

**Re-Connecting Adolescents with Nature Using  
Environmental Art and Photography.**

**by**

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## Abstract

### Re-Connecting Adolescents with Nature Using Environmental Art and Photography.

Patricia Ann Popovich

The lives of today's youth are so influenced by technology that many believe they are rapidly disconnecting from nature and its benefits. This grounded theory research explores meaningful interactions within a natural setting, environmental art, and the use of digital photography with adolescents. Data was gathered from questionnaires, personal process reflections, and the researcher's observations and interactions with the participants. Resources supporting the basis for this research were derived from environmental art, ecopsychology research, and ancient cultural wisdom. Conclusions from this study indicate that through the use of environmental art and photography, adolescents can reconnect with a natural environment. Through their active participation within a natural setting, they can enhance well-being, raise awareness regarding ecological commitment, enhance self-awareness, and recognize the power of place.

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## Chapter I.

### *Introduction*

#### *Statement of the Problem*

In an era heavily influenced by technology, today's children are spending more time inside rather than outside within a natural environment. According to a Kaiser Family Foundation study, children ages 8 to 18 now spend 6.5 hours a day on television, electronic games, computers, music, and other media, many multi-tasking electronically (Washington Post, 2007). As technology, consumerism and deforestation continue to shape our lives, our youth are increasingly disconnecting from each other and losing the importance of their interactions with nature. It seems that the desire to be connected still exists, but has changed from a communal relationship with each other, our communities, and our natural environment, to a virtual relationship consumed with the use of technology. Ecopsychologists have expressed concerns regarding the long-term affects these behaviors will have on physical health, emotional well-being and environmental consciousness.

Our lives have become so fast paced that we often seek rest and relaxation by vacationing or retreating to environments that, ironically, bring us back to nature on beaches, in forests, within mountains, or by the water. Reflections, either verbally or visually, often convey the experience as relaxing and

rejuvenating. Preserving some of these experiences with photographs can enhance the occurrence and provide a healthy means of reflection and re-connection. Creating these photographs is an attempt to bring those experiences to our lives more frequently, so as to enhance overall well-being.

Recently, Richard Louv has conducted studies on the direct affects these behaviors are having on our youth and has coined the phrase *nature deficit disorder* (Louv, 2006) to describe this experience in society. National movements, inspired by Louv's work have produced programs such as *No Child Left Inside* and *Green Hour* (Louv, 2006) in an effort to begin the beneficial process of reconnecting our youth to the natural environment. These programs suggest that by beginning to re-establish the human-nature connection, long-term effects could help address such issues as childhood obesity, depression, and behavioral problems. It appears that health care professionals could also benefit from interventions that support and encourage the positive experiences that nature can provide. These experiences include stress reduction, increased creativity, social skills, as well as, self and environmental awareness. The benefits of connecting with nature flow across the lifespan, but for the purpose of this study adolescence will be the point of focus.

Research supporting the importance of connecting with our natural world is becoming more prevalent today because of concerns regarding the earth's depleting resources, global warming and diminishing natural environments.

Methods to create a healthy balance between technology and our environment are surfacing in many different ways. One example would be the work of Dr. Michael Cohen, who by using the internet has provided a workshop to educate and promote reconnecting with nature, called *Project NatureConnect*. It is a unique blend of technology and natural environmental experiences designed to raise awareness about the human-nature connection (Cohen, 1997).

Many ancient cultures throughout the world embrace customs and traditions that hold sacred their connections to the natural environment, a concept that is not present in most Western cultures, with the exception of Native Americans. Ted Andrews, author of *Animal Speak*, reflects on the importance of direct experiences with nature. He examines the cultural customs of Native Americans and relates the customs to the human-nature connection (Andrews, 1997) and the benefits thereof. In the field of psychology, Carl Jung frequently wrote about the human-nature connection using the term *deep psychology* (Sabini, 1998) many others have attempted to capture it through the use of various terms, such as, *natural psychology* (Fisher, 2002), and *green psychology* (Metzner, 1999). A term that has been used recently and readily resonates the beneficial connection of both ecology and psychology is that of ecopsychology. It was not until 1992 that Theodore Roszak first used the term *ecopsychology* in *Voice of the Earth* (Roszak, 1992). Ecopsychology, is a school of thought in modern psychology that runs parallel to nature-based cultures, and their beliefs and rituals. Ecopsychology

suggests that human psyche and well-being are connected to the environment, and that one cannot exist without the other (Roszak, 1995).

Although technology may appear to be reflected in a negative manner, it is not the intention of this study to be anti-technology, but to focus on exploring healthy methods of balancing the use of technology (in the form of digital photography), creative expression, and interaction with our environment.

#### *Purpose of the Study*

The purpose of this grounded theory study is to develop an understanding of how creative expression with natural found objects in combination with technology, in the form of digital photography, can encourage adolescents in reconnecting with themselves and the natural environment. It is hoped that through these experiences the adolescents will develop a better understanding of ‘self’ and ‘self in environment/place.’

A final product will then be created in the form of an informative packet, *Reconnecting Adolescents with Nature Using Environmental Art and Photography* (the R.E.A.P. companion), which will provide health care professionals with a way to introduce their clients to nature, and increase self-awareness regarding the benefits of the human-nature connection. This will include techniques utilizing the combined effects of interacting with nature, photography, and creative expression as an approach to self-awareness and the learning process.

### *Research Questions*

The following questions will guide this study:

1. How can creative expression with natural found objects and digital photography enhance the experience of connecting with the natural environment for adolescents?
2. How can adolescents benefit from reconnecting with the natural environment?

### *Definition of Terms*

*Art Therapy.* The belief that the creative process involved in the making of art is healing and life-enhancing. Art therapy is the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma, or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes individuals will benefit from: increased awareness of self and others, methods to assist with stressful and traumatic experiences, enhance cognitive abilities, and enjoy the life-affirming pleasures of making art (AATA, 2007).

*Ecopsychology.* “A psychological undertaking that essentially says - we too are nature.” Its first task is therefore to describe the human psyche in a way that makes it internal to the natural world or that makes it a phenomenon of nature. Stated otherwise, the task is to build a psychology that expands the field of significant relationships to include other than human beings, a psychology that

views all psychological and spiritual matters in the light of our participation within the larger natural order (Fisher, 2002).”

*Native American.* For the purpose of this research the term Native American will refer to the indigenous peoples of North America and their traditional belief systems and practices regarding nature and the spirit world.

*Nature-Deficit Disorder.* Not an actual medical term, but a new key phrase first coined by Richard Louv in 2006, as a conceptual way to think about the things that are denied children when they do not get enough time and direct involvement in nature (Louv, 2006).

*No Child Left Inside.* A current movement that is being proposed to school districts to adopt the use of out-door classroom settings (Louv, 2006).

#### *Delimitations and Limitations*

The delimitations intentionally set by the researcher in this study include the selection of participants, dates, time, and location of the study and the development and application of the specific interview questions. The participants were considered based on their age, maturity, desire to explore creative expression, and willingness to engage and interact in a nature-based environment. There were two groups of adolescents aged 13 – 20 who participated. The groups consisted of two six-hour sessions on two separate days. The first group consisted of four participants and the second group consisted of two participants.

The limitations of this study included but are not limited to the following elements: Technology is mentioned as an elemental distraction to interacting with a natural environment; however, to find two groups of populations that are completely influenced by either technology or nature is highly unlikely. Therefore, this study focused on the importance of a healthy balance between reconnecting with nature while utilizing technology. Also there was the element of personal sharing involved with group work and there was no way of knowing how participants would react to sharing and verbal expression of their creativity in any given setting. Specific to this age group there existed the possibility of unexpected behavior or outbursts due to maturity levels and lack of ego strength. Also to be considered was the element of reliability with the adolescents, since the members were not mandated to attend and were participating for their own personal growth; it was not known how many participants would follow through with the study.

## Chapter II.

### *Methods and Research Design*

#### *Characteristics of Qualitative Research*

In conducting qualitative research some basic principles need to be applied when gathering data. The research is conducted in an environment that is comfortable and natural for the participant. This gives the researcher the opportunity to be involved in the activity and witness the participant's experience. The collection of data is always evolving and changing throughout the process of the study. Methods of obtaining data are various in form and may include observations, images, verbal exchanges and questionnaires. Themes may emerge and change the direction of inquiry as the study progresses, making this form of research less tightly modeled. In analyzing the data collected, there will be emerging themes and similarities that arise. Qualitative research requires a certain degree of self-reflection from the researcher. Multiple levels of strategies are used when conducting qualitative research; these help shape what types of questions will be asked and what will be important in observing the participants' behaviors.

#### *Qualitative Research Strategy*

The strategy that was utilized in this research was a grounded theory, with the knowledge claim of constructivism. The primary methods of gathering data relied on the participants' views regarding their interactions in reference to the combination of technology and a natural environment. The emphasis of this



research was on using a familiar element, that of technology, to reconnect the participants to the benefits of interacting with a natural environment, an unfamiliar element. The framework of a grounded theory study provides for exploration of processes, activities, and events (Creswell, 2003) making it an appropriate approach for this research. This strategy influenced the development of the questionnaire, and how the data was collected, analyzed, and reported. When approaching research utilizing a grounded theory it is important to retrieve data that provides the views of the participants. This helps to gain a better understanding of their experiences in relation to the elements of technology, creativity, and interactions with nature.

The research gathered is based on each group member's views regarding their experiences in the study. Multiple types of information were gathered and then separated into different subheadings to begin distinguishing similarities and differences in emerging, relating themes.

#### *Role of the Researcher*

All researchers bring with them a past history based on their experiences in life including bias, knowledge, and certainly core personal values. These factors can influence the researcher's perspective either as a hindrance or as a benefit. Hopefully, these can be recognized and utilized in a positive manner allowing researchers to be open to continued learning from their observations and participation in research. My personal experiences have certainly shaped my

perceptions regarding the importance of nature in the maintenance of my own well-being. Having grown-up with an appreciation for nature, continually growing and learning from interactions in and with nature, I comprehend and resonate with the tenets of ecopsychology. These experiences can only enhance my sensitivity, awareness, and role as an investigator in this research. Since attending graduate school, I have acquired a greater sense of self-awareness and knowledge that has reinforced the healing power of nature. My previous experiences of working with nature-based cultures will be beneficial and has deepened my compassion for multiculturalism and diversity. Biases could certainly influence my perspectives when gathering data and the way I perceive the information; however, all attempts will be made to maintain objectivity.

Another part of my background lies in technology, and this experience has provided me with the knowledge of how easy it is to disconnect from a social environment and become absorbed into a virtual environment. During my time in undergraduate school, I expanded my knowledge in the field of art through acquiring graphic design skills, which utilized technological advancements in the field. During the process of applying those skills to the professional field, my life became more absorbed with constantly acquiring multiple levels of skill and knowledge regarding those rapidly changing technologies. For a period in my life, I began to disconnect, spending more time absorbed with technology and less with human/environment interaction. As a result, I recognized more anxiety,

increased stress levels, disturbances in sleep patterns, as well as a disconnection with myself in the process. Throughout my experiences in graduate school, I have recognized the benefits of reconnecting with the environment on my own psyche and have begun the process of recreating a healthy balance between the technological world and the natural environment.

#### *Data Collection Procedures*

*Setting.* The setting for this research was a 21-acre nature preserve located along a tributary river just south of Lake Erie in the Midwest, which used to be Native American territory. The grounds emitted a sense of serenity and spiritual energy, which created a pristine place to reflect and renew with nature. Amongst the thick forest groves were walking trails and pathways. Nestled within the natural environment were various reflective sites including: a memorial garden, gazebo, labyrinth, picnic area, two cabins (one large and one small) and at the edge of a small lake, deep within the forest, sits a tipi. The smaller cabin housed a variety of art materials and is designated as the art and learning center. The opportunity to observe and interact with nature was crucial to this research; moreover, all of the experiences occurred out of doors, as to encourage and develop self-awareness in connecting with the natural environment.

In attempting to provide a way to connect adolescents with the environment, an appropriate setting was considered. This organization has been providing a community space for fourteen years, where groups, and individuals

can retreat for self-growth, renewal and healing. They recognize the importance of interrelatedness as a significant factor in balancing one's overall well-being, as well as, "understanding the significance of our relationships with ourselves, each other, our workplaces, communities, and the natural world (Nord, 1994)".

The agency philosophy of this research site reinforces the importance of the human-nature connection, as reflected in the following statement.

Grahovac (2002) states:

Our youth programs take participants out of their conventional physical and mental landscapes and challenges them to search for new, healthier ways of being. We do this in a way that many might not expect: through play. Through the use of experiential outdoor initiatives, expressive arts, and nature exploration, we build personal character, self-esteem, and leadership skills, as well as challenge young people to see how their actions play a role in the greater community.

*Participants.* The two groups that participated in this study consisted of adolescents between 13 – 20 years old. The first group of four adolescents was composed of one male and three females, the second had two female members. All were Caucasian, and two of the females had Native American heritage. The groups consisted of adolescents that had an interest in art and visual arts, but had not had any formal training. The group members were part of a mentoring program within the community. The program is offered to local teens that express

an interest in the visual arts. The programs promote the visual arts to teens through different programs and events that are of interest to this age group. The adolescents were offered the opportunity to participate in this study through the process of phone calls and electronic mailings.

### *Methods of Gathering Data*

The adolescents were introduced to the work of Andy Goldsworthy, an environmental artist, and his use of media and techniques. They were given a brief overview of photography basics, including use of light, and composition. Three different predetermined stations within the preserve were utilized for creative expression. The adolescents were limited to the materials accessible in the natural environment and within the designated boundaries of the stations. Based on the techniques acquired from viewing the environmental artist's work, they were asked to creatively express themselves with naturally found objects. Group participants were then asked to apply basic photography skills while photographing each individual's natural object creations. After completing the three stations, the group members were then asked to complete a written questionnaire reflecting their experiences. Immediately following the experience a short process paper was requested of them describing their experiences as a participant in the study.

### *Data Analysis Procedures*

Data was gathered through questionnaires, observations, my personal reflections, and the creative art pieces. These four elements would be combined to provide insight and information about and from each participant.

The questionnaires provided the researcher with specific information relating to the participant's experiences in nature. I was specifically looking for parallels of observed behaviors to that of the written responses given in the questionnaires. Determining if there was a similarity to the two pieces of information provided me with a better understanding of the individuals' insight and self-awareness. The written responses also provided evidence as to whether the activity was thought provoking for the participants.

Another method of analysis was observation and interaction with the adolescents. The researcher documented the activities in the form of field notes. The elements that were observed were as follows: how much time was spent on the activity at each station, and how much effort/thought was put into the activity. Also of importance were their interactions in relation to self, others, and the environment. A third component of observation was regarding where the participants emphasized their interactions in relation to technology, creativity, interaction in nature, or a good balance between the entities.

Visual pieces of creative expression provided the researcher with additional information about the participants in relation to self and self in

environment. Key elements reflected on how much thought was put into the creative aspects, utilization of the available materials, and whether the participants simply imitated the environmental artist or used originality in their creative expressions.

### *Strategies for Validating Findings*

The data for this study was collected through a variety of methods. In order to validate the data, the following strategies were implemented:

1. Triangulation - Initial information came from the participants in written form, particularly responses to a questionnaire and a personal reflection of their experience after participating in the study. This information was then combined with my field notes, which included my observations and interactions with the adolescents.
2. Member checking – Throughout the experience, members were asked to verify and clarify verbalizations and actions as to assure accuracy and authenticity.
3. Prolonged exposure to the environment – An extended exposure within the environment provided me with the opportunity to observe the participants' actions, reactions and interactions with technology, as well as, nature. This information also provided for a broader understanding of the individuals' self-awareness, familiarity with technology, and creative expression within this particular environment.

4. Peer debriefing – A Master’s level art therapist who is familiar with research methods provided peer review.
5. Rich, thick description – A detailed descriptive exploration of the events that unfolded, the processes and activities that occurred, and the interactions that were observed throughout this process were provided.

### *Narrative Structure*

This study utilized a grounded theory approach and therefore presented the views of participants reflecting on their interactions and creative expressions within a natural environment. At times, quotations from the participants reflected their realities in relation to the environment, as well as discussions that occurred regarding the creative expressions that transpired throughout the process. Supportive information from existing literature is presented in the form of quotations or as simple statements within the text. At times metaphors carry a point across and symbolize the relationship that exists between the two entities of self and self in relation to the environment. Current theories and literature were referred to in relation to the observed and verbalized experiences that occurred within this setting.

### *Anticipated Ethical Issues*

When studying human subjects, we as researchers must always respect the rights of our participants and uphold the ethical principles set forth in the professional guidelines. The participants in this research were informed of the



nature of the study, both verbally and in written form. Participants were informed of where and how the information they provide would be used and the option to be identified or remain anonymous. They were given the necessary paperwork to complete, which included a consent form that their parents signed. In addition, they were advised of what would transpire throughout the study and what would be expected from them.

### *Significance of the Study*

Although it is not the intention of this research to address the entire global environmental crisis, as it is too large of a topic, it will be referenced occasionally in relation to the impact of our natural environments disappearing. Ecopsychology was just becoming a formal school of thought in the early 1970's and is now more than ever relevant to society today. This study provides current insight to what this particular group of adolescents feels about themselves within the larger context of the world around them. It also provides a non-threatening way for adolescents to implement creative techniques to help them re-connect with nature in a positive manner. Raising awareness about the power of place and how we interact, respond, and relate to our environment provides us with increased introspection about our emotions and feelings. Certainly, encouragement of continued exploration and preservation of our natural environments is implemented.

This research also improves mental health practices by giving people the tools, the R.E.A.P. companion, to develop self-awareness and raise their consciousness as to what actions they can take to contribute to their own (w)holistic well-being. In addition, the study also provided the use of creative expression as a way to enhance the concepts and ideals of ecopsychology. Although these techniques are not limited to the adolescent population, it is significant to the practice of mental health that a sense of hope is encouraged by raising awareness and concern for the future and providing (w)holistic approaches that can be incorporated into daily living to maintain overall well-being.

#### *Expected Outcomes*

It is hoped that this study instigates further explorations into ways that we can combine the use of technology with environmental experiences, reconnecting us with the importance of the human-nature connection. After this nature-based experience, it is hoped the participants will experience some or all of the following:

1. Experienced how interacting with a natural environment can be beneficial.
2. Developed an understanding as to how to incorporate nature in their lives while using technology.
3. Developed new skills regarding environmental art and basic photography.

By using creative expression in a natural environment as a means to reinforce the basic theories of ecopsychology, it is hoped that the combined use of

creativity and technology encourages further exploration of the human-nature connection. This study will provide a packet, the R.E.A.P. companion, to connect our youth, at a critical time in their development, with their natural environment and essentially Self.

### Chapter III.

#### *Literature Review*

##### *Importance of connecting youth with nature*

The Center for Disease Control reports, “two out of ten of America’s children are clinically obese” and spend “approximately 30 hours a week looking at TV or computers (Louv, 2005).” The diagnoses of obesity, depression, and attention deficit hyperactivity disorder are now familiar terms and conditions to today’s youth. Reconnecting with nature may provide a method of addressing some of these medical issues.

As we become more aware of our surroundings and pay attention to visuals, sounds and smells “fewer things compete for our attention and drain our energy” (Gallagher, 1993 p. 209).” This seems to allow us to engage in feeling rejuvenated. Being able to recognize what our environments bring to our overall well-being is a skill that develops as we become more in tune with ourselves. By engaging with nature and awakening our senses we can begin to “rediscover a universe of living beings intimately related (Gray, 2004 p. 226).” We are part of the earth and not a separate entity from Mother Earth. Roszak (1992) states “at its deepest level the psyche remains sympathetically bonded to the Earth (Yunt, 2001 p.105).” Modern culture has placed an emphasis on conquering nature rather than living in harmony with nature. “When we are alienated from nature we are dissociated from an essential dimension of our very being (Adams, 2005).”

Though there are many different variations regarding a definition of ecopsychology, Sarah Conn (1998), a clinical psychologist and lecturer of self-world connection in psychotherapy provides the following:

“The practice of ecopsychology is based on the recognition that the needs of the earth and the needs of the human individual are interdependent and interconnected and that human health and sanity must include sustainable and mutually-enhancing relations with the natural world.”

We are connected to the earth from the beginning and to the end of our lives. Native American wisdom tells us that our first encounters with life are centered around the four elements of water, air, fire and Earth. Hopi Indians provide us with this story of our connection to our natural environment. Our first foundation in life is water, we live in water in our mother's womb. The second foundation is air, after we follow water into this world we take into our lungs our first breath of air. Then we experience the third foundation of fire, which is reflected in our mother and father and all who care for us in this life. The fourth foundation is Earth and we experience this through rolling, crawling and standing on our own two feet (Schaefer, 2006). Through the process of death we are returned to the Earth in different forms, eventually becoming one with the environment again.

In the past, children learned about life cycles and the natural environment through exploration and oral traditions passed down from their families. Ancient

cultural wisdom provided a strong sense of place for youth; today it appears many look to their computers to find this connection. Piaget, in his studies of children, confirmed that, “learning is grounded in the body (Clinebell, 1996 p. 249).”

When we actively engage in our surroundings we ‘feel’ a connection and as we mature we develop and ‘sense’ the connection to the earth. Children receive this information through many different sources: teachers, playmates and their own explorations.

In Native American culture a traditional ‘coming of age’ milestone for adolescents is the practice of vision quests. Through these experiences immersed in nature, many discover the animal spirits and guides believed to have emerged to direct them through their lives. These experiences are sometimes seen in modern therapy techniques when “adolescents often claim a landscape, an animal, or some other natural feature as a metaphor for growth and development (Thomashow, 2002).” Animals and nature played a pivotal role in the development of not only the individual but the function of the community as well. Today these traditions are still being passed down in Native American cultures including the spirit wisdom of the animal world and oral traditions or stories. “When we embrace that which is “old” and “new,” we may find that wilderness holds the potential for transformative experiences that were perhaps never possible before (Harper, 1995 p. 185).”

Many indigenous cultures honor the fact that we are a part of the natural environment, and they utilize elements from nature to make sense of the world. They have “preserved practices of sustainability that we are now trying to re-invent (Metzner, 1999 p.4).” Animals are a vital part of these cultural lifestyles in many different ways and in the past were a means of survival, providing food, shelter, and clothing. They also provided symbolism reflected in artwork, ways of communicating and documenting; as well as attributes of the animals to connect with personality characteristics, helping to build self-identity. In trying to achieve a sense of harmony perhaps we could benefit from exploring the Native American model of well-being which “emphasizes restoring balance - aligning body, mind and heart in balance with the environment (Gray, 2004 p.224).”

In current psychotherapy practices Hoffman (1998) has developed a “hoop and tree” model based on ancient cultures and integrated with modern psychology. He references “wheels and cycles” present in many traditional practices when referring to *the hoop* of his model. These symbols are present in various forms such as mandalas, medicine wheels, and spirals. He suggests that these symbols represent a horizontal plane, the “relationship” aspect of our make-up. Hoffman expands this model with a vertical plane which represents our “growth and aspirations” in the form of a tree. He suggests that this is a universal structure familiar to all humanity. His model is relevant to the human-nature

connection in concept and application; it also portrays the unity of ecology and psychology ultimately, ecopsychology.

After spending considerable time with native southwest cultures Gary Paul Nabhan (1994) recognized many traditions that brought children to a rich connection with the earth. Children who have a strong concept of their “relatedness to the earth” seem to develop a solid sense of “bonding with the self (Phenice, 2003)”. Nabhan’s observations reflected that through interaction and exploration with plants and animals, youth developed a communication, such as “to be lazy or lascivious like a coyote,” or “to stand firm like a stalwart saguaro cactus (Nabhan, 1994).” By creating ways to identify with real elements and characteristics these “qualities provided the metaphors through which human behavior was placed into perspective (Nabhan, 1994).”

From a psychological perspective, the importance of connecting with our natural environment has been occurring as far back as the works of C.G. Jung and is coming to the forefront again because of concerns regarding our diminishing natural environments. The concept that we are “part of the earth” (Roszak, 1992) and that our psychological well-being relates to this connection is not new in psychology. Many psychologists throughout history have touched on this theory and used various terms to describe the benefits that being in nature and interacting with it can bring. Western lifestyles have dramatically become influenced by technology, and a radical disconnect from our natural environments has



developed. In turn, a loss of the concept “self” has occurred. C.G. Jung often used the term *depth psychology* and frequently reflected on the therapeutic benefits he experienced in nature for his own well-being (Sabini, 2002). Others have used terms such as *green psychology* (Metzner, 1999), *environmental psychology*, and *nature psychology*, until the combination of ecology and psychology captured the essence of both concepts.

In the early 1970’s psychologists began to explore the importance of these ecological-psychological connections. There was a definite pattern developing in society that reflected the belief that the farther we disconnect from nature, the more our psyche deteriorates (Roszak, 1992). C.G. Jung frequently referred to the importance of a human-nature connection, and many associate this with the conscious and unconscious theories he presented. During his lifetime, the school of thought that followed this concept was referred to as *depth psychology*. Researchers within the field continued to build on Jung’s theories of the human-nature connection and eventually evolved this point of reference into what is now expressed as ecopsychology.

Richard Louv (2005) has conducted current research in regards to current environmental trends, and he believes that our youth are becoming so disconnected from nature that a new experience has developed which he is calling “nature deficit disorder.” Today, movements are in motion to reintegrate the benefits of these nature-based learnings. *Green Hour* and *No Child Left Inside*, are

examples of these national movements. Another area that is emerging is that of ecoeducation, educating our youth about ecology and the environment. By bringing ecology into the educational curriculum we can begin to heal this disconnect that has occurred. “*Ecoeducation* involves learning both *from* and *with* the body, by hands on experiences of the earth (Clinebell, 1996).” When children interact and engage with nature early on, experiencing the “real world (growing food, exploring a watershed, restoring a wetland) that overcomes our alienation with nature and rekindles a sense of place (Capra, 2002 p.232).”

Although the practice of reconnecting to nature can be beneficial to any population, for the purpose of this study the focus was on adolescents. Adolescence is a critical time of development in one’s life when self-identity is evolving and the transition into adulthood is beginning. During adolescence, many display the “fight to guard an inner self that feels too fragile for public display and an ache for the relief that nature provides from the pressure to conform and perform (Thomashow, 2002).”

Today’s adolescents are extremely influenced by technology and are adapting in some ways to using technology as a developmental tool for self-identity. The use of creativity in some computer games provides a means to explore different ways of developing self-identity. Attributes and characteristics projected onto a fictional character could be something adolescents might not explore otherwise. It could also be a way to explore a dark archetype or a

powerful personality they may wish they could possess. Pyle (2003) states that “direct, personal contact with other living things affects us in vital ways that vicarious experience can never replace (p. 209).” By meeting adolescents where they are, immersed in technology, and utilizing these elements we can bridge the gap between the two entities. Thomashow (2002) further adds, “nature provides the solid infrastructure in a world of swirling possibility, a place to return for stability and balance, a place that unguardedly provides the real stuff of life.” In many virtual reality worlds it seems that youth become desensitized to the consequences of their actions. Some may take these virtual experiences into the real world without the ability to interpret the consequences of their actions. “Through nature they gain access to the wild and untethered, the naked realities of life and death, and the basics of survival (Thomashow, 2002).” One way to engage them is to use the environment as a source of media in creating art, specifically environmental art.

Environmental art can be loosely defined as: art that helps improve our relationship to the natural world. Environmental artists are not new to the world of art. There are many environmental artists to explore in relation to why they choose this media and what it means for them. Environmental art is core to the R.E.A.P. companion in that it is a media that enhances the interaction between the participant and the environment.

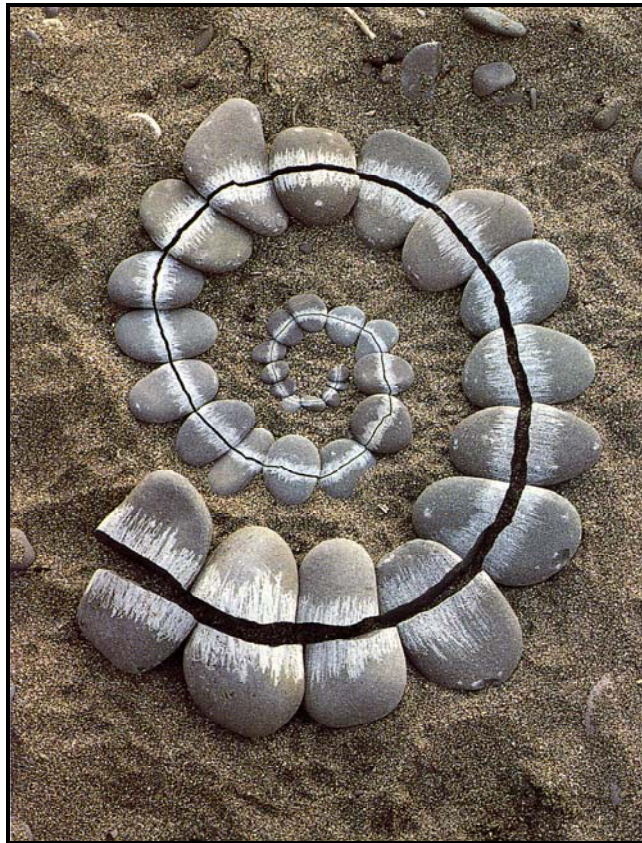
The act of combining art and environment can be a very healing process, not only for the artist but sometimes for society as well. Our environments have a strong influence on our behavior. Some environments can make us feel accepted; whereas, others can make us feel uncomfortable. Natural environments tend to make us feel welcomed and a part of something greater than ourselves. Lynne Hull is an environmental artist in Colorado who creates sculptures and environmental pieces to help wildlife recover from devastation created by man. Her sculptures have been created to assist birds in recovering from the loss of habitat, while at the same time creating visually beautiful art within the landscape. Masumi Hayashi, an internationally known artist, uses photography to depict natural settings that have in the past been attached to fear and anxiety because of their history, but she portrays them in such a way as to project the healing element of the environment as it is today. For example she portrays the sorrow and isolation in Japanese internment camps from World War II, but at the same time shows them as overgrown and void of people. She uses the environment and what it may stimulate, not only personally but socially as well, as a way to heal through her photographs. Her work exemplifies the healing and therapeutic value of the creative process, for herself as well as a collective statement for those who have endured such atrocities.



Goldsworthy (1987)

The artist that was focused on for this research was that of Andy Goldsworthy. Goldsworthy's work was pertinent to developing the R.E.A.P. companion because over the past 30 years he has displayed such a deep passion and connection to the earth. *Rivers and Tides* (Reidelsheimer, 2005) documents his trials and triumphs while working in and with nature, it is evident how passionate and connected to the earth he is through his work. He utilizes only natural objects, 'stitching' items together with pine needles, using water or spit as 'glue'. He "prefers to explore the natural bonds and tensions that exist within the earth (Goldsworthy, 1990)". Much of his art can deteriorate within the same day, and yet some remain for years, which creates an artform within its environment, changing with the seasons. Goldsworthy adds, "when I

work with a leaf, rock, stick, it is not just material in itself, it is an opening into the processes of life within and around it.”



Goldsworthy (1987)

The use of photography is an added element to his creative process, but not intended to be the purpose behind his work. Goldsworthy (1990) states that, “photographs leave the reason and spirit of the work outside”. Photographs document his creations and capture that moment in time. These photos bring us closer to reliving those moments through viewing them, and as history would

have it the speed at which this occurs has been greatly improved through the use of digital technology.



Goldsworthy (1989)

In the past, the quickest way to retrieve photos was through the use of a Polaroid camera. Although the rapid results were beneficial, there remained the element of handling processed chemicals when working with and cutting the photos. In *Instant Images*, Fryrear and Corbit explore various applications of using Polaroid camera images leading one to question what the results might produce with the use of digital cameras today.

One of the benefits available today is the technology of digital photography. Digital cameras provide the benefits of instant images as well as

technical manipulation and rapid retrieval without the added element of developing chemicals. Fryrear (1992) conveys that without using words, through the use of art and photographs one can portray an experience, dream, or fantasy. The photography acts as the “memory” (Fryrear, 1992) and creates a timeless image of the art, much like traditional mediums of paint, pastels, or charcoal.

Photography can enhance the way we see our environment and surroundings. As many landscape artists rendered an image in different medias, photography captures the image in its reality. Our vision becomes narrowed and focused on what we see through the viewfinder essentially changing our perspective. We begin to look and act with our environment in a different way. Photography in nature provides us with a release; “we are lost in the moment, responding to the earth, we become (sic) oblivious to the human chaos we’ve left behind (Phillips, 2000 p.114).” The use of photography is implemented in this study to provide a tool for the participants to consider different angles, light and composition ultimately influencing their way of viewing the artwork and surroundings. Our perspective begins to connect us with the environment and ourselves within that environment.

When we begin to look at our creativity through a different lens, our perspectives begin to change. “Whole body and mind seeing, as Master Dogen refers to it, is the total merging of subject and object, of seer and seen, of self and other (Loori, 2005 p. 68).” Choosing what to include in the photograph and what



to eliminate plays a vital role in a person's overall view of the created piece(s). Whether we choose to interact with nature individually or within a group can influence the experience as well. Weiser adds that "different people will interpret the same sensory stimulus in different ways, based on who they are and the background factors that influence what they do or do not notice" (Weiser, 1999, p. 1). By using natural objects as the primary creative expression, then adding photography an additional dimension is integrated into the creative experience. Patterson (1982), a professional nature photographer conveys, that "through the photography of natural things, we can explore freely our interests in, and our relationship to, the natural world, the vast system in which each of us is a tiny part (p.8)." We begin to notice aspects within the environment that would possibly have gone unnoticed when restricted to the view through the lens of the camera, or on the screen of a digital camera.

Photography can be an effective tool in different ways with different populations. In much the same way as art therapy, photos provide a non-threatening way to approach difficult issues in our lives that sometimes can be manipulated or avoided through traditional talk therapy methods. Adolescents are at a particularly unique stage in their development that makes photography a curious media, one that is an increasingly familiar element in their world. It is a media that provides a non-judgmental means of self-exploration and expression, as well as, enhanced decision-making and problem-solving skills.

## Chapter IV.

### *Research*

#### *Researcher's Personal Experience*

Interacting with the natural environment in my developmental years provided me with the framework for the person I would eventually become and influenced the development of my social skills and interactions with others. Learning about the cycles of life and interacting with other living things through direct experience, such as witnessing birth and death, provided me with the gift of life's sacredness. Discovering how elements worked together and the inter-relationship of all living things provided me with an appreciation for and understanding of the environment and my place within it.

Images flow vividly through my memory, validated by the still frames my mother compiled from an old Argus 35mm camera. The camera documented my earliest connections in and with nature. Photos of my sun-bleached tawny hair and little tan figure running barefoot through the grass, brought forth memories of the sensation of calloused feet on sun-warmed beach rock and sand. The peaceful whoosh of lapping waves on the shore, waking to various nature sounds, and falling asleep to frog and cricket sounds still soothe and comfort me today. This body of water would impact me in many ways throughout my life and still does today. I learned to respect her fierce capabilities when she threatened to absorb my physical home through erosion, and to appreciate the awesome beauty and

magic in her moments of stillness, is it any wonder I would grow to love and respect her very spirit? I can easily recall the physical sensation of 'letting go' and trusting her gentle strength, buoying yet encompassing my whole being. Memories of physically digging Vermillion clay out of the lake bank and completely covering my body from head to toe, the sensation of it drying and cracking on my skin and clothes, easily return to my mind and body. Recalling how it felt to add water to this material and the slippery sensation it created as it dissolved off of my skin brings back pleasant memories of interactions with the environment. The importance of these interactions would influence my life throughout development and beyond. Through my mother's photography my recollections of these events and interactions are validated and documented creating visual 'memories' that help me reconnect with my natural environment and the feelings associated with those periods in my life.

The transition from youth to adolescence, not unlike the experiences of others, proved to be a challenging time for me. It is when I struggled the most that I remember returning to a natural environment to reflect and renew my spirit. Whether it was to gain solace in an environment that brought comfort to me, or was a means of releasing tensions that occurred throughout my teens I was becoming steadily aware of the ways nature embraced me and enhanced my well-being. Engaging with my environment and other living creatures, unbeknownst to me, was becoming a source of refuge. Learning from the actions and interactions

of nature and its cycles taught me a lot about the interactions and social skills that I was developing and experiencing in everyday life. Throughout my adolescence the development of respect for self and others, recognizing personal strengths and weaknesses, dependability, reliability and faith in one's own abilities were rapidly influencing the development of my self-esteem, confidence and problem-solving skills. But even greater was the development of recognizing these qualities in others, and the expansion of empathy towards others. The significance of these characteristics in relation to self and others, would eventually become major building blocks in the foundation of my own personal growth and well-being as I transitioned into my adult years.

As I began my journey into the adult realm of development, time devoted to interacting in nature became much more difficult to obtain and was often limited to a quick run through the woods, as fleeting thoughts raced through my head regarding agendas and time schedules, leaving little room for interaction and reflection. Eventually I became more absorbed with a career, and less focused on my overall well-being. As an adult in the thick of life I am restoring my connection to the environment and wholeheartedly choosing a healthy balance in and with nature, finding solace in reconnecting with the beauties and comforts of nature's embrace.

In creating the R.E.A.P. companion, elements from my development, present growth experiences and the unearthing of ecopsychology have contributed

to the rediscovery of how important it is for us, individually and as a society to re-connect with nature. After conducting this study the significance of the human-nature connection and it's role in our well-being was clearly evident.

### *Structure of the Experiences*

This study consisted of two groups of adolescents, and both groups engaged in a six-hour day consisting of one group activity and two individual activities. The first hour consisted of an introduction to the day's activities, the focused environmental artist, and basic photography skills. The participants were introduced to the artwork of Andy Goldsworthy, through various methods of pictures, books and a PowerPoint, then given a brief overview of basic photography skills, such as lighting, shadows, frame of reference and composition. Then the participants were led to a pre-determined area in the nature preserve and were directed to use only the natural materials available within the designated area to create a piece of art as a group. They were encouraged to work together and devise a creation with the natural objects in the immediate area. This portion of the activity occurred over the next 50 minutes, allowing for ample time to photograph the art piece.

The next hour was spent on lunch and conversation reflective of the day's events so far. The next two hours were reserved for two individual sessions of the study. The participants were led to another area of the preserve and directed to use the materials available within a particular area to create two nature-based pieces

of art. These two activities were 50 minutes each, allowing for time to access each participant's piece and photograph each one.

The final hour of the day was spent completing the questionnaires, a process paper and verbally reflecting on their experience in the study. Group participants all were given photos of the art they created. The first group either brought a personal camera or received a complimentary one from the site. The second group utilized one camera and received a copy of the art creations on a CD. All participants had their own copies of the photography after participating.



*Figure 1. Tree.*

*Group I*

For their first activity, four adolescents, Ann, Nathan, Carla, and Sienna

created the tree (Figure 1) during their group task. They transported logs and timber from a distance, each individually contributing to the overall effort. Cooperation and encouragement were present both verbally and physically from all the adolescents. Different sections of the tree were focused on by each participant; one added a small bird made out of flowers on a branch of the tree, another added color with flowers in different sections, and multi-colored leaves were placed to give it a seasonal affect. Group members engaged well in the process and continued to expand on the development of the final image. Verbal interactions were present throughout the entire process, and members easily worked together to complete the image. They recognized individuality in different areas of the tree, and contributed to these areas by gathering materials or asking each other for an opinion. This group effort was limited to one hour as heat and humidity contributed to the participant's energy and safety levels. This activity took place in a large open field that had shade along the perimeters, but was mostly conducted in full sun.

#### *Participant I*

Ann was a 16-year-old female; she expressed herself well verbally, in written form, and creatively. She was of average height and weight, with long auburn hair and was confident and assertive when interacting with others. She arrived for the activity appropriately dressed in jeans and a cotton t-shirt with casual slip-on shoes, along with both a digital camera and traditional standard lens

reflex camera. Upon first impression she appeared slightly hyperactive and talkative, but with further interaction this behavior changed to a more comfortable level with thoughtful verbalization and relaxed body language. She repeatedly expressed throughout the sessions how excited she was to be participating in a nature based art experience.

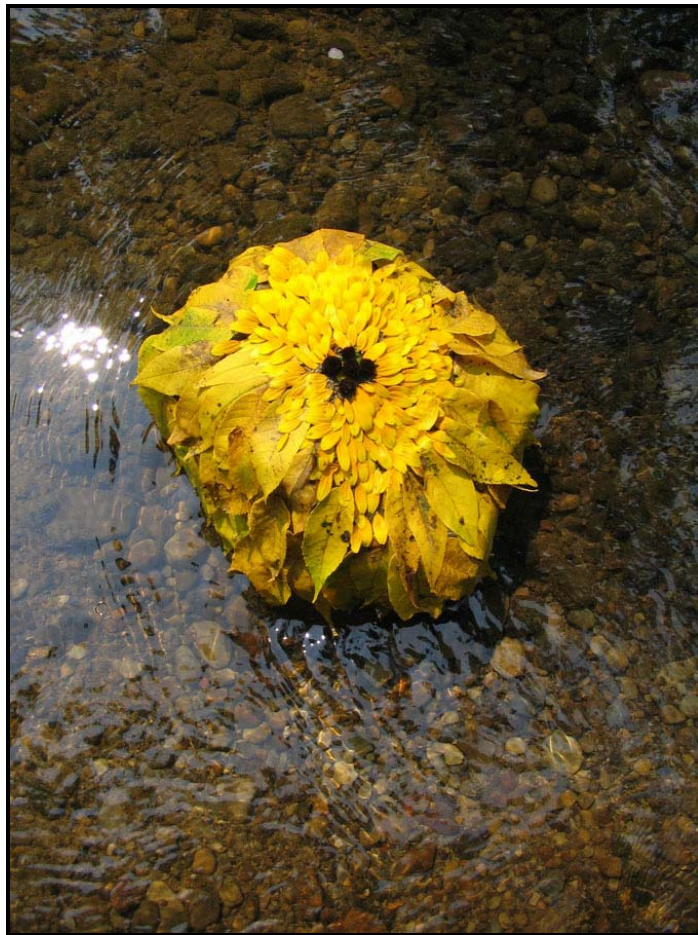
### *Observations*

Ann displayed a pleasant attitude throughout the activities. She repeatedly expressed joy in the combination of materials and techniques. She was eager to find materials and explore different methods of connecting them. She worked well independently and was open to receiving help; however, she did not need any help gathering materials, as she was physically able.

During the first group session Ann was very co-operative and worked well with her peers. She functioned as a co-leader in contributing to the thought processes of creating a collective piece, she intentionally gathered and sought out materials. In the second session, she began by gathering materials from a nearby field and transporting them to the creek bed. She immediately removed her shoes and rolled up her pant legs to walk into the water. She used her time well and created a viable workspace. Her first attempt was a large stone within the creek bed completely covered with white petals. About ten minutes into the session she redirected her efforts to the next stone in the creek bed located just below the original stone. Ann began to gather different colored petals from two different



types of flowers. Her method of securing the materials was to saturate them with water and adhere them to each other upon the rock surface. Placing larger yellow petals on the bottom and moving to smaller yellow petals towards the middle, she then added the dark black center into the middle of the rock. She worked diligently with the second attempt through to completion (Figure 2). Eventually, she removed the white colored petals from her first attempt and released them into the creek to float downstream. She sought out the



*Figure 2.* Creek flower rock.

surrounding materials without frustration and was very engaged with the process of creating. She was close in proximity to other participants but remained focused on her project. Different angles and perspectives were explored when photographing her artwork. She was not critical or judgmental about the art she had made and displayed pride in the finished piece, as she was eager to show her work to the other participants.



*Figure 3. Willowy woman.*

For her last piece, Ann quickly gathered materials from the nearby pine grove. She did not take an extensive amount of time to begin working. She actively engaged in the process by gathering large handfuls of pine needles and

transporting them to her workspace. She quickly began placing the materials into various sweeping lines (Figure 3). She eagerly participated in the physicality of her creative piece and displayed satisfaction with the finished piece (as was evident by her smile and body language). She stated that the piece ‘evolved’ as she worked; she did not have a particular idea in mind when she began.

### *Questionnaire*

Ann stated that her use of technology on a daily basis is largely recreational and at a duration of two to five hours a day. She also stated that she spent very little time in nature on a weekly basis. This experience was very enjoyable for her, as she responded, “I enjoyed the idea of using nature, and being outside, getting away from things while still doing something I enjoyed.” She expressed an interest in participating in an activity such as this again. Her response to the use of nature as a place for reflection or renewal in the future was rated on the positive end of the scale as a nine out of a possible ten.

### *Process paper*

Ann reflected on many aspects of the experience in her process paper. She acknowledged an appreciation for Goldsworthy’s art and the beauty of creating a piece of art from natural materials. She found that it was an enjoyable experience, both relaxing and fun. It was also easy to be creative with and in nature. There was not a pressure to copy or conform to another style or technique. She felt relieved to create art and make it her own. She reflected on nature having its own

beauty, and putting it into a creative piece of art brought a sense of “fulfillment” in that it was something individually created.

### *Participant II*

Nathan was a 16-year-old male of average height and weight. He had sandy blonde straight hair and was well groomed with short hair and the absence of facial hair. He arrived for the activity appropriately dressed in long shorts, a cotton t-shirt and loosely laced tennis shoes. He was quiet throughout the activity but was responsive when addressed; he appeared comfortable in the environment as was evidenced through his body language. He was attending high school and working full-time. He expressed excitement about the possibility of buying a car in the near future and eagerly shared models and features he would like to own.

### *Observations*

During the first group session, Nathan was a team player and actively engaged in the process. He gathered materials from many different locations and contributed to the compilation of a final piece. In his second session Nathan was eager to engage with nature and was pleasant throughout the experience. He immediately removed his shoes and socks and physically immersed himself into the creek bed. He located himself in a body of water that was waist deep and began pulling various sizes of rocks from the bottom of the creek and placing them at the edge of the water. He willingly accepted and asked for assistance when he needed more timber for his project. He did not complete this attempt, but



was inspired into another direction and idea. About fifteen minutes into the session he moved to a new location farther upstream and began gathering new materials for a different creation. He again asked for specific flowers and continued to find rocks within his immediate location. He continued with his second attempt, completing it, resulting in the Turtle Rock (Figure 4).



*Figure 4.* Turtle rock.

In his third session, Nathan was more contemplative about his creativity and began gathering materials from the flower garden and placing them in the pinegrove. He cleared a place within the grove and used pinecones and sticks to outline the rough shape of a star. He meticulously began placing yellow flowers

into the star shape (Figure 5). He readily accepted help from his peers to complete the project in the allotted timeframe and was proud of his creation, as was evidenced by his eagerness to share and photograph his art. He utilized his time well but had some difficulty projecting how much material he would ultimately need. Others repeatedly gathered more flowers for him and contributed to separating them from the stems for him to place within the star.



*Figure 5. Star of flowers.*

### *Questionnaire*

On a daily basis Nathan reported that he did not use cell phones at all and only listened to music for approximately an hour or in the car. He spent about six

hours in nature on a weekly basis, and he occasionally watched educational programs such as Discovery™ and Animal Planet™. He stated that he enjoyed the experience and specifically liked “the quiet peace and the sights”, and that he would participate in an experience like this again. After participating in this experience, he stated that he would use nature as a means for reflection as high as a level ten on a scale of one to ten.

#### *Process paper*

Nathan reflected on how he used nature as a creative tool. He stated he enjoyed being in and interacting with nature. To Nathan, nature was a medium. He enjoyed participating in this experience because “it reflects who I am”. Nathan also projected future plans that included nature in different aspects. He would like to eventually work in a natural environment with animals and live in a cabin in the woods. Combining nature and art was a good combination for him, as he has always enjoyed sketching and drawing throughout his life. He sketched animal figures on the front and back of his personal process paper.

#### *Participant III*

Carla was a 19-year-old female slightly shorter than average and slightly overweight. She had short red colored hair with bangs bluntly cut. She was quiet and reflective but expressed excitement about going to college and the transitions that it will be bringing. She was well written and expressed herself well both verbally and creatively.

### *Observations*

In the first group session, Carla was initially hesitant and unsure about the materials, but once she heard ideas and visualized the suggestions she was very engaged and contributed to the process of completing the tree. During the second session, Carla began gathering materials and transporting them to a place that had soft malleable soil. She created a spiral shape in the soil with her hands and began placing the various mushrooms along the lines of the spiral. The mushrooms were whole or split in half and placed either top-up or bottom-up along the spiral. There were various colors and textures within the mushrooms: pink, white and brown (Figure 6).



*Figure 6. Mushroom spiral.*



In the third session, Carla took some time to gather materials and find a location to work within. She explored the area and available materials before settling under a large pine tree with a large pinecone and some long stalks of grass. There was great examination of twisting and turning and manipulating of the materials before she discovered a way to wrap and interweave the grass stalks onto the pinecone. Her piece culminated in the form of a large bug on a stump (Figure 7).



*Figure 7. Pinecone bug.*

*Questionnaire*

Carla responded that on a daily basis she spends one to two hours using technology. This use is mostly educational in regards to research and school related items. She is familiar with email and specific websites such as Facebook™, and states that her time spent using these are minimal. During breaks from school she enjoys small amounts of time in the woods or time at the beach, but when school is in session, she enjoys the immediate nature on campus. Stating, “I enjoyed the collaboration of the practice of reification of nature to make art”, portrayed her enjoyment in this process. I enjoyed seeing what the other artists came up with, and working with nature with my hands and feet.” Carla enjoyed the activity and would use nature as a place for reflection at the level of a nine on a scale of one to ten.

*Process paper*

Creating art with natural found objects was a new experience for Carla, and initially it was slightly difficult for her. Although it was a challenge to begin, she found that it “expanded (her) perception of what art is and what it can be made from.” She also expressed the good feelings that came from participating in this experience. It was a “meditative experience to be one with nature, working with only my hands, feet and the woods.” By using natural common objects she

learned that it helps one to appreciate the beauty in our surroundings, such as “finding beauty on the bottom of fungi.”

#### *Participant IV*

Sienna was a 20-year-old female of average height and weight. She was dressed in casual Capri pants, a short-sleeved white t-shirt, and flip-flop shoes. She had medium length brown hair. She was articulate and expressed herself well in both written and verbal form. She was a full-time student in college and worked full-time over the break. Sienna worked well with her peers and was very supportive and encouraging throughout the experience. She was co-operative and engaged in the group process.

#### *Observations*

During the first group session Sienna was very effective in modeling as a leader, she was the first to verbalize her ideas and was able to effectively interact with her peers in completing the artwork as a team. She engaged in the process and eagerly contributed to the session by gathering materials and encouraging her peers' efforts. In her second session, Sienna was very thoughtful about her art piece and utilized elements from her surroundings effectively. She covered the rock with yellow petals and secured them with water from the creek and occasionally human spit. She worked intently on her bug and began almost immediately. She finished the piece of work with green petals as wings and brown

flower centers representing eyes (Figure 8). Her use of time and materials was appropriate and well managed. She worked independently, but she was able to



*Figure 8. Bug on a rock.*

interact with neighboring participants verbally. She was supportive and thoughtful in her interactions with her peers, and explored different angles and lighting when photographing her work as well as others.

In the third session Sienna worked quickly in the pine grove to create a face on a stump (Figure 9). Although she was quick in completing this piece, she continued to show support to her peers and utilized her time well by assisting



them with their artwork, and offering to collect more materials so that they could complete the artwork in the allotted timeframe.



*Figure 9. Stump face.*

### *Questionnaire*

Sienna responded that on an average she spends 6 or more hours using technology in her daily life in educational, recreational, and work environments. Her time spent in a natural environment throughout the week averages around two

or three days. She particularly liked “being creative and using nature elements to create works of art.” Sienna reflected that she would participate in an experience like this again, and she rated nature as a place of reflection as an eight on a scale of one to ten.

### *Process paper*

Although Sienna had always incorporated hiking, photography, and art in her life, this experience was new in that it combined all three entities. She felt comfortable using the materials and elements of nature. She expressed pride in her completed pieces, although she did reflect that she would have loved more time to make “really great pieces.” After this experience Sienna stated that she would like to explore her environment more and in a new way. Sienna felt that these kinds of experiences might be helpful to people in realizing the importance of nature and wildlife in our lives. She expressed enjoyment in experiencing this activity both verbally and in written form.

### *Group II*

Two adolescents, Chloe and Rowen participated in the next group. They were so ambitious and inspired that they were able to work quickly and efficiently enough to create two sculptures within the fifty minutes. They verbally expressed their enjoyment throughout the session and worked well together. They utilized materials found along the trail and within the water for the first sculpture (Figure 10). They gathered berries and specifically red leaves for the rock formation. Each

item was thoughtfully placed and balanced to create the final piece. Members worked well together and communicated effectively. Chloe and Rowen engaged with the environment by walking in the creek, submerging their hands and arms, and climbing on the rocks to complete the sculpture.



*Figure 10.* Change of current.

In the second activity, the branches are all balanced between the two tree trunks without anything securing them. The group members were frequently challenged with collapsing materials but never appeared frustrated. They continued to add to the sculpture until completion (Figure 11). Leaves were purposefully placed, as was the draped moss. And a circular twined grapevine was



hung from a twig positioned as a peg. These two members worked well together and made use of their surrounding materials effectively and efficiently.



*Figure 11. Balancing act.*

*Participant I*

Chloe was a 17-year-old female of Native American descent. She had long black hair parted in the middle and braided into two ponytails. She was somewhat short in height and slightly above average weight. She arrived to the activity



appropriately dressed in a short-sleeved shirt and khaki pants, wearing casual slip-on shoes. Chloe was delightful to work with and interacted well with her peers.



*Figure 12. Ascension.*

### *Observations*

Throughout the session, Chloe displayed a calm and present manner. According to Chloe the experience was enjoyable. Materials were gathered along the creek bed and a large tree along the bank was utilized. Her work began on the

ground but trailed upward along the tree trunk. She began by digging chunks of clay and building various shapes out of them. As she progressed, she explored the clay by pressing items into it and placing them onto the tree. She used thorns to adhere flowers in a pattern up the tree trunk. She created small sculptures out of branches placing them along the bottom of the tree. She completed the art piece without interruption (Fig. 12).

In her third activity, Chloe was very intent on gathering numerous items from the surrounding area. In the pine grove she utilized many different pieces of earthy matter. She immediately sat in a cleared space and worked independently. Her materials consisted of broken pinecones, pine needles, small green pea shaped items, branches, leaves, yellow, and white flowers. She began in the center and started to work outwards creating a balanced symmetrical mandala (Figure 13).

### *Questionnaire*

Chloe stated that on average, she spends four to ten hours per day using technology. This includes MP3 technology, computers and cell phone usage. In addition to recreational usage, much of her technical time is related to education. She is currently using the internet to research colleges and universities she will be applying to in the near future. She reflected that between walking her puppy and playing, she averages ten and one-half hours a week in a natural environment. She enjoyed this experience and specifically “the openness of the projects, as well as

the many places to work and endless materials.” She reflected that she would definitely participate in an activity like this again. After this experience she would use nature for reflection at the highest level of the scale, a ten on a scale of one to ten and proudly stating “I probably won’t stop!”

### *Process paper*

Chloe reflected on how this experience was an “eye-opener” for her. Although she acknowledged the absence of these types of experiences in her life, currently, she felt a renewed sense of incorporating nature and art into her life. The other participant in the group was her sister, and although they are both



*Figure 13. Mandala.*

artists, they have never created art together. Chloe enjoyed the time spent with her sister. She portrayed the enjoyment she had in working with her sister both verbally and in writing. She was inspired to continue with her creativity and thought of beginning in the woods behind her house. As she was writing she felt a distraction to her own environment and what she could create once leaving this experience. Chloe enjoyed feeling relaxed and being able to escape the noise and air pollution of the city, and accessibility of the materials in this environment.

Her reflections compared the use of traditional materials to natural materials. The natural colors that occur in nature became part of her palette in creative expression. This experience was a “worth-while way to spend a morning” as she felt it brought her thoughts “back to normal”. She referred to the experience as a “breath of fresh air.” Her reflections stated that this experience was one of the “best things I have been at or attended in a while.” Chloe projected a sense of comfort with the environment and the materials in stating that it is a “beautiful open canvas” out here. She felt it stimulated her mind in many directions stating, “wow, what could I do with this interesting piece of bark?”

*Participant II*

Rowen was a 19-year-old female of Native American descent and average height and weight. She had straight black hair parted down the middle into two ponytails. She arrived to the activity appropriately dressed in a cotton short-



sleeved t-shirt and khaki pants that ended at mid-calf with low cut socks and tennis shoes on her feet. She was a full-time college student.



*Figure 14.* Lamb's ear shrub.

### *Observations*

In the second session, Rowen utilized a location along the bank of the creek although she did not use the water as part of her materials. She gathered materials from the flower garden in the form of soft, fuzzy leaves of the lamb's ear plant, twigs, bricks and a crushed aluminum can. She placed some twigs as a structure to the shape and filled the space with the petals from the lamb's ear in

and around the twigs to form a shrub like sculpture. Other twigs and bricks were used in two other sculptures to the right and left of the shrub. A few thin twigs were placed in the top portion of the sculpture. She considered the empty space behind the sculpture when choosing her location and how to include it when photographing the art piece (Figure 14).

In the third session, Rowen walked around the pine grove area before settling back at a pine tree and stump. The materials she gathered were from different areas throughout the pine grove. She utilized her time well and transferred her materials back to her workplace in a few trips. Her creative expression included a pine needle nest with three pinecones in it, and three wooden items balancing pebble like objects along crevices the length of their surfaces. She incorporated a spider web into the altar and had three objects balancing within the sculpture. Twigs, a used paper bag, and small green leaves were placed throughout the sculpture. She spent considerable time executing the sculpture and used the time efficiently. She worked well independently and showed pride in her creation as was evidenced by her eagerness to share it with others. She also put a lot of consideration into the angle and lighting of how she wanted it photographed. Specific attention was put into the light shining through the spider web, showing its undisturbed inclusion in the overall piece. Each area of this piece could stand alone as a separate entity; however, the three parts naturally work together as one art piece (Figure 15).



*Figure 15. Organic alter.*

### *Questionnaire*

During breaks from school, Rowen stated that she spent approximately eight hours a day using technology for recreational purposes, and during the school year she spent seven hours a day on the computer for educational purposes. On a weekly basis she spent about five hours of her day being in nature walking or riding her bike. She reflected that she enjoyed this experience and would participate in an activity like this again. She stated that “the location was lovely,

and the art making was calming and wonderful.” After this experience Rowen reflected that she would utilize nature as a place for reflection as high as a ten on a scale of one to ten.

### *Personal Process*

This experience provided Rowen with the realization that art making in nature is an “extremely intuitive and enjoyable activity.” She also had some reservations before participating; she was not familiar with the materials as art media and usually created artwork on her own. Creating in nature gave her a sense of freedom and removed her from the limitations of a studio that commands you to “make something good.” Words she used to reflect her experience were, “calming, open, soothing and relaxing.” She described herself as predominately, an “anxious” person, but this environment made her feel “safe” and “free to create.” She finds the natural environment the “biggest spiritual, intellectual, and artistic inspiration in her life.” While interacting with the environment she came to realize and visualize things in a different manner. The availability of supplies was compared to traditional materials such as pastels or paints. Once they are used they are gone, you have to go buy more; in nature it seems unending. She reflected on how she began to “notice” every little detail, veins, leaves, stones, and broken branches. She projected how the environment influenced her overall feelings as well. She added, “I felt inspired; I felt like everything was meant to be there, including me ~ everything had a purpose and a place.”



## Chapter V.

### *Conclusions and Recommendations*

#### *Conclusions*

Nature can be a healing entity for many populations, and certainly was reflected in this study with adolescents. Throughout this study I found the participants to be very receptive to a new experience both on an individual basis and within a group environment. They all interacted well together and produced very different creations in the two groups.

One observation that occurred was that one group created natural representations such as, birds, faces, turtles, bugs, etc. whereas; the other group chose to use nature as an expressive form abstractly. Although there were differences in the artwork, there were some similarities in the fact that symbols and shapes were displayed, such as, spirals, circles, hearts, and a nesting type of representation. These certainly could be reflective of the developmental stage these adolescents were experiencing in their lives. In example, possible correlations could be: spirals, for confusion, circles, for completion or transition to a new area of their lives, and nests possibly representing the process of leaving home for college.

The participants provided reflections that reinforced the healing powers of nature. These adolescents all stated that they would like to include nature in their lives more frequently. Many of the adolescents reflected on feelings of

‘belonging’, and having a sense of ‘place’ with nature. The fact that ‘real’ interactions with group members were so different and beneficial in comparison to ‘virtual’ interactions with others, were verbalized throughout the process of engaging in the activity.

Although these participants did use technology in a large part of their lives, they also reflected the desire to achieve a healthy balance between the two arenas. Their interactions and verbal contributions reinforced the need for healthy ways to incorporate the benefits from nature into our everyday lives. These adolescents repeatedly stated how much they enjoyed the process of connecting with nature and how this experience had changed their perspective of balancing time and making an effort to use nature as a place for reflection and renewal. All of the participants expressed a sense of enjoyment in combining photography, creativity and nature.

The impact this experience had on these adolescents was certainly a reward for this research, in that it provided a positive reflection regarding today’s youth. There was significant enjoyment in seeing these adolescents work together as a team and as individuals. Their reflections were very insightful and portrayed a desire to make nature a part of their lives. They seemed to recognize the technological world and its significance in their lives, but expressed that time in nature and personal interactions are important to one’s well-being.

Through using natural materials and digital photography the experience of connecting with nature was enhanced for these adolescents. On more than one occasion they expressed verbally how much they enjoyed this experience and would certainly do it again. Interacting with nature both creatively and physically can strengthen the spirit. During adolescence many are feeling uneasy about their transition into adulthood and struggle with feelings of inadequacy, but desire independence. Confusing feelings surrounding sense of belonging, and sense of self can be frightening. As evidenced by this study, the embracing, non-judgmental spirit of nature can provide a safe place to discover and build self confidence and strengthen faith in one's abilities. By using art and the creative process these adolescents gained a sense of empowerment with their choices and problem solving skills. Using a media they are deeply tied to and an environment they have lost connection with creates the building blocks for a whole new experience. They expressed pride and joy in creating with these materials, and positively interacted with their peers. Nature provided them with an arena to be themselves, free to express themselves without fear of criticism or constraints.

### *Recommendations*

Overall, this study was very productive and informative. As with anything that is experiential things grow and evolve with each occurrence. In this particular activity one of the most difficult things to do was terminate the creative flow with the participants. Given the fact that this was conducted within a structured

timeframe the activities were limited to fifty minutes each. On some occasions it would have been nice to see the creativity continued on some pieces. The participants in this study had stated that they would have liked more time with the projects. It would be recommended that the activities be broken up into smaller occurrences. Possibly, introducing the environmental artist at an earlier occasion in a different session would be helpful.

Perhaps give the assignment to the client to view the Andy Goldsworthy video as a precursor to the actual activity. One way to eliminate the time constraint would be to make an assignment out of these activities for the client to do on their own and reflect on it in a journal book, then process it at their next session(s) with their therapist. Another option would be to have the client and therapist experience it together and process it at the moment. This timeframe did not allow for a processing journal book, but it would be recommended to utilize one with clients, as it would give a document for both the therapist and client as to the progression that is occurring throughout the experience.

The final development from this research was the creation of a tool, the R.E.A.P. companion, for youth to get reconnected with the natural environment and encourage new ways to perceive their surroundings and development of 'self'. The companion consists of three items: a guidebook (including a brief introduction to the experiential – environmental artists, examples of their art and basic photography skills), a disposable digital camera, and a photo journaling

book. This companion could be used with many different populations, both individuals and groups. Reaping the benefits of what nature gives to us unconditionally is a treasure in itself.

As mental health professionals, it seems appropriate to acknowledge and provide a means to engage and interact with our natural environment. Helping others to engage in a place that is part of us collectively and accepting of the individual seems to be a proactive measure for personal growth. In attempting to recognize the impact of a global crisis we must first begin with the individual recognizing his or her own relationship to self, community, and the planet. Erazim Kohak urges us to “set aside the learned ways of perceiving the world as dead matter for your use and see if you can recover again your actual perception of the world as a community of beings to whom you are meaningfully related.”

The lives of today's youth are so influenced by technology that many believe they are rapidly disconnecting from nature and its benefits. The current work of Richard Louv is supportive of this belief and influential of many movements to change this experience for our youth today. Many ecopsychologists have expressed their concerns about this behavior and the long-term effects it will have on individuals. The growing field of ecopsychology has provided evidence regarding the importance of the human-nature connection in maintaining well-being. Native American culture supports the experience of harmony with nature rather than destruction over nature. Environmental art and photography are

techniques to reconnect our youth with their environment for improved well-being as well as to inspire a renewed desire to protect the environment for themselves and future generations.

Our youth are spending many hours in virtual environments that are beginning to impact their wellness in various degrees. As health care professionals, it is a wise idea to meet the youth where they are and in using what they are familiar with to bring them to a different place in their interactions with others. This research intended to cross both environments of nature and technology and create a healthy way of developing new skills in this critical time of development.

## Appendix A

## Questionnaire

Name:

- 1) How many hours do you spend using technology (in the form of computers, music, cell phones, etc.) on a daily basis?
- 2) Is this use of technology educational, recreational or work related in nature?
- 3) How much time do you spend in a natural environment on a weekly basis?
- 4) Was this experience enjoyable or unpleasant?
- 5) Please expand on the aspects you enjoyed or did not enjoy?
- 6) Would you participate in an activity like this again?
- 7) After this experience will you use nature as a place for reflection or renewal?

(0 being lowest and 10 being highest)

0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10

Appendix B  
Art Therapy Release Form

I, \_\_\_\_\_, hereby agree that my art work or representations of my art work, quotations, and photographs may be used for professional or educational training purposes only.

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Signature

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Date

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Parent or Guardian

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Date

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Witness

---

Date



## Appendix C

### R.E.A.P. Companion Packet

The R.E.A.P. Companion Packet consists of three components: a guidebook, a photo journaling book, and a disposable digital camera. The elements of each component are as follows:

- A.) Guidebook – is a book to essentially guide the procedure for the experience. It would include a brief description of environmental artist Andy Goldsworthy. The second component would be basic photography skills such as, composition, lighting, and perspective. The third component in the guidebook would be directives to guide the participant through the experience.

#### Guidebook contents:

This booklet is intended to be a guide for reconnecting with nature and rediscovering the healing powers it can provide for us. You may experience joy, sorrow, or even a renewed sense of kinship from participating in this experience, but whatever may arise for you most importantly have fun and ‘grow’ with it.

#### *Beannacht (“Blessing”)*

On the day when the weight deadens on your shoulders and you stumble, may the clay dance to balance you. And when your eyes freeze behind the gray window and the ghost of loss gets in to you, may a flock of colours,

indigo, red, green and azure blue come to awaken in you a meadow of delight. When the canvas frays in the currach of thought, and a stain of ocean blackens beneath you, may there come across the waters a path of yellow moonlight to bring you safely home. May the nourishment of the Earth be yours, may the clarity of light be yours, may the fluency of the ocean be yours, may the protection of the ancestors be yours. And so may a slow wind work these words of love around you, an invisible cloak to mind your life. ~ John O'Donohue (Echoes of Memory)

*Environmental art and artist*

Prior to participating in this experience rent and view the DVD *Rivers and Tides* to get an idea of how Andy Goldsworthy experiences the natural environment and ways that he approaches using different materials.

Become familiar with the art of Andy Goldsworthy. Some examples of his work are pictured in this guidebook. Notice how he uses only supplies and materials from the natural environment. 'Blankets of leaves' are "stitched" together with pine needles. Petals are "glued" using water, and rocks "scratch" the surface as well as "break" materials apart. Notice how he utilizes light to get a particular effect in the photograph, or the angle at which he captures the art work.

*Photography basics*

*Composition* ~ Be aware of what is being included in the photograph.

Watch for feet, hands, shadows or objects that may distract from the central focus.

*Use of light* ~ Observe the light and dark areas of the photo.

Walk around your art piece and pay attention to what direction gives the art the most dramatic effect.

*Perspective* ~ Explore different ways to view your work. Try looking from different angles - lie on the ground or see it from above.

*Activity structure*

Don't forget the camera!

Walk through a natural environment and begin looking for a site with plenty of materials (twigs, leaves, etc.), you may find more than one site.

Meditate or 'center' for a few minutes and find a sense of comfort with that space/site. Begin to touch, feel, and absorb the colors, textures, and temperature in that space/site ~ begin gathering materials.

Using only the elements available to you within a designated area begin creating art, if possible limit yourself to approximately one hour.

View and photograph your finished piece from different angles ~ in example: a birdseye view, or a worm's perspective.

*Photo journaling*

Download photos to a personal computer, or commercially process the photos to a CD. Print the photos or have them commercially printed.

Lay the photographs out on a large table or on the floor ~ view them all together. Which pictures resonate with you the most? begin asking yourself why were certain colors, and textures, used?, what materials were chosen?, and where were you in relation to the environment ~ by water, trees, or near a path? Place your photos into the photo journal book and begin journaling in relation to the photos ~ pay attention to your feelings externally and internally ~ process the experience with a professional.

- B.) Photo Journaling Book – is a journaling book where the participant can reflect on their photographs and journal about the experience and what each piece was reflecting for them throughout the activity. The journal could be processed at their next counseling session.
- C.) Recyclable Digital Camera – would be available for the participant to have processed and stored on a computer disk.

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