in unexpected ways.

In addition to these three overarching themes, a total of 11 subthemes arose from participants' narratives. The themes and subthemes are described in more detail below, re-storied into a framework that accounts for shared as well as distinct experiences across participants.

Participant Demographics

In alignment with the recruitment strategies outlined in the Procedures section of Chapter Three, all participants adhere to a sobriety-based, 12-step approach to overcoming addiction, and identify nature as their higher power. All participants have been in recovery for at least one year, and live in urban or suburban areas. The participants include three women and three men, of mixed backgrounds. Participants range in age from 30 to 76, and their time in recovery ranges from two years to 33 years. Various excerpts from participants' responses are provided to demonstrate each theme and subtheme. In reporting the results that follow, participants' names have been excluded to protect their confidentiality.

In conducting the interviews, it was the researcher's intent to capture the participants' lived experiences of overcoming addiction through a spiritual relationship with nature, exploring the ways in which this relationship has served as a higher power and ultimately led to unanticipated healing and personal growth. All of the participants were gracious and open in sharing their personal narratives. Many expressed gratitude for the opportunity to reflect in-depth on their healing journeys, and voiced a hope to make a positive contribution toward addiction research and support.

Theme I: Evolving Relationship with Nature

In this section I explore the material that emerged pertaining to each participant's relationship with nature as it evolved over time. This theme delves into the history and essence of participants' relationships with nature across the

lifespan, from childhood to the present. Participants described several factors that influenced their degree of connectivity with nature at various times, including family values, geographic location, addiction, and recovery. One participant captured the dynamism of his relationship with nature by saying, “I think I was born into it, and I think my recovery’s been about trying to get back to it. Over and over again” (Participant 6). Subthemes more deeply explore phases of this evolution, specifically: Initial Connection With Nature, Separation from Nature, Reconnection Through Recovery, and ultimately, Transcending Recovery.

Initial Connection with Nature

Participants were asked to describe their initial connection with nature, and how it came about. All six participants referenced childhood, sharing stories of spending time in the wilderness and how it made them feel. Participants became animated and enlivened when sharing their memories of discovering a connection with nature as children and adolescents.

Three out of six participants felt a special relationship with the woods, often spending time alone among the trees. “The woods around my house were very important to me…a place to get out of the house, a place to go and be alone, a place to read, a place to play with my friends” (Participant 1). Another participant said,

> I found myself, as a child, wandering the woods near my house. It was woods on three sides, and I’m an only child so I had a lot of time with the dog….and my thing was about wandering as far as I could go, and seeing

> what was out there, and finding things, and, you know, just kind of exploring (Participant 6).

He went on to add, “I used to climb trees all the time as a kid. Cause I was by myself in the woods. What do monkeys do? They climb into trees! It’s what they do. So trees, trees, all about the trees.” Another participant discovered a connection with the woods in early adolescence, after her family moved across the country:

> I grew up in the desert, and then when I was 12 I moved to the East Coast. And I was really excited to be in a place that had so many trees, because before that, there was only golf courses; that was the greenest thing around. So I got really, really excited about nature…because I really hadn't had any exposure to it before that (Participant 2).

She went on to explain that before her addiction got out of control, some of the substances she was using enhanced her connection with nature:

> I started smoking a lot of weed and taking a lot of hallucinogens, in my early to mid to late teens…so it all just got wrapped up in a lot of ritual and a lot of reverence…Ironically, my connection with nature came from all the drugs I was doing that preceded me getting into recovery.

Another participant depicted summers with his family, traveling to seek out novel geographical features:

> I grew up in the Midwest, and we didn’t have a lot as far as mountains and nature, so we would go traveling to the west to go skiing and to find

> mountains. I really enjoyed going towards more elevated spaces, that had more animals and more connections (Participant 5).

Two participants described feeling calm and at ease when in nature during their childhood and adolescence. “From the time I was young, I just felt better when I was in nature…Whenever I needed to get calm, which was pretty frequent, I’d go on long drives. By myself, just in the middle of nowhere” (Participant 3). Another participant said,

> I’ve always had a connection with nature on the level of, feeling calmed when I would go to the beach…in the beginnings of my life…or when I would go traveling to different countries and go on a hike or a walk through some kind of trail in the jungle. There was always something in me that felt really called to that, and really at home in those places (Participant 4).

One participant shared a memory of intentionally relating with nature during his childhood:

> I remember there was a huge willow tree near my house growing up, and I would go out, and the branches—they hang straight down and they brush along the ground. And I would gather them and I would braid them, and I would braid the whole tree, as much as I could (Participant 6).

He went on to describe the sense of wonderment that the natural world instilled in him as a child:

> My earliest memory of nature, really, is laying on the grass and staring down into the grass, down inside the blades of grass. And this is very

> vivid, I always remember this—watching the insects and the ants down inside, and the whole world that's embedded just under your feet. There's an entire universe. And so that was amazing to me, it was captivating.

Separation from Nature

Though they weren't asked directly, three participants mentioned that they had experienced a period of feeling separated from nature, due to factors including addiction, entering adulthood, and moving to an urban area.

> As I got older that connection became a little less important. We were in the same house so I was surrounded by the woods, which, looking back I think is a wonderful thing, but I don't think it really was important to me at the time necessarily. And then I moved to a very urban place for college, and then for my job after that, and was very disconnected from nature. I never really went out into nature (Participant 1).

The same participant reflected on how her substance use led her to feel cut off from nature, whereas presently in her life, she has cultivated a more intentional connection:

> Mother Earth is nurturing us, and all the food in my refrigerator came from these farmers, and what am I doing to give back to that? That's what's important. And I definitely wasn't thinking about any of that when I was drinking. None of it was important to me. Everything that was important was immediate in my head.

One participant said that as an adult, he came to rely on substances in an attempt to approximate the tranquility he felt in nature as a child:

> I used to use drugs to get to those spaces. I used to use alcohol to calm me, to soothe me, to make me happy. To relieve my stress enough so that I could let it go. And feel free (Participant 6).

He continued,

> I still value that experience of pleasure. And the thing about addicts—seeking relief is sane. Seeking pleasure and seeking peace through a substance—the impetus for that is a lovely thing. There's nothing wrong with it. It's actually the right thing to do. The substance, the vehicle that you're using to get that is the problem. And it's just not close enough to the truth. It clouds and gets in the way. And it messes with your body attunement.

Similarly, another participant recalled how difficult it was to connect with nature when she was in the midst of her addiction: "When I was at the most ill, I suppose, I would have to be out in the middle of the woods, and be there using all my energy to kind of tap in to what was around me" (Participant 1).

Reconnection Through Recovery

All six participants described returning to their previously established relationships with nature when seeking sobriety. They reconnected with nature for the sake of fostering a spiritual relationship in which nature served as higher power. All participants reported that sustaining and deepening this relationship over the years has been central in maintaining recovery.

All six participants reported that they turned to nature when first seeking sobriety, once they realized that their addiction was out of control and that they needed help.

> I was drinking and definitely knew there was a problem. And then there was a time when I was like, ok, I need to get serious about not drinking…that was kind of the turning point for me…I found such a big connection then to nature, where I could find it (Participant 1).

She reflected on how she was able to return to her relationship with nature at that time, saying: "Being in that park, and spending the time that I spent there when I was 22, that really brought me back to something or led me to see something."

Another participant worked through the struggles of early recovery by creating a sanctuary garden:

> My first year of recovery was putting all my frustration, all my pain, all my anger that came up after I got sober—channeling it into the ground, into the dirt, into making my environment a safe sanctuary. And that was all about nature (Participant 6).

He said the garden was central to his recovery process, explaining, "That garden gave me a productive outlet. It was an estimable act. Cleaning the dirt and growing things, growing things. That's my higher power, is that creative part of me, that artist, that garden."

Other participants elaborated on the ways in which using nature as a higher power provided a doorway to recovery.

> Coming into recovery, I had to get over a hurdle, because…I am not a religious person in the sense of, say, I am not affiliated with a particular religious group. That's not part of me. I was, and maybe in a way still am, a confirmed avoider. So I had a challenge with what in Alcoholics Anonymous is called the higher power (Participant 3).

He explained that he initially shied away from Alcoholics Anonymous due to its Protestant Christian roots. He went on to share an excerpt from the Alcoholics Anonymous Big Book in which William James' *The Varieties of Religious Experience* is quoted, explaining that this passage validated for him that nature was an acceptable higher power:

> Apart from anything acutely religious, we all have moments when the universal life seems to wrap us round with friendliness. In youth and health, in summer in the woods or in the mountains, there come days when the weather seems all whispering with peace, hours when the goodness and beauty of existence enfold us like a dry warm climate, or chime through us as if our inner ears were subtly ringing with the world's security.

Similarly, another participant spoke to her uncertainty regarding beliefs stemmed in organized religion:

> There's a part of me still that really wants to believe there is an actual heaven that is in the clouds. There's so much I don't know, and I'm kind of at a place, religiously, where it's like, I just don't know anything…I

> don't know that I can come to an actual belief and say, I definitely believe this or disbelieve this (Participant 1).

She went on to explain that relating to nature as a higher power felt more concrete for her: "One thing I do believe in is the world we live in, and the earth, and the animals, and the wisdom of the earth, and the rhythms of things and the seasons of things."

Other participants used words such as power, beauty, trust, connecting, and comfort when describing their relationships with nature as a higher power.

> I took a trip up to Yosemite a couple years ago… it just felt like I was grounding myself and taking myself out of the urban landscape, and really finding an area and a space to connect with. I mean, that's my higher power. Is finding the power in turning something over to the beauty of Yosemite (Participant 5).

Another participant explained,

> In my daily life, as a part of my daily recovery…it's that sense of something larger than myself and that sense of trusting something bigger, or trusting that I'm really not in charge. It carries through today. And I think that's something that continues to carry through, for the rest of my life (Participant 4).

A third participant said,

> That is exactly what I found a higher power in—nature, and the world, and the earth. That greater thing that was bigger than me, that is just so much more immense than me or my problems or my thoughts…And connecting

to that, connecting to something that was so much bigger—there's so much comfort in that, really (Participant 1).

Some participants shared stories of feeling supported by nature specifically while working the 12-step program:

> I told you earlier of the difficulty I had in doing the third step with my sponsor. Prayer. Getting down on my knees. Little did I know, that one year later, I would be doing that with a sponsee on a granite rock in the pines up in the Sierra. And feeling very natural doing it (Participant 3).

In the same vein, two participants referred specifically to the soothing and purifying effects of water in facilitating step work:

> Reflecting on my step work, as I've gone through the 12 steps several times in recovery, and am continuing to work the steps as needed or on an as needed basis, that when I find reflection time and quiet time, it's either in the water or near it (Participant 5).

He went on to say,

> With the fifth step we went out to Crissy Field, and just sat out there near the water. And it's so much more soothing even though it's a bit of tense process…I felt like I left a ball and chain on the beach that day. I really felt the impact of that particular step, and felt much closer to nature. I was grounded, I mean, I sat in the sand and did my work and so I felt like, something's protecting me, that day.

Another participant said,

> That's how I made it though my first year, basically. Was just, water. As a ritual." She explained, "The fourth step is the step where…you have to write all the people that you're resentful toward, and then you write the resentments. So for me, I was finding that the action of writing my resentments was really intolerable, because I was having to live each and every resentment over again. And it was kind of unbearable, having to write it out and live through all these memories, it just dredges up a lot in the body and it became this really hard, visceral pain (Participant 2).

She created a purification ritual, alternating between doing the step work and swimming to rinse away the pain:

> I would write write write, as much as I possibly could, and then I would swim swim swim swim swim, and it was almost like this, like I was rinsing it off. And it was also sort of like, embryonic. I was in the water, and then I would get out and I would do it again.

She found that the physical act of immersing herself in water tempered the intense emotions of the step work.

One participant reflected on the choice she made in early recovery to leave the East Coast city where she had been living, and to move to a rural area out west where she had more access to nature:

> At that point where I decided to move, I was actually well enough to say, if I stay here, if I stay in the city at a job that I don't love, chasing some kind of early 20-something city dream, if I'm dating guys who are all downing beers on the first date—if I'm going to be doing those things, I

> am not going to stay healthy. I am not going to continue to be sober, I am not going to be living my true self, I'm not going to be happy (Participant 1).

She went on to say, "I think at a very unconscious level, the choice to leave and the choice to find something else was kind of a part of recovery. Being true to myself and finding what felt the best for me." Her recovery deepened during the initial journey out west, through exposure to nature during the long train ride:

> Seeing Montana stretch out, and North Dakota stretch out, and just seeing nature like that—it reinforced those feelings of like, there is just so much out here that is so much bigger and so much more beautiful…I could drink today or tomorrow, and it really wouldn't matter to this field, or these birds, or these rocks…I could drink myself to death and the world will still be here.

It led her to ask herself,

> Is that how I want to be spending my time here? Do I want to be spending my time in a little apartment being angry and sad and anxious, or do I want to go out and be in a huge plain, with the sky above, and appreciate the immensity of, all this is so much bigger than me?

Transcending Recovery

For all participants, reconnecting with nature for the sake of being successful in recovery was a somewhat utilitarian choice, at least initially. Sobriety-based, 12-step programs demand that participants identify a higher power, and for those who don't resonate with a religious conceptualization of

God, nature can be a convenient alternative. Unprompted by the interview questions, four participants shared that over time, their relationships with nature came to transcend recovery, and shaped their lives in unanticipated ways.

These participants reported that as the years passed, they came to feel increasingly integrated (or perhaps reintegrated) with the natural world: “When I’m out in nature, knowing myself, it feels like I’m part of nature. That’s my experience. I’m part of the interconnected whole” (Participant 3). Another participant felt a lasting bond with the farm on which she lived and worked for years: “Whenever we go back there, it’s amazing to me how connected I feel to it…The smells, the geography of it. And I’d never really experienced that before” (Participant 1). She found that even after moving away, her relationship with the land was unchanged: “This place is still a part of me and I’m still a part of it, and I know this place. I know this farm, I know this land. And it’s just a very incredible feeling.” Another participant felt similarly during a long-term hiking trip:

> I actually took the time to let go of the civilized world and be surrounded by nature and really become a part of it. A part of its cycles and a part of its rhythm. That’s when I feel like something in me really shifted (Participant 4).

Another participant reflected, “We forgot that we are nature, and that it isn’t something to be dominated. It’s something to be seen as self” (Participant 6).

Two participants found that their relationships with nature inspired them to make dramatic shifts in their lifestyles and value systems. One participant recalled his pre-recovery lifestyle:

> The high point of my life, with the value system I had at the time, was in 1975. And I got sober in 1981. But in 1975, I was living in a house in the Hollywood Hills with a view, and I had a job with a door with my name on it, a title. I had a credit card, I could travel anywhere on the company, stuff like that. I went to Europe a couple times a year (Participant 3).

He explained that initially his aim in recovery was to recreate this lifestyle, but his recovery journey in relationship with nature overhauled these prior ambitions and value system: "I thought, you know, if I could just get back to that, I'd call it even. I'd say, we're good. Recovery. I had no idea. And I could not have had an idea of what has happened since then."

A second participant said, "It's just hard to even express how much nature has become a higher power to me, and how much my connection to nature has not only helped me get and stay sober, but become the person who I am" (Participant 1). She explained,

> I can't even think of the last time, or remember the last time that I actually thought, I want to drink. It's been so, so long. But my connection to nature is still there, and that is helping me grow, and take better care of myself. And if I didn't have that, then it might be. It might be like, yep, wanna drink today.

She elaborated on the ways in which her former lifestyle has been completely overhauled thanks to this relationship, saying,

> Because of nature and meditation and yoga and my spiritual practices, drinking is hardly even there. It's more like, I want to grow and I want to

be healthy and I want to give off positivity to the world so, it goes without saying that I wouldn't drink again. It goes without saying that I wouldn't walk out on my family. It goes without saying that whatever I'm doing I want to be healthy, and take care of myself, and nurture others.

Theme II: Levels of Integration with Nature

This section explores the level and degree to which participants have been able to bring nature into their lives in a way that helps sustain their recovery and enhance their well-being. Given that all participants live in urban and suburban areas, they have creatively found ways to integrate nature into their lives, as well as periodically "leave civilization," as one participant called it, to spend a day or even months on end in the wilderness. Subthemes that emerged include Bringing Nature to Me, "Into the Wild," and Reflections on the Relationship. Participants reported that regardless of their circumstances, it was always possible to integrate nature into their lives to different degrees, and maintain a relationship with nature that contributed to recovery and healing.

Bringing Nature to Me

All six participants shared about the ways in which they have been able to incorporate nature into their urban and suburban lives. They told stories about bringing nature into indoor spaces, "tuning in" to shift attention and notice the existing nature in urban spaces, moving to a place with more access to nature, engaging in nature-based rituals, and choosing a job that involves spending time with animals.

Two participants reported that they moved to their current locations specifically for greater access to nature:

> I made a choice to leave New York, and a very big part of that was because there was not enough nature for me. I moved to the West Coast which I heard was more nature-based, and since I moved out here, which was six years ago now, I've just found that my connection to nature has really grown (Participant 1).

She explained,

> Where I live, it's not wooded, it's not out in the middle of nature. But there is enough nature where I can go for a walk right now and feel like there are trees, and it's not very very loud, and I do do that. That's very important to me, and it's why I live where I do.

Another participant reported that it is important to him to have access to a body of water:

> I have found some beautiful places to live, always close to the water. I really like the water. Being near a beach. So I'm near a beach now, and I lived on the East Coast for years on the beach as well. So I think water is one of the most soothing parts of nature, and there's just something magical about the waves (Participant 5).

He explained that the beach provides him with a sense of peace and vitality:

> It just helps me to clear my mind. And to kind of turn things over and just get out of my headspace for a little bit…Even if I didn't live near the

beach I'd still find a way to go out there a lot because it just seems to be a life source for me. Water and air.

Two participants shared the ways in which they have brought nature into their living spaces, and the ways in which this has impacted their recovery and well-being: "I've put a lot of wood, and a lot of rock, and a lot of stone into my apartment, and that's important to me. That's one way I have done it, that makes it part of my day-to-day" (Participant 1). Another participant said, "I'm making art out of found material, garden art. Collecting stones, creating sculpture. Weaving branches" (Participant 6). He continued, depicting the ways in which he has transformed his living space over the years:

> I have a fountain when you walk on the property. It's right there. And then you go in the house and I have another fountain right there. And that sound of water, it's very soothing to me. And then I have a fish aquarium that I keep in my bathroom. And so there's always water. And I have a cat, and the cat is nature. And she is divine. I love her.

He went on to describe the symbolic meaning behind two plum trees he planted, and the time he spends with these trees each morning:

> I wake up every morning and I grab my coffee and I stand on the front porch. And I just sit and I take in the weather…I look at my plum trees that I planted. Right now they're in flower, they're covered in the little pink flowers, and no leaves. So it's this magic period when they burst into bloom, and the tree's gotten so big and so strong. There's two of them. I

> planted them side-by-side on the sidewalk for my boyfriend. So I'm the purple tree and he's the green tree.

One participant reported that working with dogs is one of the ways in which she maintains contact with nature:

> When I got sober, I got this job walking dogs, and I take them out to the park every day. So I've been doing that for awhile in my sobriety, and I always say that, I think I would be a miserable cunt if I didn't go out with the dogs, like every fucking day, and like, get out there. So that is something I do five, six days a week (Participant 2).

Three out of six participants reported that they regularly engage in nature-based rituals.

> There's this thing where you're supposed to put a lot of energy you don't want into an egg, and then you put that egg into a creek that flows into a body of water, and I think that's an African tradition…So I try to make time to do those kinds of things every couple of months. And that just seems like a long-term thing that I'll keep doing (Participant 2).

She acknowledged that this is not a typical practice of the 12-step approach to recovery, but has found that it works for her and doesn't seem to be incompatible with recovery practices: "I think it supports my recovery in a way that—there's no part of recovery that says, go do these rituals in the woods, but I do. And it seems to be ok." She also shared that she aligns certain rituals with the lunar calendar: "I gauge a lot with the moon, I try to notice where it's at, where I'm at,

where my cycle is at with it, maybe even like, what house it's in." Referring to supporting her sponsee in working the 12-step program, she said,

> If we had to start something new, and set new intentions, I would try to do it on the new moon. Or if we had to wrap something up or get rid of some stuff I tried to do it on the full moon. If we were gonna burn something for intentions I'd do it on a new moon…Just trying to look at where it's at and say, this is what the phase of the moon is, this is good for this kind of work.

Another participant also aligned rituals with the moon, and incorporated fire: "I use the elements. I have a cauldron. I burn things. I usually burn them under the full moon. Usually when I want to let go, or on a major holiday" (Participant 6). He went on to say, "There's just something about fire. To me that's nature too, fire is…a lot of my rituals have been about staring into the fire, releasing things to the fire, tending to the fire."

> Two participants reported incorporating the ocean into their rituals:
>
> Since coming to California, the ocean is a big part. I've done a lot of rituals where I put stuff in the ocean...I've done a lot of different kinds of rituals in the ocean, since I've been sober. Whether it be at the ocean or in the ocean (Participant 2).

A second participant said,

> When I've done different things to release people from my life, or release different things from my life, I've written down what I wanted to release,

> and gone down to the ocean, and burned those things and kind of let them go, and sort of let the ocean and the air take them (Participant 4).

Three participants spoke about mindfulness, namely shifting attention to visualize nature or paying attention to the existing elements of nature around them.

> The reading that I do, the meditations that I do, the yoga poses that I do relate to the natural world. I'm at a point in my personal healing, and my recovery, and my yoga practice, and my meditation practice where I can just kind of think about it, and bring it into my head, and it's a calming image or calming thought (Participant 1).

Another participant said, "I often will burn sage, or when I meditate I'll hold my gems cause I feel like they have a different energetic resonance" (Participant 4).

One participant described a mindful shift in attention as "tuning in":

> While I'm driving I will shift my awareness from the person in front of me, from my timetable, and I will just suddenly look at any green thing, any tree, and I will try to tune into the trees on the street instead of the cars (Participant 6).

He further explained,

> I don't drive unsafely, but I literally will—Can I see the city for the trees? Can I take in the trees? And I tune into the trees, and suddenly, the street changes color…I look down the street and I can see all the trees as far as the eye can see…And suddenly it's a completely different city in that moment, and I feel relief.

“Into the Wild”

All six participants told stories about leaving urban or suburban areas behind to enter the wilderness, in some cases only for a day trip, and in other cases for as long as several months at a time. In contrast with the prior subtheme, here participants leave the “civilized world” behind to immerse themselves in the wilderness, and in some cases even take on a nature-based lifestyle.

One participant shared,

> I connect mostly when I’m around greenery, and the mountains, and the hills, and lakes and stuff like that…I had decades in southern California, and on a day like this it could be 75 degrees and I could go to the beach, or I could get my skis and go out to the mountains, to the snow-capped mountains and do that, all within an hour from where I was living (Participant 3).

Another participant said, “Being in the woods…being out from the city is just a grounding thing, and I feel like I can think more clearly and I can find more of my true voice” (Participant 1). A third participant recalled, “I would…spend the day with myself…being up in the trees. That’s a big part of my ritual” (Participant 6).

Another participant said her connection with nature continues to deepen the more she aligns with nature and its cycles:

> I’ve done a ton of long hiking trips since moving out to California. Before then I had never had a really deep, deep connection to nature…I knew that I was kind of supposed to connect with the woods, and get back with the natural environment and the natural cycle of things (Participant 4).

As previously stated, one participant talked about feeling deeply connected with nature in altered states of consciousness during her adolescence, before her substance use grew out of control. During these times, she felt a sense of clarity that could only be achieved when she was immersed in nature: “I used to cut school a lot to just go smoke weed in the woods, like when I moved to the country. There was always waterfalls, and caves, and trees, and woods and farms and things like that” (Participant 2). She went on to say,

> Over time, that used to be a way that I would solve problems…I was like, I need to figure something out so I’m going to go to the river, and smoke a bunch of weed, and figure it out in nature. So it became that kind of ritual…it was like a combination of therapy and problem solving. And I couldn’t do it anywhere else. It had to be in nature.

Similarly, another participant found that spiritual or intuitive wisdom emerged when she left the city and immersed herself in nature during extended hiking trips:

> I’ve been alone and walking through nature…and sometimes thoughts would just come to me. Whether it was intuition or whether it was voices from people that I’ve known who have passed that would come to me when I was very still (Participant 4).

She explained that nature provides a space for her and brings her to a state of being in which she can receive these messages:

> I almost have to be away from the distractions and be connected to myself in a natural state to where I could let that intuition and guidance in. It’s

> really hard for me to connect to spirituality when there's so much going on and I'm so busy, and I'm just going and going and going. But in a natural setting, I can somehow unwind and be receptive enough to all of the things that I need to hear.

Reflections on the Relationship

In this subtheme, participants reflect on their ability to weave nature into their lives, with many expressing a wish to deepen their relationships with nature. Three of the six participants expressed that they frequently yearn for more time to experience nature, and for an increasingly integrated relationship with nature. These excerpts also illuminate the significance of this relationship for these participants, and the ways in which they intentionally nurture and deepen the relationship.

"My connection to nature has really grown. It's very important to me. It's something that I actively seek out" (Participant 1). She went on to say,

> If it's not there for whatever reason, because I've not gone out to nature as much, or I haven't been walking outside as much, especially during the winter when I'm kind of just inside a lot, I find that I miss it, and that I really need it.

Another participant felt pulled to move to a natural environment, but at the same time, was reluctant to leave her city life:

> That's what I'm struggling with now…I've built up such a life here, and this is the life that I've been happy with, and have led. And I know that I'm being called for more silence and to get into a place where there's

> more space, and yet there's something in me that's still really scared to let go. Even though I know that at this point, being in a natural environment serves me so much more (Participant 4).

She also noticed that her relationship with nature drastically shifts when she is the city, compared with in the wilderness:

> If I'm in the city and I see a sunset and say it's beautiful, I actually almost can't stand that all the buildings are in the way of it anymore. And it almost makes me sad that nobody notices it. I actually think what I notice is the loss of awareness.

She acknowledged that she recognizes a lack of awareness in herself, as well as in others:

> I see it in other people, like, nobody else is noticing this, and I also see it in myself now that I've gotten busy. And I'm like, wow, before I would have been looking at this for an hour. And now I can look at it for two minutes before I have to go along my way…I notice my lack of ability to be with it for as long as I'd like.

Another participant echoed this dilemma in saying, "I think I spend a lot of my time longing for nature. That's part of my experience of nature—is wanting more, and not having enough of it. But kind of running by it" (Participant 6).

Lastly, one participant who had spent extended periods of time camping and hiking reflected on the critical difference between leaving a city to spend a few days in the wilderness, and adopting a long-term immersive nature-based lifestyle:

> I think there may be some subconscious reason why we all, why people don't connect to nature anymore. Because I think then there actually has to be a choice between these two realities. And that it's really hard to pull away from the constant going. And so when one does experience a very different way of being, it's in such conflict with the way that we all have to live that it's hard (Participant 4).

She explained,

> I think a lot of people don't want to feel the contrast, because it's too painful. To a certain level. Not to be too dramatic. I mean, of course people can go on a day hike and come back and live in the city, you know? But to really be changed by it, I think is very scary.

Theme III: Healing Effects of the Relationship

All participants expressed that in addition to helping them be successful in the 12-step approach to recovery, their relationships with nature also addressed many of the issues underpinning addiction, and enhanced life in unforeseen ways. They were pleasantly surprised to find that this relationship brought about deeper healing across several areas. Subthemes delve into these specific areas, namely Physical, Intellectual and Philosophical, Emotional and Psychological, and lastly, Spiritual.

Physical

All six participants shared stories of physical healing and transformation that came about as a bi-product of their relationships with nature. They talked about adopting a healthier diet and lifestyle, feeling re-embodied and

experiencing heightened senses, working through physiological trauma responses, developing an ability to calm and self-regulate, and being physically challenged by nature.

One participant shared that her dietary preferences shifted once she became more aligned with nature: “Growing up, and then even when I was living in New York, I kind of ate what I liked, and I would microwave it and I didn’t think much about it. But now, I eat totally seasonal” (Participant 1). She further explained,

> It’s gotten so ingrained in me that if someone offered me a bowl of blueberries right now I’d be like, no, that’s weird, but how about some oranges?...The way that I eat, composting, getting down to more of that connection of where my food comes from, where it goes. And that’s been an immense thing that I hadn’t thought about really until I had moved out of the city.

Three participants said that their relationships with nature help them to feel meditative, calm and at ease. One participant felt calmed by the moon and the early morning sunlight:

> I get up every morning with my head spinning…nowadays, it’s dark, so I can see the moon. Or it’s sunny even, if it’s that time of year. I’m driving down the street cause I go to a meeting at 7am every day, year round…I can see the artist’s light on the hill. And I just cool out, there it goes. And I just, I can feel the shift. I can feel it. So it’s very calming. It’s a daily experience (Participant 3).

Another participant found calm in the water: “If I can’t find time to just sit and mindfully meditate throughout the hectic day here in the city, the hustle bustle, at least swimming in the water, it’s complete silence and just being in a different element” (Participant 5). He also said, “Hiking through the woods, the redwoods, it’s just very meditative.” A third participant echoed,

> If I’m stressed out, I could go down and walk on the beach, and all of a sudden feel like things are right-sized again. Like the sounds, the smells. I feel like the experiential aspect of calming comes about in different natural settings (Participant 4).

All six participants described feeling re-embodied and experiencing heightened senses. One participant shared how her addiction impacted her senses and connection with her body: “My senses had just been deadened for so long. And I wasn’t really in my physical body, I was just so in my head all the time. And I’d try to get out of my head by drinking” (Participant 1). She described the experience of rediscovering her senses in early recovery:

> There were these moments of being in the park, and looking at the trees, and being like, wow, that is so green, and so vibrant, and the colors are so alive. And how is it that I’m in my early 20s, and I’m just seeing this? And that just was so striking to me.

She went on to say,

> There was a time when I was just so dead, sensory wise, that I wasn’t even seeing it. It was just grayish. And then to go through that transformation

and be like, that is green. That is yellow. That is a blue sky. It was moments like those.

Another participant echoed,

> Smell is most associated with memory, if I recall correctly. I saw something about that recently. But it really does amplify when it's quiet and deep in the redwoods during a hike, and finding that—yeah it's amplification I guess. More of a connection, a grounding (Participant 5).

A third participant said,

> Now when I ski, especially when I'm on the ski lift, I really notice the trees, and I find myself caressing them almost, with my eyes. I mean, really getting into the tree. So, it has sharpened my senses I guess. Or directed them in a way that they hadn't been before (Participant 3).

He reported feeling a deeper level of consciousness and embodiment, thanks to his amplified senses:

> I'd go and feel good sitting on the beach or being in the mountains or something, but now I can more experience it on a being level. More of a conscious type of thing. So I've been aware of a new way, a deeper way of experiencing myself, my body, and my existence.

Similarly, another participant emphasized feeling re-embodied through the sense of touch:

> We all started laying down on the beach, and having our whole bodies on the stones…I do these things now. I stop and I feel what my body feels

> against the stones, or I touch the bark on the trees, and I never had been doing that. Ten years ago, certainly not (Participant 1).

She continued, “That moment on the beach, it was a beautiful experience to me…This is part of my life where I am more apt to touch the tree bark, or look at the sky, or watch the sunset.”

Another participant explained that she experiences sensory overwhelm living in the city:

> I just feel like an antenna picking up a lot of signals. I want to cut off from it, that’s why I took drugs. I mean, I would love that, if I was cut off from that. I think I would be a much more functional person, you know? It’s overwhelming (Participant 2).

She explained that nature provides a respite from the intensity: “It’s cleaner in nature. I’m not getting bombarded with bullshit, and information, and emotions, and other people’s, just, whatever people are emitting, it’s not there…it’s nice to go to nature to actually decrease the sensation.”

Another participant reported that challenges in the wilderness helped her to learn to soothe herself:

> All the ways that I’ve reacted in the world show up when I’m hiking. Like if the mountain has a false summit, and I get to the top and the turn the corner and there’s so much more to go, I would get, at first, really frustrated. And then, I’ve had to sort of work with self-regulation, and regulating my own nervous system, and changing my thoughts, and

> saying, ok, apparently this isn't the top. Keep going, you can't turn back (Participant 4).

Lastly, another participant said,

> When I tune into nature, my senses turn on. And I usually get really emotional. It's such a clean feeling. It's such a—it's a sensual state…Even just thinking about returning to nature calms me down. It brings me to my senses. That's what it does for me. It actually reminds me that I am a sensual beast (Participant 6).

One participant spoke in depth about the ways in which she has gained a more nuanced understanding of the body's trauma responses during extended hiking trips in the wilderness:

> There were times when I didn't have water, and I thought, ok I'm going to get it at this next place, I have to get there before sundown. Something completely overtook, shut down my hunger, shut down everything, and I moved faster than I ever thought my body could handle on the mountains, with my bag, with everything, to survive (Participant 4).

She went on to say,

> The whole system kind of convenes to use every single bit of energy to get me to a place of safety. And at that point, everything does shut down—hunger, having to pee—everything stops, and it's only about that place, and getting to safety. And so I think that also helped me see how the body really does—dissociative states really do come in to serve survival.

She explained that much of the healing she's experienced had to do with being physically challenged, or even deprived, by nature.

> Surrounded by nature, I've had to experience the cycle of life on a daily basis. Like when things have been really difficult, when things got easy again, when it was freezing, and then when it was easeful weather, when it was beautiful and sunny, times I couldn't find water, when I had plenty of water…and so there became an experience of trust that became physicalized for me.

Intellectual and Philosophical

This subtheme focuses on the intellectual growth experienced by participants as a result of their relationships with nature. All six participants shared stories about knowledge, wisdom, and clarity gained. They also expressed philosophical stances and values that have grown out of this relationship, specifically regarding environmentalism; technology; and modern, industrialized life as compared with a nature-based, tribal lifestyle.

Participants talked about the personal impact of philosophical ideas or revelations inspired by the natural world. One participant described how her thinking began to shift in early recovery:

> Is my day-to-day existence toxic and hurting others? Even if I don't mean to? Or is my day-to-day existence really helping others, especially because I mean to? And of course for me at the time, it was, well, I'm pretty toxic and I'm hurting others. Even when I'm trying to do my best. Because of this addiction that's going on (Participant 1).

The natural world inspired her to turn her focus away from her own problems:

> At that time it was really easy to get really distracted by my career, and boyfriends, and all these other distractions and things that I felt were really important. But just kind of coming down to, what are animals in nature doing? How is a bird living?…The forest and the trees, they're going to be there no matter whether you are or not. They're going to be there.

She also discussed the freedom she felt in coming to terms with her own insignificance in the universe:

> Wow, I am such this little speck in everything else. And even though it matters to me, it doesn't matter to the mountains, or to the ocean, or to generations ahead of me or generations before me…I think that was really big, when I was really struggling…really stepping back and not looking at the city, not looking at my hometown, but just looking at the world itself and saying, there's so much more here. And don't I want to be a part of that?

Another participant shared similar sentiments, saying he was relieved to be reminded that everything didn't revolve around him:

> I noticed that my watch was no longer the center of the universe, metaphorically. Everything didn't revolve around me. And I had it inside, deep inside, that everything is connected, part of. I'm part of an interconnected whole. And I think that's called ecology (laughs). And from there, it's grown…Nothing is wasted and everything is connected (Participant 3).

One participant found inspiration to make a positive impact on the world, acknowledging that her impact would be small yet still worthwhile:

> I'm here, like it or not. And I have impact here. And I can make that a really good impact, and I want to make that a good impact. And even as big as my impact is, it's so tiny in the scope of things. And that's, I don't know, that's not necessarily a scary thing (Participant 1).

Another participant said that challenging experiences in nature put her in touch with an inner strength she wasn't previously aware she had: "Because we make our lives so easy, we actually really don't know anymore, we can't even feel into how much strength we actually have. And we're doing ourselves a disservice" (Participant 4). She went on to say,

> When you climb a mountain, or you deal with the rain, or you think you're lost and then figure it out, or just walk for 10 miles or something, there's a way that that's an experience of like, wow, I can do so much more than I ever thought I could. My body is so strong and able, and I do have more intuition than I thought, and I can make a choice and figure it out.

These experiences deepened her awareness of how, in the developed world, we have lost contact with our own strength:

> I think that in our society, in our culture, we make things so easy that we stop thinking we can really do anything. Everything we do has to be an intellectual feat, or something computerized. Or we pay for it to be done by someone else who knows. We don't actually think we can figure it out

ourselves. So I think we do ourselves a great disservice by making life way too easy.

Another participant discussed coming to terms with her own mortality:

> If I know nothing else about what happens after we die…at the very least I know that my body is going to go back to the earth. And it's cyclic. And I don't believe that's all there is, I just, I kind of can't, I just don't. But at the very least I know that. That's something that I can say, with at least, scientific certainty (Participant 1).

Five participants expressed cultural critiques, comparing our society with nature-based cultures:

> There's just so much that has come before the world the way it is now, that's come before America. That's just so powerful and meaningful and deep. Even when I talk to people who aren't necessarily inclined to the more spiritual or things like that, when talking about ancient things, or how old the mountains are, or the way people used to live, and I don't mean the Paleo diet, I mean hunting and gathering—there's just resonance (Participant 1).

She recalled the rural area she lived in for a time, saying,

> A lot of people there were transplants. People like me who found it and were like, this place is magical, and who were rediscovering it at 20 or 25 or 30 or later. And it's like, if so many people are rediscovering this and finding resonance in this, that means that it's lacking. That means that there is importance here and it's lacking otherwise.

She concluded, “I think there’s so much to be taken from how people used to live, living more slowly, living more connected to nature. More connected to themselves, to their own intuition.”

Similarly, another participant advocated for a “return to the earth,” comparing indigenous cultures of the Americas with our capitalist society:

> What they were able to do not only with nature but agriculture—to sustain societies for decades and for centuries without any technology, observing the sun up and sun down and following rituals…being able to connect with weather patterns…They have more of a spiritual connection and respect for the elders, and the people that have come before them, and conventional wisdom (Participant 5).

He expressed concerns about the impact of capitalism on the environment:

> Living in a capitalistic, materialistic society, we can’t even—unless we step into nature and take ourselves out of the daily grind, there’s no way to even connect with it. I think the Amazon—80 percent of the world’s biodiversity is right there, and it’s still being—you know, the oil companies are going in and taking what they want, and if we can’t find better ways to sustain ourselves, we’re in big trouble.

He advocated for a realignment with nature: “There’s a lot of information there that we should be paying attention to. A return to the earth, if you will.”

One participant saw environmentalism through the lens of reciprocity:

> Having kids of my own…I want them to be able to live in a beautiful world, and have access to the things that I had access to. And it boggles

> my mind that everyone on the earth is not fighting tooth and nail to save the environment, and 'save the whales!' and all that, cause even the idea of the earth mother—Mother Earth. And nurturing what nurtures you (Participant 1).

Another participant reflected on value judgments surrounding urban-industrial culture as opposed to nature-based lifestyles:

> People turn their noses up at people that live in rural environments, or farmers, or things like that. There's a lot of elitism connected to living in a city, and go go go, and having a job. And if you're drawn to more of a natural state…I think that there can be judgment. Because we're a capitalist society (Participant 4).

She continued,

> There's so much brought up in us about needing to succeed, and do, and be the masters of our universe, and making more money and being fast. There's so much that's accepted about that, that the opposite is almost lackadaisical, or unfocused, or unintellectual.

One participant said, "I think there's going to be a revolt against technology at one point or another" (Participant 5). Similarly, another contrasted relating with technology and relating with nature:

> I haven't been able to align myself and enmesh with the trends of technology, and sort of the way that the world is going, so it (nature) has been a refuge…I know the ocean is there, and the ocean is always there, and the ocean is bigger than a social network, and it feels really like I need

> to have a lot of respect for it. Whereas I can't seem to wrap my mind around what data is (Participant 2).

She went on to say,

> Everyone's like, we have to save the earth, and I'm like, I don't think the earth is going to need to be saved. We are the ones that are going to be destroyed. The earth is going to eat us, hopefully. The earth has been around longer than we have, and we should be worried for us. The earth will be fine.

Other participants shared similar views on the fate of mankind: "The dominant part of our nature is really playing itself out. And there's an end to it. There's actually a limit to how much it can go on, I think" (Participant 6). Another participant said,

> I think we've decided that we are in charge, and to a certain extent, we are. I think the only lesson is, nature is probably gonna win. Cause it's gonna, at the very least, run out of, we're gonna run out of the resources that we've been—then where are we gonna be? (Participant 2).

A third participant said,

> Don't mess with Mother Nature. In the end, I mean, that water is rising out there. The whole thing about global warming, whether it's one of these things that's going to wipe out the earth or whether it's just one of the long-term cycle type things, it's going to change. There'll be a new ice age or whatever it is…there are some things you cannot stop.

He summed up his thoughts on the matter saying, “The lesson is called humility” (Participant 3).

A second participant referred to humility, in terms of allowing, rather than fighting, the ups and downs of life:

> As a society, we don’t know how to deal with unpredictability. And we don’t know how to deal with the ebbs and flows of things like working and not working, coming and going. Everything in our society we try to have at status quo. And I mean, even the temperature within which we live (Participant 4).

She illustrated her point by saying,

> It could be 40 degrees outside and everything inside will be at 70, and then it’ll be 85 outside and we’ll have the air on and everything will be at 70, and if it’s not 70, something’s wrong. And then we complain about it.

She found growth in embracing the inconsistencies that a nature-based lifestyle demands:

> Something in our society has created this belief that everything needs to be the same in order for it to be ok. And I just think that having to kind of be in the natural rhythms of environment, and in nature, it forces us to deal on a larger level with ourselves and with resilience, and with trust, and humility.

Lastly, one participant expressed his belief that living in relationship with nature is our hope for the future:

> Books are great, but actually the one book that we're longing to read is the book of nature. And that's what I believe. That's what I think will be the salvation of our species on the planet, if we have enough people who understand that and can be there at the right moment. I hope I can be one of those people (Participant 6).

Emotional and Psychological

This subtheme showcases participants' stories of experiencing emotional and psychological growth through their relationships with nature. All six participants talked about experiencing personal growth through being challenged, slowing down, healing from trauma, and feeling rooted or oriented. Participants also spoke to the interpersonal growth they have experienced through healing relationships.

> One participant talked about feeling grounded in relationship with nature: I often feel overwhelmed, and I can look at the moon like a map and be like, well here's how I can orient myself. It's like a compass that I can say, ok this is where I can be pointing myself…as long as there's always nature, I'm always rooted in something (Participant 2).

Another participant talked about letting go of anger and finding peace:

> I felt very calm and very above the anger. That was all there, but right now I am just here, and in this beautiful space, and calm. And I think that's where the attachments of anger started to just go, and dissipate (Participant 1).

Another participant reflected on the ways in which spending extended amounts of time in nature has led her to want to move more slowly, and minimize external stimulus:

> I realized that I just really needed my space. And that, that's not necessarily a bad thing. It just means that being surrounded by nature and being in that kind of environment for the amount of time I was, it's changed the craving that I have for different energies (Participant 4).

She elaborated, saying, "I just can't make as many plans as I used to. And I thought I would try to get back to normal, and part of me is like, well maybe this is the new normal."

Similarly, another participant found that a growing edge for her was to be able to slow down without judging herself for being unproductive:

> The guys were just strolling on the beach looking at rocks, and I was antsy, like, what are we *doing*? Let's go, let's do something. The idea of strolling and looking for rocks on a beach was so outside of my schema. And I was really aware of it too, cause I was the one who was anxious. No one else was anxious (Participant 1).

She said at the time, she thought to herself, "I have come really far, but obviously I have a lot more to go if I can't even walk on a beach and look at rocks without feeling like I'm not being productive." She explained that her relationship with nature has helped her to let go of anxiety and appreciate the present moment:

> I think just being in nature and being around people who appreciate nature—that's helped me so much…I don't want to always be jumping on

the next thing. I don't want to miss the stones. I don't want to miss all those things. I do want to stop and look and appreciate.

Another participant shared about the emotional healing she has experienced in relationship with animals:

> There's a cat at my house and I spend a lot of time with him. He's not my cat but he's my roommate's cat, and we're bonded. I don't know, I try to spend a lot of time with him just like, on my chest, because that feels like, there's something there that feels relevant (Participant 2).

She explained that the closeness she feels with animals helps to alleviate the loneliness that often arises in recovery:

> There's a lot of feelings of isolation that come up with sobriety. And loneliness. And you lose something, you lose that—whatever blanket you were using to smash yourself with to feel ok…So it's nice to have something physically touching you that is a dog, which is so sweet.

One participant found that emotional growth emerged from physical challenges experienced in nature:

> There are times when something is difficult, and I have to be with it anyway. Like walk through the rain, or there's another mountain, or the rocks are hard, or it's slippery, or I lost my balance. And like, to come back again is, I feel, is much more of the healing process than just the relaxation of the sound of lapping water on a shore (Participant 4).

She explained,

> The healing part for me has come in noticing like, wow, what are my primal responses when I get scared, and I'm out here alone? So I get to see where I go when I'm tired, frustrated, when the mountain just keeps going on and all I want to do is stop. But somehow I get through, and there's that sense of accomplishment.

Another participant explained that her awareness of natural cycles has helped her to weather the ups and downs in her own life:

> One thing I do believe in is the world we live in, and the earth, and the animals, and the wisdom of the earth, and the rhythms of things and the seasons of things. And I just found such a connection with that to my own…seasons and my own rhythms, and even ups and downs in my relationship. That's a season and I know it's going to pass, just like I know the winter's going to pass. And finding so much comfort in that (Participant 1).

One participant found that experiencing trauma responses in the wild, serving the functions they are intended for, helped her to heal from relational trauma:

> Nothing that I experienced in those states of survival—even though I was in the wild and I was in a totally different environment—was new. What I realized was that they were all familiar, and they were all in their right place here, and how they were all relational in my civilized life (Participant 4).

This revelation helped her let go of the trauma responses that were no longer serving her: “I got to see how they served a purpose when I connected them back to their original functions. And how they no longer needed to serve a purpose when I was in the civilized world.” She continued, “Those relationships that did that to me didn’t really have that power anymore. And that all the sort of survival responses were from a very young age, and that they could be released.”

One participant felt that technological culture has made authentic interpersonal contact increasingly difficult:

> Everything is transmitted in a code across some sort of a medium. It’s not who you are, when you’re looking at a screen, when you’re talking in the phone. You’re not talking to the other person, you’re talking to a piece of machinery. And getting replications. And the human brain is capable of making believe, as it were, that you’re really talking with someone else (Participant 3).

He explained that it is preventing us from deeply connecting with one another, as well as with ourselves:

> If you’re not fully present with somebody like we are right now, you’re only this much present through a medium, I think it makes it extremely difficult if not impossible to know who you are yourself…the only way that I really can know myself is in the presence of another. You know, like the fish can’t see the water that it swims in.

One participant experienced interpersonal healing through his relationship with his sponsor, a man who also had a spiritual connection with nature:

> He took me through the steps, he got me on a regimen of prayer and meditation, and took me into his home, and took me to his gardens—he worked at a garden center—and we would go out into nature and talk. And he had an uncanny connection. Very. He was a mystic…divinely inspired (Participant 6).

He explained, "That was my first real demonstrative, this is how I pray, this is what I want you to do, kind of sponsor. And it changed the course of my life."

The same participant responded to the final interview question, "Before we end, is there anything else you would like to say?" by honoring his mother, her relationship with the nature, and the impact it has had on him:

> I watched her in her nature. And she works with animal spirits…there's been periods when she worked very intensely with guides and animal spirits. And hung skins, and waited for signs, and burned things, and did a lot of rituals.

He explained that in early recovery, he didn't want to pray the Catholic way so he asked his mother to teach him how she prays. She taught him to locate the four cardinal directions and sit in meditation with the animal spirit at each direction:

> She said, the wisdom is the east, and it's the eagle. And that was her thing. And the mouse is the south and that's for innocence and new eyes. And the west was the great bear to endure the winter of hardship and strength. And then the north was for truth, with a capital T.

He explained that he made some modifications to fit his own needs:

> It became clear that I needed to have the—not so much the bear. She's the bear, my mom is a bear. That it needed to be the sea otter…the freedom, the play, the delight in the liquid environment, the ability to float and to…never forget how to play. That was my west. So, that's kind of the answer to the last question. Is that my mother has a hand in this.

Spiritual

All six participants shared that they have experienced spiritual healing in connection with nature. In describing the quality of these experiences, they used words like lifted, connected, trust, and faith. Some participants talked about spiritual experiences with animals, and with elements such as water and fire. Participants also talked about how their relationship with nature has opened them up to other notions of higher power, such as energy and cosmos.

One participant reflected on his childhood spiritual connection with nature: "I would literally just wander into the woods, and spend the day with myself. And it was a spiritual experience. It was a sacred experience, and I didn't realize at that time that it was. It just was" (Participant 6). Another participant said,

> As my grand-sponsor told me, way back when, when I was wrestling with this higher power business—he says, You don't realize it, but as we're talking the universe is rearranging itself on your behalf…I couldn't wrap my head around it but something inside went, yep. This is all you gotta do, is tune in. And the way I tuned in, initially, was through nature (Participant 3).

Another participant recalled an ecstatic moment experienced during a meditation:

> I meditated once in this park in my hometown, and it was the first time I'd done something like that, it was the first time I'd meditated out in a public-ish place. And I think also maybe because I was early on in meditation, but just feeling very lifted, very connected, very lifted…it was kind of akin to being on mushrooms (Participant 1).

She explained how this moment resulted in a breakthrough:

> At that time especially, I had a very angry lens at my hometown and growing up. It was a familiar place and it was home, but it wasn't necessarily like, this is my spiritual place. So I was meditating in the park, and my lens really changed at that moment.

Similarly, another participant found relief through peaceful reflection:

> A spiritual relief, if you will. Just knowing that I can take if offline, and go out to the beach and reflect on the work that I've done, and the connections that I've made, and the experience I certainly hope that I've shared with others, and that they've shared with me (Participant 5).

For a third participant, synchronicities have helped him to feel spiritually connected: "This meditation, this connection with nature, this master gardener—these things, they're not mistakes. It's right on time. And I'm so grateful for that. Talking about it really brings it home, like, oh yeah—I've got this wonderful connection" (Participant 6).

In the previous section, one participant shared that she has experienced significant emotional growth when being challenged by the natural world. In addition, she explained that her trust and faith in something greater than herself also grew through these experiences: “In recovery we talk about, like, you’re never given more than you can handle. It’s like, you’re brought to something because you’re ready for it” (Participant 4). She painted a picture of some of the challenges she has faced in nature:

> It’s been freezing cold and the winds were gusting at 30 miles an hour or something and I was on a ridge, and I somehow weathered the storm and I somehow wasn’t panicking anymore. I know how to deal with it, and I just deal with it.

She explained,

> It’s a spiritual experience…I never thought I could handle something like this, but something larger thinks I can handle something like this. Like I mentioned, times I’ve been out of water and felt terrified, and then the next day it’s like, this blessing—there’s water. And I somehow can trust in everything again. I feel like trust and faith and spirituality are so intertwined.

A second participant spoke about finding trust in relationship with nature, saying he experienced

> a definite change in psyche, due to recovery and connecting with nature, and believing that this is a power greater than myself. And that I can trust

> in it, and believe in it, and just kind of using the guiding, not ideology, but the guiding light (Participant 5).

Three participants said that over time, their spiritual relationships with nature helped them be more receptive to other forms of spirituality. For one participant, that meant turning to ancient cultures:

> I've just been really interested in the goddess archetypes. The more ancient, the more intuitive, ancient things people have been doing for a long time to find meaning and strength, and to keep going through the day that has just been so forgotten (Participant 1).

Another participant expanded outward from nature, to find spirituality in the cosmos at large:

> Not just nature but what's beyond—our universe. It's absolutely mind blowing…I believe in complete infinite worlds. If there's a never-ending universe there's got to be something far greater than the human existence. Something very spiritual and beyond our constraints of society or life (Participant 5).

A third participant recalled a spiritual turning point, a moment in which he felt metaphysical or supernatural energy:

> You may have heard of Rumi?…I was in his mausoleum. And there's the old guy right there, with his father, and all the family. And it was as if, I mean—it was palpable. You could feel it. You could really, really feel it, you walk into that space, it felt heavy, the energy in there. And of course

> now I do qi gong, and they talk about moving energy in the qi and all that kind of stuff (Participant 3).

One participant experienced spiritual connectivity and healing through elements such as fire and water:

> Part of my ritual is to stare into the flame of a candle…I'm talking about looking straight into the power of fire itself. It's another universe into itself, and it is a sacred power, and it is much more powerful than me. And I don't understand it, but it is so incredible (Participant 6).

He also spoke about a spiritual experience out on the open sea:

> We were on the boat, and we had a really nice room with a balcony. The ship was just so massive, and I remember going out there and beholding the water. And it hit me so hard, the immensity of the Goddess, of Mother Earth.

He contextualized this experience in light of his religious upbringing:

> I've been born a Catholic. I mean, it's all about male gods, and fire and brimstone, and going to hell, so this—to have this goddess part, to have this feminine power, the buoyancy, just being carried and lifted, this massive boat, hundreds of tons, you know? A whole city. And yet, it was nothing. All of it, just in the palm of this great entity.

This revelation led to an ecstatic moment:

> To me, the water is one being on the planet. And it suddenly just reverberated through me and I cried, and it was beautiful…that was a true spiritual experience. The whole trip was about being on the ocean…I was

like, oh, the planet's three-fourths water. Oh that's right, we're three-fourths water. Oh! You know, and it kind of just kept hitting me—this is who we are, this is where we, this is where I come from. This is where we all come from. And I just kind of—woohoo!!! Aaaaaahhhh! Let's dance! It was really, it was a spiritual experience. Even just telling you now, I feel it.

Another participant talked about several animal encounters that have affirmed her spiritual connection and facilitated healing and growth:

> It's always like, you'll see some animal at the right time. I like to look up, if I see some hummingbirds. Cause I do pray also. And if I go somewhere and I pray and then there's a bunch of hummingbirds, then I like to think about, what do hummingbirds—what's their medicine? What do they bring? (Participant 2).

She also shared a near-death experience in the wilderness that was quite spiritually significant to her:

> I was out on the trail, and I was camping. And we did everything right. We put the stuff—we took off our clothes and put them over here, and put the bear bag over here, and put the tent over here, and everything was perfect.

She explained,

> I was a big bear aficionado, that was my spirit animal for a long time. And this was during that time. And then we got flanked, the tent got flanked by these bears. And there was one right next to my head, and I could feel the

size of its head based on its breath, it was right next to me. And the only thing separating us was a tent wall.

She explained that she came to terms with her own mortality in this moment:

> It was sniffing at my head, and I had to resign myself that I was going to die that way. I was like, well this is the way I'm gonna die, but I'm ok with it being a bear…They didn't eat us, which was awesome…that was kind of a spiritual thing, because I made peace with it, and I was like, what a way to go. It's not the worst.

The same participant said that her bond with the dogs she works with often feels like a spiritual experience:

> I think I would be a much more miserable person if I didn't work with dogs and animals every day…the ones that sit up front in my truck have to be on my lap, or put their head on my arm, like somehow be leaning on me. It feels really special. That's kind of a spiritual experience, I feel, like when something needs you.

Lastly, one participant talked about guiding visions he received while praying in his garden:

> I would sit in the dirt with my roses. And I would talk to the goddess. And I would say, I'm just in a lot of pain. Really really scared to be alone, really just struggling with love, and how to be in a relationship, and the failure of relationship, and just all of these big losses that I was trying to come to terms with (Participant 6).

He continued, sharing his prayer to the goddess:

> Will you please take the reins? I need some help here. I trust you. I need you. I really want to hear you. I believe in you…will you gently enter my thought system and guide me home? Because my ideas are part of my problem. I'm willing that you should have all of me, good and bad. I don't know what your will is for me, but will you please tell me who I am? Really. Because, there's something more going on here and I really really want to get on board.

He talked about a specific vision that came to him during one of these moments:

> I'd go in the garden and I'd sit, and I'd say, who is my sponsor? And of course, I clearly saw one person. And I was like, oh hell no. Really? No. Oh no no no no no. No no no, oh my God. Ok whatever. Fine. I don't know if I can do that.

He continued,

> It was this man in recovery, this older man who was a very famous horticulturist and landscaper, whose gardens had been in magazines, and he was this loving guy. Totally loving. And touchy feely, and empathic, and warm, and that scared the crap out of me. It's just that, I needed that. And I didn't understand my own resistance at the time, but his face came to my mind and I thought, ok. Now all I need is the courage to ask him. But I didn't know if I could really trust the vision. And I thought, well she's clearly telling me. That's the image. That's what I got in the garden.

Conclusion

Each of the participants in this study shared the unique story of their relationship with nature. Their stories recalled the evolution of this relationship over time, the ways in which they weave nature into their lives at present, and the unexpected gifts of deeper healing. It was found that in cultivating a meaningful relationship with nature, participants unknowingly implemented ecopsycological values and approaches that supported their recovery in multi-faceted ways.

Overall, a total of three master themes and 11 subthemes were identified. The four subthemes of the first section, Evolving Relationship With Nature, are as follows: Initial Connection, Separation from Nature, Reconnection Through Recovery, and Transcending Recovery. The four subthemes of the second master theme, Levels of Integration With Nature, are: Bringing Nature to Me, "Into the Wild," and Reflections on the Relationship. Lastly, the third section, Healing Effects of the Relationship, encompassed the following four subthemes: Physical, Intellectual and Philosophical, Emotional and Psychological, and Spiritual.

Based upon the core themes and subthemes identified in this study, several key summations can be made:

(1) All participants reported feeling a connection with nature that began in childhood. At times this relationships has felt close and intimate, and in some cases, at other life chapters there was significant separation.

(2) In seeking sobriety, each of the participants drew on their connection with nature to support their recovery. The 12-step approach to recovery demands that participants acknowledge some sort of higher power. For

these participants, it was convenient to use nature as a higher power due to the existing connection, and in some cases, having issues with a conventional, religious notion of God.

3) This relationship with nature has been central in helping participants to be successful in recovery. Participants reported that over time, the relationship transcended the utilitarian purpose of "working the program," and led to significant shifts in participants' lifestyles and value systems.

4) In sustaining this relationship, participants have woven nature into their lives to varying degrees. Some make an intentional effort to connect with nature in the urban or suburban environments in which they live. Others have gone into the wilderness for extended periods of time. Many expressed that they generally yearn for more contact with nature than their current lifestyle permits.

5) Aside from helping them to abstain from addictive behaviors, participants found that their relationships with nature resulted in deeper healing. Physical healing included shifts in diet, amplified senses, and feelings of reembodiment. Intellectual and philosophical healing led participants to become more involved in environmentalism and cultural critique, seek meaning and purpose, and contemplate their own mortality. Emotional and psychological healing involved individual as well as interpersonal growth, and healing from trauma. Spiritual healing included openness to broader spiritual conceptualizations such as the goddess,

energy, and cosmos; visions and ecstatic experiences; and near-death experiences.

These findings are discussed further in the following chapter, where they are integrated with this study's theoretical framework.

CHAPTER FIVE: DISCUSSION

This final chapter begins with a Summary of Findings, in which the thematic results derived from participant interviews are meaningfully integrated with the literature review. The results are analyzed and interpreted through the lenses of both ecopsychology and addiction research, to allow the essential findings to emerge. In Implications for Future Research, I provide recommendations for follow-up studies based on the limitations of this research project that were outlined in the Methodology section. Additional recommendations include addressing the sub-areas of the research questions that remained unaddressed by these interviews, and exploring additional unanticipated questions that arose through the research process. Finally, in the Concluding Narrative section, the results of the study are integrated with the analysis and findings, which will summarize the entirety of the research results.

Summary of Findings

This study sought to draw from the wisdom of individuals who have been successful in healing from addiction through a relationship with nature. The central research question was, *How can ecopsychological values and approaches help addicts to achieve and sustain recovery?* The research method involved interviewing individuals who participate in 12-step programs and identify their higher power as nature, to explore how this relationship has contributed to their success in recovery. Specifically, the researcher's hope was to better understand how a relationship with nature has helped participants to overcome addiction, to hear stories about the specific practices they engage in that contribute to their

success in recovery, and to learn about the ways in which they have grown and changed during their journeys.

The main research question covered several more nuanced considerations. I wondered if these interviews would illuminate some differences between an individually cultivated relationship with nature as opposed to organized ecotherapeutic programs such as wilderness or horticultural therapy. Another sub-question sought to explore how a relationship with nature can support individuals not only in refraining from addictive behaviors, but in more deeply addressing what research has found to be some of the root causes of addiction: unresolved trauma, insecure attachment, and difficulty self-regulating. Another consideration was the possibility of nature-based rituals replacing the rituals associated with addiction. Lastly, I imagined that these participants might offer some insights regarding culture-wide addictive behaviors that impact the natural world, such as consumerism and materialism. Many of these considerations were addressed in participants' interview responses, and others remain to be explored through further research.

Transcendence and Attachment Healing

The first theme, Evolving Relationship With Nature, sought to explore the connection participants have felt with nature, and how this relationship has changed over time. Participants reported feeling connected with nature during childhood, (in some cases) having a period of separation, returning to the relationship, and over time, experiencing some sort of personally transformative shift. These various chapters of the relationship mirrored the phases of lifespan

development, which was unsurprising given that this comparison was drawn in the literature review. Similar to being raised by a parent, the natural world can be conceptualized as a greater body that nurtures humans but at times can feel neglectful and certainly even harmful.

All participants reported that as children, they felt an easy and innate connection with the natural world. Memories of these times seemed to be wrapped up in a lot of emotion and reverie. Similar to an infant with an attuned caregiver, participants found that many of their needs were met through this relationship in childhood. In nature they felt at ease, playful, and free.

During adolescence and early adulthood, some participants found that this relationship became less important to them for various reasons, including moving to an urban area, going away to college, and becoming wrapped up in an addiction. Some participants simply seemed to have graduated from this relationship to move onto other adventures and take on new challenges. They had developed needs and desires that were no longer being met by their relationship with nature. It was a time of transitioning away from this connection. This section had overtones of loss. Some participants found that they couldn’t find the sense of peace and calm they had previously experienced in nature, and used drugs and alcohol to approximate it. One participant found that using plant medicines such as marijuana and hallucinogens initially enhanced her relationship with nature, but ultimately her substance use grew out of control.

All participants reported that they returned to nature when seeking recovery through the 12-step approach. This seemed to be a very sobering life

chapter for these participants, both literally and metaphorically. This section had an industrial feel to it, as it seemed that participants weren't necessarily yearning to reconnect with nature so much as they were desperate to step out from under the weight of addiction. Using nature as a higher power felt resonant to participants, due to recalling the connection that came so naturally during childhood and in some cases, having difficulty with a typically religious interpretation of God. At this time, participants were more intentionally engaged in the relationship, in a way that felt more adult. As previously discussed, being in recovery means much more than simply abstaining from addictive behaviors—recovery entails addressing deep wounds, growing as a person, and seeking meaning and fulfillment in life. Participants became more invested in their relationships with nature than ever before, because their ability to thrive in recovery depended on it.

It seems that the last subtheme of this section, Transcending Recovery, yielded the most surprising and heartening results. I did not anticipate that participants would report that their relationships with nature far surpassed the utilitarian relationship that recovery demanded. When participants reconnected with nature for the sake of being successful in recovery, they seemed to have a level of close contact with nature that was unprecedented in their lives. Ecopsychologist Paul Shephard theorizes that individually and societally, we exploit the natural world because we have felt failed by it at moments, and are vengefully striking back (Shephard, 1992). For these individuals, their well-being depended on the success of this relationship, and leaving would have had serious

repercussions. From an attachment perspective, such intimate contact through both ups and downs led to a significant deepening of the relationship, which some participants referred to as “transcendent.”

Perhaps the transcendence that participants described was an arrival at what Martin Buber referred to as an “I-thou” relationship with the natural world, in which humans relate to the natural world as another living being rather than an object for one’s own use (Buber, 1970). Participants’ comments such as “I am a part of nature” are indicative of a more mature and advanced manner of being in relationship with nature. Rather than asking only, “What can I get from this relationship?” as they did in early recovery, during the transcendence phase participants considered mutuality, asking themselves, “What can I do for the natural world that has been so generous with me?” They also tapped into a deep sense of belonging, feeling that they exist as a small and humble part of nature but can choose to have a positive or negative impact on the world.

This level of growth indicates attachment healing from what ecopsychologist Chellis Glendinning refers to as our “original trauma”—humankind’s separation from the natural world (Glendinning, 1994). These participants have managed to directly face this trauma through deep contact with nature, and in healing from addiction, also heal from this original trauma to some degree. This also paved the way for deeper levels of individual and interpersonal healing, which is explored further in the analysis of Theme 3.

This transformation has significant implications, especially in terms of personal and cultural values. As participants overcame addiction in relationship

with nature, they experienced a shift in value systems from one of indulgence to one of moderation. It seemed to go without saying that all participants identified as staunch environmentalists, and were acutely aware and critical of our culture's exploitative relationship with the natural world. In recovery, and in transcending recovery when this relationship came to mean so much more, participants widened their scope from focusing on the self to looking outward at the community, society, and the planet.

Ecotherapy, Ritual, and Wanting More

The second theme, Levels of Integration With Nature, explores in practical terms how an emotional or spiritual connection with nature can facilitate the recovery process. Potentially useful to individuals who are newly seeking recovery and feel that nature could be their higher power, this section focuses on the "how-to," and illuminates the ways in which these participants have incorporated a healing relationship with nature into their urban/suburban lifestyles. Some participants adopted ecotherapeutic approaches, some created nature-based rituals, and two people discussed leaving "civilization" to spend extended periods of time in nature.

Only a few participants were familiar with ecopsychology, ecotherapy, or ecospirituality before participating in this study, and even in these cases, marginally so. In intuitively building a meaningful relationship with nature for the sake of being successful in recovery, several participants unknowingly implemented ecotherapeutic approaches such as horticultural therapy, wilderness therapy, and animal-assisted therapy. One participant talked about laboring over

his garden in early recovery, turning a scrap yard into a natural sanctuary in a process that mirrored his own inner transformation. Similar to wilderness therapy, two participants strove to test the limits of their physical and emotional strength in nature during hiking and camping trips. One participant reported that she has found healing and spiritual connectivity in her job working with dogs, a practice that approximated animal-assisted therapy.

The fact that participants unknowingly created these "interventions" by following their intuition lends more credibility to ecotherapeutic approaches. It's unsurprising that these approaches seem to be effective in addressing a wide array of mental health issues, given that connecting with the natural world through these channels seems to be intuitive, and deeply humanizing.

Several participants talked about bringing nature into their daily lives by engaging in nature-based rituals, even while living in an urban area. Some rituals were self-created, such as holding stones and crystals while meditating, or burning things in a fire to symbolically "let go." Other rituals were adopted from cultural traditions or historical practices, such as focusing negative energy on an egg and releasing it in a moving body of water, or aligning life events with the movement of celestial bodies.

In the literature review, I discussed the lack of ritual in Western culture and the possibility of individuals in recovery replacing rituals associated with addiction with nature-based healing rituals. It is only recently in human history that we have ceased to engage in community-wide, nature-based rituals for purification, healing, mourning, and celebrations (Szasz, 1985). Participants did

not explicitly discuss rituals associated with their addictions, or compare them with the nature-based rituals they currently engage in. However, the participants that do regularly engage in nature-based rituals reported that these practices support their recovery and well-being, and are an essential part of their day-to-day engagement with the natural world.

Lastly, in this section some participants discussed the critical difference between "just visiting" nature for short periods of time, as opposed to leaving "civilization" to immerse oneself in the wilderness and take on a nature-based lifestyle. Several participants expressed that they never quite seem to be able to get enough of nature, and are perpetually yearning for more. They are satisfied by the contact that they have with nature where and how they can get it, but simultaneously feel that more is always better. The participant who had spent the most time in nature on extended backpacking trips felt that these experiences have been profoundly transformative, and were the catalyst for the vast majority of the healing she experienced in relationship with the natural world. She also reflected on how challenging and scary it can be to experience a nature-based lifestyle, then have to reconcile that with the pace and values of urban life upon returning to "civilization." Similarly, several other participants found that the more time they spent in nature and out of developed areas, the more able they were to problem-solve, get in touch with their intuition and inner voice, and contact feelings of deep trust.

Deeper Healing

The final section, Healing Effects of the Relationship, explores the deeper healing experienced by participants in relationship with nature. Research has shown ecopsychology to be effective in improving mood and self-esteem, and addressing a variety of mental health issues (Barton & Pretty, 2010); therefore it is unsurprising that this study found that the healing effects of this relationship extend far beyond the cessation of addictive behaviors. Participants' stories indicated that a relationship with nature addresses some of the root causes of addiction such as trauma, disembodiment, and difficulty self-regulating, as predicted by the researcher. Other healing experiences that were unanticipated included transforming dietary practices, feeling a connection with ancient cultures, and experiencing ecstatic states and spiritual visions.

One participant explicitly said she has found that it's nice to feel a sense of peace and calm in nature, but the more transformative healing experiences she's had have come from being challenged by nature, when things haven't necessarily felt tranquil or easy. Other participants shared similar sentiments, expressing that the dark times and struggles in their relationships with nature have pushed the limits of their comfort, resulting in healing and growth.

These stories indicate that participants have in fact arrived at Klein's depressive position in relationship with nature, in which they have accepted that the natural world is simultaneously destructive and live-sustaining (Klein, 2002). Rather than lashing out at the natural world or abandoning the relationship in difficult moments, participants displayed a more mature way of relating with

nature. They seemed to have a broader view of the relationship, enabling them to weather the ups and downs and stay faithful throughout.

In the first subsection exploring physical healing, participants said that being in nature is relaxing and centering, and provides a respite from urban/suburban life, which can feel sensorially overwhelming. Some were inspired to make lifestyle changes that included eating fresh foods, exercising, and meditating, all of which contributed to the healing process. More dramatic healing effects of nature were experienced when participants felt their senses turn on again, and were more able to be present in their bodies. They described sensual feelings such as seeing things in Technicolor for the first time, smelling the forest, and feeling the texture of stones and bark. Being physically challenged and even deprived by nature, yet surviving, gave participants a concrete experience of trust.

In the subsection on intellectual and philosophical healing, several participants mentioned working through existential issues central to the human experience such as coming to terms with impermanence and mortality, and contemplating our smallness and vulnerability on the planet and in the universe. They described feeling humble in early recovery after realizing that they did not exist at the center of the universe. They talked about completely shifting away from the addict mentality, to adopt a value system of moderation in all things rather than excess. In this vein, participants spoke out as passionate environmentalists, and were critical of the ways in which the developed world exploits nature as if resources are limitless. Some felt that we should draw from the wisdom of ancient civilizations and indigenous cultures in addressing the

environmental crisis, and others were pessimistic about the fate of humankind, believing that our society at large is unwilling to be receptive to the lessons nature has to offer.

The subsection on emotional and psychological healing was truly an intersection between the healing participants have experienced in relationship with nature, and within12-step recovery groups. Several aspects of the 12-step tradition and format align with the values of nature-based cultures: the membership within a community, the framework for building healthy relationships through sponsorship, and the tradition of oral storytelling.

Participants drew comparisons between the cycles of the natural world and the ups and downs in their own lives, reminding themselves during difficult times that nothing lasts forever, seasons come and go, and cosmic bodies are perpetually in motion. Several people reported that they were able to overcome anxiety by seeking out experiences in nature that they knew to be calming and soothing. One person talked about experiencing appropriate fight-or-flight responses at scary moments in the wilderness, and realizing that these were familiar feelings that she had previously experienced interpersonally. This awakening helped her to heal from past trauma by releasing these automatic survival responses at moments when they weren't serving her. Lastly, one participant reflected on the ways in which he feels modern technological culture limits our ability to authentically connect with one another, and as a result, prevents us from knowing our deep selves.

In the final subsection, participants shared stories about the spiritual healing they have felt in relationship with nature. As previously discussed in the literature review, many theorists understand addiction as a spiritual crisis: a hunger for ecstasy, a yearning for an experience of wholeness, and a journey similar to the quest of a mystic (Grof, 1994; Wilshire, 1998; Zoja, 1989). Through a relationship with nature, these participants seemed to finally experience the spiritual healing and wholeness they had been craving all along.

Participants used words such as trust, faith, and connection when describing their spiritual relationship with the natural world. It seems that this relationship has provided them with a sense of peace, gratitude, and completeness, all of which were painfully absent during times of addiction. One participant said that the contact she's had with both domesticated and wild animals has felt deeply spiritual, including a near-death experience during which she found a sense of inner peace while nearly being attacked by a bear. Several people mentioned that whereas in early recovery they felt agnostic or balked at the typically religious conceptualization of God, their spiritual relationships with nature have led them to be more open. They talked about having expanded their notions of higher power over time to include the cosmos, energy, and the goddess. Multiple participants talked about moments of unique spiritual connectivity, including mystical experiences: feeling tuned in and connected with spirit, being lifted or held, experiencing states of ecstasy, and having visions and supernatural experiences.

To summarize, this section integrated the literature review and theoretical framework of this study with the thematic results of participants' stories to deeply

explore the question, *How can ecopsychological values and approaches help addicts to achieve and sustain recovery?* Some of the study's sub-questions were addressed by participants' responses, whereas others remain to be explored through further research. In sum, participants forged close relationships with nature through various practices that enabled them to have meaningful and consistent contact with nature. Ultimately they seemed to arrive at a secure attachment with the natural world, which led to profound healing and transformation in lifestyle, value systems, and spiritual connectivity.

Implications for Future Research

Considering the limitations of the study's design as well as the implications of the results, in this section I offer several suggestions for future research. This study is a qualitative inquiry that was conducted in the narrative research tradition. It was designed as a pilot study to explore the sparsely researched intersection of ecopsychology and addiction recovery. The objective of this research was to interview individuals who have been successful in recovery by engaging with the natural world and attending 12-step groups, in hopes that the results would provide a preliminary understanding of how ecotherapeutic approaches might support individuals yearning to overcome addiction. It was expected that the findings would lead to many new questions to be explored through further research.

The sample size of this study (six participants) was relatively small. Given the researcher's intention to engage in an in-depth exploration of the relationship between ecopsychology and recovery, a small sample size was appropriate for this

study's design. However, there are limits to the generalizability of this study, and the results are not intended for implementation in addiction treatment until extensive follow-up research is conducted. Future studies might consider using a quantitative approach with a larger sample size to further explore a specific aspect of the results of this study, which would potentially lead to generalizable results.

A second limitation of this study was the participant demographics. The inclusion criteria delineated that participants must identify nature as their higher power, and must have been in recovery for at least one year. Demographics such as age, ethnicity, religion, gender, sexual orientation, and amount of time in recovery were not factored into the screening criteria of the study. It would be interesting to conduct further research that narrows in on certain demographics, to provide results that are generalizable to a specific population. Though it wasn't one of the demographic questions, 4 out of 6 participants mentioned during the interviews that they have a same-sex partner or identify as LGBTQ. This is also an area that warrants further exploration—is this simply due to the fact that the research was conducted in the San Francisco Bay Area? Might it be attributable to the phenomenon of LGBTQ individuals being cast out from conservative religions, and seeking spiritual connection elsewhere? Further research could shed light on these questions.

The overarching research question contained within it the sub-question of whether a self-created relationship with nature would have a different impact than organized ecotherapeutic approaches such as wilderness therapy or horticultural therapy. None of the participants reported having participated in any sort of

organized ecotherapy program. However, several participants had devised their own methods of connecting with the natural world that strongly resembled ecotherapeutic approaches. Further research could isolate and compare organized ecotherapy programs with a self-created relationship with nature, to more deeply explore the efficacy of each.

A second sub-question that could be investigated through further research is how the wisdom of individuals who have overcome addiction through a relationship with nature can help to shift our culture-wide addictive behaviors, namely the materialism and consumerism that result in the over extraction of natural resources. Participants' responses addressed this question to some degree – they were critical of modern technological culture, yearned for a cultural shift that would incorporate the values of nature-based cultures, and voiced concern for the environment and the survival of humankind. However, because this question was not a central focus of the study, participants did not make explicit connections between our culture-wide issues, and the lessons garnered from their personal journeys overcoming addiction. Instead of looking at individual addiction as an isolated problem, further research could more deeply explore the relationship between individual addiction and culture-wide addictive values and practices.

Some unanticipated areas for further exploration arose from the results of this study. Participants reported that they had the opportunity to spend time in nature during their childhoods, and experienced an innate connection with the natural world. In spite of certain moments of separation, they recalled this

connection when seeking recovery, and returned to the relationship permanently. Further research might explore whether a relationship with nature can support individuals seeking recovery even for those who have not felt an inherent connection with the natural world, or have not had the opportunity or ability to spend much time in nature.

Lastly, this study explored and showcased the experiences of individuals whose relationships with nature have supported their recovery. Participants' amounts of time in recovery ranged from two to 33 years, and the stories they shared regarding the struggles they faced and the successes they've had span the entirety of their time in recovery. Further research might narrow in on what was most helpful in early recovery, to execute a study that would be applicable specifically to individuals who are currently struggling with addiction and want to seek recovery through a relationship with nature as higher power.

Concluding Narrative

The motivation of this study was rooted in a desire to learn how the values of ecopsychology and the applied methods of ecotherapy might contribute to overcoming addiction. I strove to explore how a relationship with nature supports recovery, and what ecopsychological principles or practices might be extrapolated from participants' stories to inform a preliminary union of ecopsychology and addiction treatment. Based upon the findings of this narrative inquiry, several key conclusions can be made: (a) All participants reported feeling an innate connection with nature that began in childhood, which in some cases, became less important as the years passed; (b) In seeking sobriety, each of the participants

sought to connect with nature to serve as the higher power they needed in order to apply the 12-step approach to their lives; (c) This relationship with nature has been central in helping participants to be successful in recovery. Over time, the relationship transcended the utilitarian purpose of "working the program," and led to significant shifts in participants' lifestyles and value systems; (d) In sustaining this relationship, participants have woven nature into their lives to varying degrees. Many expressed that they generally yearn for more contact with nature than their current lifestyle permits; (e) Participants found that their relationships with nature resulted in deeper healing that extended far beyond addiction, and across physical, intellectual, emotional, and spiritual realms.

There seemed to be a perfect storm of elements coming together to bring about these positive results. Participants turned to nature for help in their darkest hours, presumably when they had "hit rock bottom" and were desperate to be freed from the bondage of addiction. 12-step programs require that participants connect with some sort of higher power, and for these participants, relating to nature as a higher power felt most appropriate. They have all been successful in their mid to long-term recoveries, having maintained sobriety for years and, in some cases, decades on end.

Within the general population, many people report feeling a connection with nature, and engage with the natural world as they please. Perhaps they choose to regularly weave nature into their lives, or they might go for extended periods when they don't have much contact with nature. They might find that they feel better in nature, but intentionally connecting with nature isn't necessarily a

priority much of the time. In the case of these participants however, because nature was their higher power, their well-being depended on the degree to which they nurtured this relationship. Being in recovery is an ongoing process without a finish line that involves incorporating a higher power to actively "work the steps," remain involved in the community, and seek growth and fulfillment in life.

In choosing this path, participants found themselves in a position where their success in recovery would be highly correlated with their ability to create and sustain a healing relationship with nature. If this relationship became inconvenient or frustrating, abandoning it had the potential to result in serious costs, namely relapsing. All six participants reported that since initially embarking upon the journey of recovery, they have intentionally maintained and deepened their relationships with nature. Over time these relationships, for many of the participants, have transcended recovery. Particularly for participants who have been in recovery for more than 10 years, they reported that they haven't felt at risk of relapsing for years, but their relationships with nature continue to grow and impact their lives in ways that in the beginning, they never could have imagined.

In engaging with the natural world, participants have creatively found ways to bring nature into their urban lives through ritual and intuitive ecotherapeutic approaches, such as gardening and spending time with animals. They have also prioritized putting their busy lives on pause to spend time in the natural world, going into the wilderness for days or even months on end. Participants yearned for more frequent opportunities to connect with nature, often feeling that life obligations get in the way, and finding it difficult to reconcile the

pace and responsibilities of modern, urban life with the desire to adopt a nature-based lifestyle and its accompanying values.

Through their relationships with nature, participants experienced attachment healing that resolved, to some degree, their own prior experiences of "original trauma," humankind's shift away from a nature-based lifestyle to a modern technological culture. In spite of the innate ups and downs in their relationships with nature, they stayed with the relationship perhaps because they didn't have much of a choice. They were grateful to find, however, that through this relationship with nature and through recovery, they experienced significant healing across many realms of their lives. Interestingly, the most profound healing did not come from the calming and nurturing feelings nature can provide; rather it was the result of being deprived, abandoned, and hurt by nature, and reconciling these facets of nature with its life-sustaining side. Participants saw the cycles of nature reflected in the ups and downs of their own lives, and by surviving the challenges nature posed, they connected with the depth of their own strength, found a sense of purpose and belonging, and accessed profound spiritual wisdom.

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APPENDIX A: INFORMED CONSENT

Michelle (Mia) Black, M.A., a doctoral candidate in clinical psychology at the California Institute of Integral Studies in San Francisco, California, is conducting a study on the experiences of individuals in recovery who identify nature as their higher power. The study seeks to better understand how a connection with nature can help addicts to achieve and sustain recovery.

As a person identified as having such an experience, you are invited to participate in the research. It will involve the audio-recording of a semi-structured interview at a location and time convenient to you and the interviewer. The interview has been designed to last one hour and no longer than one-and-a-half hours. During that time, you will be invited to talk in a manner you find safe and comfortable concerning experiences of how your relationship with nature has impacted your recovery. No preparation on your part is required for any part of the process.

For the protection of your privacy, all information will be kept strictly confidential and your identity will be protected within the limits of the law. The research procedure has been designed to not collect unnecessary identifiers, and personal information will be kept separate from the interview data. The interviewer will ask you to refrain from giving names and when necessary to use pseudonyms when referring to any other persons in the interview. The audio recordings will be securely stored, and erased after one year. Additionally, any identifying information will be removed from the data.

Only the principal investigator, Michelle Black, M.A., and the academic advisor, Kaisa Puhakka, Ph.D., will have access to the data associated with this study; electronic data will be password protected and hardcopy data will be stored in a locked area and destroyed within five years of completion of the research project. To further ensure your privacy, the investigator will use numeric identifiers of all electronic data and any material used by any third-party transcribers. In the publication of presentation of the findings, no information that could personally identify any of the participants will be used.

For your participation, no direct benefit, including any monetary recompense or treatment, is offered or guaranteed. If you choose to take part, your contribution will help increase understanding about the potential of nature to aid in the recovery process, an area of knowledge that has rarely been discussed in the professional literature. In addition, participation in the study may benefit others seeking to enter recovery, those already in recovery, or you directly. That is, based on the experiences of participants in similar research studies, I expect that you may find the interview affords an enjoyable opportunity for reflection and self-expression.

Before you agree to participate, it is important to understand that while this study is designed to minimize potential risks, this inquiry may touch sensitive areas. In

other words, depending on your unique history with the topic, it is possible to experience discomfort when discussing situations that were challenging for you. If you have any concerns or questions before, during, or after your interview, the principal investigator will make every effort to discuss them and inform you of options for resolving your concerns, including providing crisis numbers, referral to a therapist, and information on local 12-step meeting times and locations. Sliding scale therapy is available through The Liberation Institute; phone [withheld for privacy].

In addition, should you at any time wish to discuss issues related to your contribution to this study, including questions regarding your rights as a participant, suggestions for how to minimize potential risk, or concerns that you have been put at risk, you may contact the Human Research Review Committee at the California Institute of Integral Studies, by telephone at [withheld for privacy], or by email at [withheld for privacy]. For questions directed to the researcher, please contact Mia Black by phone at [withheld for privacy] or email at [withheld for privacy].

Participation in this study is considered completely voluntary. If you decide to participate, you may refuse to answer any question(s), withdraw your consent, or discontinue your participation at any time and for any reason without penalty or prejudice. You may also request a summary of the research findings by providing a mailing address along with your signature.

Finally, your privacy with respect to the information you disclose during participation in this study will be protected within the limits of the law. However, there are circumstances where a psychologist is required by law to reveal information to others, usually for the protection of the patient, research participant, or others. In the following cases, this could occur as a report to a police department or to an appropriate protective agency:

1. In the judgment of the psychologist, a patient or research participant becomes dangerous to him/herself or to others (or their property), and revealing that information is necessary to prevent harm;

2. In the judgment of the psychologist, there is suspected child abuse; in other words, if a child under 16 has potentially been a victim of a crime or neglect;

3. In the judgment of the psychologist, there is suspected elder abuse; in other words, if a woman or man age 60 or older has potentially been a victim of a crime or neglect.

If a report is required, the psychologist should discuss its contents and possible consequences with the patient or research participant.

By signing below, I _____(print name) *attest that*:

- I have read, understood, and received a copy of this consent form;
- I have had any questions about this research answered to my satisfaction;
- I understand that my confidentiality will be protected within the limits of the law;
- I consent to participate in this study on the experiences of individuals in recovery who identify nature as their higher power; and
- I am willingly and voluntarily participating in this research.

_____ _____
Participant's signature Date

Yes, I would like to receive a copy of the research findings. My mailing address is:
_____
_____
_____

_____ _____
Michelle Black, M.A., Researcher Date

APPENDIX B: PARTICIPANT BILL OF RIGHTS

Participants in psychological research have the right to:
1. Be treated with dignity and respect;
2. Be given a clear description of the purpose of the study and what is expected of you as a participant;
3. Be told of any benefits or risks to you that can be expected from participating in the study;
4. Know the research psychologist's training and experience;
5. Ask any questions you may have about the study;
6. Decide to participate or not without any pressure from the researcher or his or her assistants;
7. Have your privacy protected within the limits of the law;
8. Refuse to answer any research question, refuse to participate in any part of the study, or withdraw from the study at any time without any negative effects to you;
9. Be given a description of the overall results of the study upon request;
10. Discuss any concerns or file a complaint about the study with the Human Research Review Committee, California Institute of Integral Studies, [withheld for privacy].

APPENDIX C: CONFIDENTIALITY STATEMENT

Your privacy with respect to the information you disclose during participation in this study will be protected within the limits of the law. However, there are circumstances where a psychologist is required by law to reveal information, usually for the protection of a patient, research participant, or others. A report to the police department or to the appropriate protective agency is required in the following cases:

1. If, in the judgment of the psychologist, a patient or research participant becomes dangerous to himself or herself or others (or their property), and revealing the information is necessary to prevent the danger;
2. If there is suspected child abuse, in other words if a child under 16 has been a victim of a crime or neglect;
3. If there is suspected elder abuse, in other words if a woman or man age 60 or older has been victim of a crime or neglect.

If a report is required, the researcher will discuss its contents and possible consequences with the research participant.

Research Volunteers Needed

Have you been in recovery from addiction (of any kind), and participated in 12-step meetings for a year or longer?

-and-

Is your higher power "nature" (or the natural world, Mother Earth, or something similar)?

If so, you might be eligible to participate in a groundbreaking study that seeks to understand how a relationship with nature can support addicts in their recovery.

Participating involves a one-hour interview discussing your experiences in recovery, and how your relationship with nature has helped you to maintain your recovery.

For more information, please contact Mia Black, M.A. at or Mia is a doctoral student in Clinical Psychology at the California Institute of Integral Studies, and is conducting this study as a part of her dissertation.

APPENDIX E: INTERVIEW PROTOCOL

Introduction
Reintroduce myself. Thank the individual for agreeing to participate in the research, and invite them to talk in a manner they find safe and comfortable regarding their experiences in recovery and their connection with nature.

In an effort to ensure confidentiality, ask the participant to refrain from giving names and if necessary to use pseudonyms when referring to any other persons.

Have the participant read the Participant Bill of Rights, and read and sign the Informed Consent form.

Interview Questions
Now I am going to ask you some questions that will give me a better sense of how your connection with nature has supported your recovery. Remember, your answers to these questions are completely voluntary and may touch upon sensitive areas. Therefore, you can refuse to answer, or discontinue our conversation at any time.

Demographics
Age:
Ethnicity:
Gender:
Amount of time in recovery:

1. Describe your connection with nature and how it came about.
2. How does your connection with nature support your recovery day-to-day, and also in the long term?
3. Has nature played a role in your personal healing process?
4. Would you like to talk about any spiritual experiences you've had involving nature?
5. Does your relationship with nature involve any rituals?
6. Has your relationship with nature led to any changes in how you experience your senses and your body?
7. Do you think there are some lessons that our greater culture or society could learn from nature?
8. Before we end, is there anything else you would like to say?

Closing
Thank them for their participation in this study. In addition, make available information on crisis numbers, referrals to a therapist, or finding a local 12-step meeting as requested.