

Running Head: EMOTIONALLY SUPPORTIVE ENVIRONMENTAL EDUCATION

**Emotionally Supportive Environmental Education in Practice:
The Meaning of Workshop Experiences**

by

Roberta Waddell

Royal Roads University

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Royal Roads University
Victoria, British Columbia, Canada

Supervisor: Mishka Lysack, PhD
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Roberta Waddell, 2020

Committee Approval

The members of Roberta Waddell's Thesis Committee certify that they have read the thesis titled Emotionally Supportive Environmental Education in Practice: The Meaning of Workshop Experiences and recommend that it be accepted as fulfilling the thesis requirements for the Degree of Master of Arts in Environmental Education and Communication:

Hilary Leighton, PhD [signature on file]

Final approval and acceptance of this thesis is contingent upon submission of the final copy of the thesis to Royal Roads University. The thesis supervisor confirms to have read this thesis and recommends that it be accepted as fulfilling the thesis requirements:

Mishka Lysack, PhD [signature on file]

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Abstract

Threats to life on Earth, such as climate change and loss of biodiversity, are putting the long-term survival of many species in question, including humans. Unfortunately, individuals and communities can experience psychological barriers to environmental action. To help navigate these barriers, several environmental educators have created educational frameworks and practices, which I have called *emotionally supportive environmental education* (ESEE). The aim of this research is to gain insight into the possible experiences of ESEE and the meanings attributed to them. I created a case study where I designed and co-facilitated an ESEE workshop, collected written submissions, and conducted semi-structured interviews. Phenomenological hermeneutics was used to create a descriptive text. Final recommendations reflect on possible implications for my own work and the environmental education field. Overall, this research indicates that ESEE is likely a valuable complementary approach to solely information-based or technical environmental education and could hold potential for behavioural change.

Keywords: ecopsychology, emotionally supportive environmental education, psychological barriers, psychology, behavioural change, phenomenological hermeneutics

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Chapter 1: Framing Emotionally Supportive Environmental Education

A decade ago, in the middle of my environmental studies degree, I was tremendously impacted by what I was learning. When I first heard about climate change, I had not realized the extent of environmental destruction that was taking place on the planet. I felt sadness, urgency, and confusion. When I left class and engaged in regular life, however, environmental issues hardly ever arose in conversation, and I rarely heard about them in the media. After I graduated, I questioned, “Why are people not more worried?”

I suspected that human emotions played a role in global environmental problems. When I took a social and environmental justice youth leadership program called, *Next Up*, I read Mishka Lysack’s (2010) article, “Environmental Decline, Loss and Biophilia: Fostering Commitment in Environmental Citizenship.” After reading this article, I realized that environmental issues increase human beings’ “emotional experiences of fear, grieving and anxiety” (Lysack, 2010, p. 3). Lysack explains how these emotions can result in a collective paralysis:

Our sense of immobilization is exacerbated. This sense of disempowerment then doubles back on itself, further inhibiting the possibilities of timely and decisive action. As a result, a collective ecological fatigue sets in, effectively constraining our ability to collectively respond to the challenges that we are facing. (p. 4)

The previous quote describes how emotional responses to environmental loss often become overwhelming, resulting in our perceived, or real, inability to take action. Mishka Lysack, Professor in the Faculty of Social Work at the University of Calgary, eventually became my supervisor. His article was the start of the answer to my question and where I wished to focus my efforts in the environmental movement, but I needed to learn more.

My time in the Master of Arts in Environmental Education and Communication program at Royal Roads University has deepened my understanding of the complexity of environmental issues. During a class called the Psychological Dimensions of Environmental Education and Communication, I realized that “unconscious processes, such as ambivalence, loss, overwhelm, and sorrow are missing factors in much environmental communications, advocacy and campaign work” (Lertzman, 2015, p. 3). I also began to learn environmental education and communication techniques that acknowledge the many psychological barriers humans can experience that prevent them from taking environmental action. As Lysack (2010) stated, “Giving language to the experience as loss or grief provides the opportunity to change the relationship between the people and their experience, so that they now have the opportunity to take healing action in response” (p. 3). My readings, professors, and fellow cohort members provided inspiration as I moved into the thesis portion of the program.

For this study, I focussed on how to advance the application of environmental education techniques that take into consideration human emotional experiences. A great deal of research has been done on why psychological barriers are a significant reason for environmental inaction (Gifford, 2011; Lertzman, 2015; Lysack, 2010; Randall, 2009; Weintrobe, 2013). In addition, many practitioners have begun to create educational methods that consider how to navigate these barriers (Lysack, 2010; Macy & Brown, 1998; Marshall, 2014; Thomashow, 1995). I wanted to provide environmental educators with further information to support the effective incorporation of these practices into their work. To do this, I created a case study by designing a workshop consisting of emotionally supportive exercises that spoke to me throughout my Master’s program. I have developed the term *emotionally supportive environmental education* (ESEE) to encompass environmental education techniques that acknowledge human psychological

processes. I observed that many traditional environmental education campaigns or programs focussed solely on spreading awareness of environmental issues and promoting technical solutions, such as icecaps melting and driving less. The techniques I studied go beyond traditional environmental education by providing ways to reflect on, process, or cope with the emotions that often result from learning about environmental problems and being overwhelmed by the immense task of solving them. I took reflective writing submissions from participants before and after the workshop and conducted interviews two or three weeks later. I was drawn to the method of phenomenology to analyze the data because of its focus on discovering raw, lived experiences and the meanings that humans attribute to these experiences (van Manen, 1997). I hoped that these insights would be beneficial to other environmental educators in their practices and offer valuable recommendations.

Purpose of Study

The more ambitious aspirations of this study were to support the kind of environmental action that can mitigate the suffering of humans, animals, and the living world. I hope to contribute to this movement by giving environmental educators and communicators greater insight into ESEE and provide recommendations about how to incorporate it into their work and deliver it effectively. Before I can adequately assist other educators, however, I would have to more deeply learn these practices and deliver them first, myself. As there is already robust research into why ESEE is important (Lertzman, 2015; Moser, 2016; Randall, 2009) and how it can be done (Lysack, 2010; Macy & Brown, 2014; Thomashow, 1995), this study hopes to bring a depth of understanding to ESEE practices from firsthand accounts of people who experience them. Ultimately, my hope is that an increased understanding of ESEE practices might lead to a greater incorporation of them into environmental education. Consequently, I am optimistic that

more people will extend their sense of self to include the natural world and be motivated on an emotional level to protect the environment.

Theoretical Framework

In this thesis, I focus on environmental education methods that incorporate ecopsychology. Here, I will describe the theories that recognize the intertwinement of nature and the human mind and the ways that they form the foundation upon which this research is built.

Humans may have a biological yearning to connect with the earth and require a relationship with the natural world as a part of what it means to be fulfilled. Biologist, E.O. Wilson (1984), created the term *biophilia* to mean “the innate tendency to focus on life and lifelike processes” (p. 1). Biophilia suggests that humans are instinctively drawn to have a relationship with other living things. Wilson also claimed, “We are human in good part because of the particular way we affiliate with other organisms” (p. 139). In other words, Wilson expanded the definition of a human being beyond our skin to include the relationships with the other living things that sustain us. If I cannot be alive without plants, then is there not a perspective that I can hold where plants are a part of me? Wilson suggested that humans may have an innate sense of love for the natural world and that a part of their psyche can only be fulfilled by befriending the Earth (Wilson, 1984).

The awareness that humans require nature to feel whole may change the way they look at the world and interact with it. Naess (1998/2008) introduced the term *ecological self*, which captures what happens when people realize that they “may be said to be in, and of, nature from the very beginning of [them]selves” (p. 82). When humans realize their ecological selfhood, they begin “a process of identification with others, [and] with increasing maturity, the self is widened and deepened” (Naess, 1998/2008, p. 78). Naess and Sessions (1984) suggested that the

expansion of the sense of self to include the natural world is a process of maturing and that, in this development, people perceive that “the well-being and flourishing of human and nonhuman life on Earth have value in themselves” (para. 1). When humans realize their ecological selfhood, they may begin to understand the interconnectedness of the planet, which can in turn, help cultivate a deeper empathy for all other living beings. Indeed, in this way, the value of nature advances beyond the self-serving. Naess (1998/2008) goes on to say that, “With the rather general concept of ecological self already introduced, the concept of self-realization naturally follows” (p. 95). Self-realization is “dependant upon insight into our own potentialities.” (Naess, 1998/2008, p. 86). Since humans have “the potential to live in community with all other living beings” (Naess, 1998/2008, p. 96), to fully self-realize is to live in harmony with nature. Naess explains, “the requisite care flows naturally if the self is widened and deepened so that protection of free nature is felt and conceived as protection of ourselves” (p. 93). As humans mature, they self-realize, moving towards the fulfillment of their potentials and life purpose. When this self-realization comes from the ecological self, the potential and deeper meaning of protecting life on Earth naturally follows.

Naess (1998/2008) called the depth of environmental action that takes place from the ecological self, *deep ecology*. Drengson (2012) explained, “The word ‘deep’ in part referred to the level of questioning of our purposes and values when arguing in environmental conflicts” (para. 2). In comparison, a “shallow” approach “stops before the ultimate level of fundamental change, often promoting technological fixes (e.g., recycling, increased automotive efficiency, export-driven monocultural organic agriculture)” (para. 2). Therefore, deep ecology requires people to question their fundamental assumptions about the environment, which often results in changes that affect “basic economic, technological, and ideological structures” (Naess &

Sessions, 1984, para. 6). In other words, the consideration that nature has intrinsic value and is an extension of ourselves may result in significant societal changes. For example, instead of individuals merely recycling, they may have to question the production of goods and their consumption of those goods. Indeed, Naess and Sessions (1984) stated, “Humans have no right to reduce this richness and diversity except to satisfy vital needs” (para. 3). Deep ecology calls for people to align their lifestyles and human-created systems with the sustainability of all living things. To approach life from a deep ecological perspective, humans must realize their ecological self.

The discipline of ecopsychology attempts to address the gaps in both environmentalism and psychology that arise from overlooking their connection. Hibbard (2003) conducted “a survey of the emerging field of ecopsychology,” and stated, “Ecopsychology was named formally and outlined seriously by Theodore Roszak, Professor of History at California State University” (p. 27). In the absence of a consistent definition of ecopsychology, Hibbard defined the limits of the discipline from Roszak’s description of the “emerging synthesis of the psychological and the ecological” (cited in Hibbard, 2003, p. 29) asserting that “ecology needs psychology and psychology needs ecology” (p. 29). Many experts urged that ecopsychology is not a subset of psychology but a different way of looking at the field overall (Fisher, 1996; Metzner, 1999; Roszak, 1994). This new paradigm of psychology acknowledges that there is a reciprocal relationship between humans and nature. Nature aids humans with their mental health while humans have a responsibility to protect nature. In addition, to protecting nature, ecopsychology suggests humans must address the mental states that cause them to destroy their habitat. Hibbard (2003) believed that one purpose of moving the ecopsychology agenda forward is to “educate environmental advocates on how to use psychology to affect positive, ecological

behavior change in people” (p. 33). Indeed, applying ecopsychology to environmental education may result in an increase of pro-environmental behaviours in students.

Eco philosopher, Joanna Macy developed one of the first environmental educational programs to incorporate ecopsychology more into mainstream environmental education. *The Work That Reconnects* (TWTR; Macy & Brown, 1998) is designed to help people move through the difficult emotions of grief and despair for the world and the psychological barriers (e.g., paralysis, denial) that can impede environmental action. This framework is presented in a fourfold spiral (Macy & Johnstone, 2012, p. 39) to help participants visualize and understand the emotional phases of processing ecological loss. Participants enter the spiral by first honouring their “Gratitude & Presence” for the earth as they become more present “to the wonder of being alive in this amazing world” (p. 38). With this awareness, however, comes the knowledge of environmental loss and all that is currently at stake through its destruction. After this entry phase, participants move into the next phase of “Honouring the Pain for the World.” Macy stated, “Dedicating time and attention to honoring our pain for the world” ensures that there is “space to hear our sorrow, grief, outrage, and any other feelings revealing themselves in response to what is happening to our world” (p. 38). After deeply feeling a full range of emotions and being witnessed in that process, the spiral then moves into the phase of “Seeing The World with New Eyes” where, after processing the pain of new awareness, “the wider web of resources [becomes] available to us through our rootedness within a deeper ecological self” (p. 38). Finally, participants have the energy to move through the last phase, “Going Forth in Active Hope,” to clarify their “vision of how [they] can act for the healing of [their] world, identifying practical steps that move [their] vision forward” (p. 39). The foundational concepts in TWTR program that Joanna Macy created revealed to me a framework from which to start exploring ESEE.

Research Problem

Awareness of the intersection between the psyche and nature is growing and ESEE practices are developing. I hope to offer myself and other educators added insight into the environmental education methods that integrate psychology.

Research Questions

The following research questions guided my study:

1. What is the experience of emotionally supportive environmental education practices from the perspective of workshop participants?
2. What meaning might people make from their experiences of emotionally supportive environmental education practices?
3. How might these understandings possibly influence or change behaviour?
4. What are the implications of these findings for my own work as an environmental educator and possibly for the environmental education and communication field?

Study Delimitations and Limitations

I imposed several delimitations or restrictions as controls on this study. In addition, some limitations I could not control. The study's delimitations and limitations both may have decreased the generalizability of the study.

I chose to create a case and conduct one single workshop to limit the number of participants to ensure the scope of the study was appropriate and manageable for a thesis. In total, I had six participants and one co-facilitator from whom I collected data from to inform this research. I wanted to facilitate the workshop myself in order to further develop and practise my facilitation skills, and deepen my own practical experience. Given this was the first time I had facilitated a workshop, I was less intimidated because it was a smaller group. I also chose to

conduct one workshop because I knew that I would gather sufficient data for the goals of this study. Although the generalizability of the study is decreased because of the limited number of participants and workshops, the findings are still valuable indications of what someone can, or might, experience under similar circumstances.

The generalizability of the study could also be decreased by the chosen exercises. Some ESEE exercises might differ from those I conducted in this workshop. Indeed, as I will describe in my literature review, I discovered a variety of environmental educational frameworks and concepts that incorporate emotional support that I did not choose to incorporate in my workshop. In addition, others may not experience the exercises in the same way as the participants from my workshop due to any number of factors, such as a different instructor.

One limitation, or completely uncontrollable condition, that restricted the scope of this study was the interview conditions. Although I asked participants if I could interview them in their homes in order to create the most comfortable environment for reflection, some participants offered home environments that were chaotic, whereas other participants asked to meet in a cafe instead. I found that the quality of the interview locations was not consistent and differed depending on the circumstances.

Significance

This research is significant because psychological barriers to environmental action may be a major contribution to the suffering induced by ecological loss in the present and in the foreseeable future. The inaction that results from denial and/or paralysis due to this suffering can remain unexpressed and unacknowledged. People, myself included, must navigate their emotional barriers to environmental action. In doing so, humanity may be able to mitigate the suffering of people and animals from ecological collapse.

Environmental educators and communicators—and essentially anyone teaching environmental topics—may benefit from the applied nature of this research. ESEE exercises can comprise a stand-alone workshop or can be a complement to more information-based curricula. I have come to understand that it would be beneficial for anyone who practises environmental education to have an increased understanding of ESEE which will become more evident in my findings.

It is my hope that the practices outlined in this case study may help readers cope with the difficult feelings that they experience when ecological loss comes into their awareness. I personally gained insight into coping with my own difficult feelings about environmental loss as I went through the progression of this research. What I have experienced has helped me process my own emotions about the environment. I also believe the experience has diversified my approach as an environmental educator, because I have greater understanding as to why people do not take environmental action. I also hope this research may be used as an encouragement for other environmental educators to help them process their own emotions about the environment. In doing so, I believe this will increase their ability to help others navigate difficult information, feel emotions and decide on lifestyle changes.

This study is also significant because of the empathetic and respectful nature of ESEE exercises. ESEE takes into consideration the identity, values, culture, knowledge, and experiences that people already hold when hearing environmental information. In contrast to the often fear- and guilt-based tactics of some information-based environmental education campaigns, ESEE helps people gain awareness of the environmental values that they likely already possess.

Working in environmental education and outreach, I develop educational programs that encourage long-term behaviour change to protect the environment. A deeper understanding of ESEE practices has helped me to understand how intended audiences might receive the programs that my team and I develop at work and to inform effective environmental education and communication practices.

Researcher's Perspective

The bias I bring is the assumption that these exercises will lead to the participants feeling motivated to take environmental action. I also believe that environmental issues are important and that many others have similar emotional experiences to my own.

Thesis Structure

This thesis consists of six chapters. Following this introduction is the Literature Review in which I will provide an overview of the possible ecopsychological experiences that people, and communities go through when faced with environmental education. Throughout this discussion, I make connections to the theoretical framework that I introduced in Chapter 1. I begin with an exploration of love for the natural world. Following that, I discuss the psychological implications of environmental issues, including the difficult emotions people can experience. I then introduce several theories by authors who explain the possible psychological barriers to taking environmental action and the many authors who believe that these mental states, with adequate support, can be moved through. I include environmental educators, and those in other disciplines, who have created frameworks to provide support toward pro-environmental action. I also include sources that advocate for environmental educators to go through a process of personal reflection themselves. Finally, I end by discussing a review of the current state of emotional support in environmental education.

In Chapter 3, I recount my methodological journey and the reasons for my choice of a case study and the lens of phenomenological hermeneutics. I will describe my intellectual orientation to this research and why it is important. I consider several qualitative methodologies and my reason for choosing both case study and phenomenology. I explain the significance and value of applying phenomenology to this case study and then move on to describe the process of my data collection, including the written submissions and interviews. Next, I discuss my data analysis based on van Manen's (1997) hermeneutic phenomenological human science methodological approach using thematic analysis. I explain how I analyzed the written submissions and transcripts by determining themes that addressed what each sentence cluster revealed "about the phenomenon or experience being described" (van Manen, 1997, p. 92). I then describe how I created a descriptive phenomenological text to convey the results. Finally, the chapter ends with a discussion about my potential research biases.

In Chapter 4, I present the results in the form of phenomenological hermeneutic text. I would like the reader to get to know each participant and their individual experience. This is why I begin with a description of each participant and the unique or key findings from their individual experiences. I then combine the themes from all participants and present a text structured around the main four categories that emerged which were: the experience of the environment, the experience of ESEE, the results of ESEE, and the meaning of ESEE. I encourage educators to read and value Chapter 4 as a stand-alone piece. This chapter is where the words and experiences of the participants come through and speak for themselves. Educators will gain insight into how people might come to an environmental educational session and what their possible experiences might be. The reader may also relate to the experiences of the participants in ways that I did not, drawing unique insights and applications for their own work.

In Chapter 5's discussion, I summarize key results from the data analysis and draw connections to the literature. I will provide twelve recommendations for educators to incorporate ESEE into their work. I also comment on surprises that arose from the data and some ideas for study improvements, as well as recommendations for future research. I conclude in Chapter 6 by reflecting upon my thesis journey as a whole and by revisiting my four research questions.

Chapter 2: The Psychology of Environmental Education Literature

This section reviews literature about the psychological experience of environmental education and several current environmental educational programs and the emotional support they lend in the field. A working theoretical framework emerges throughout the review as I found that the literature fell into a sequence similar to the spiral of the Work That Reconnects (Macy & Johnstone, 2012, p. 39). As I begin reviewing literature pertaining to theories about human love for the natural world, they align with the first stage in the spiral: “Gratitude and Presence” (Macy & Johnstone, 2012, p. 38). I then describe the difficult feelings that one can experience about environmental loss and offer insights from authors who have psychological theories to explain why humans can struggle to protect the environment (Lertzman, 2015; Randall, 2009; Weintrobe, 2013). These theories align with the objectives of ecopsychology. For instance, the authors often call for multidisciplinary support both for education about ecological loss and for caring for the emotions that can arise from this loss (Hibbard, 2003). These theories also align with Macy and Johnstone’s (2012) second stage of the spiral, “Honoring the Pain for the World” (p. 38), which calls for taking time to process emotions about the environment. Finally, I describe several practitioners who have developed frameworks and theories to acknowledge and process the emotions that humans feel about the environment (Gifford, 2011; Leighton, 2014; Lysack, 2010; Macy & Brown, 2014). Aspects of these approaches align with the third stage of the spiral, “Seeing with New Eyes” and the final stage, “Going Forth in Active Hope” (Macy & Johnstone, 2012, p. 38). For example, these approaches support developing a new perspective and taking action in alignment with it. The themes of the ecological self and deep ecology are also represented throughout as they promote an exploration of identity and perceptual paradigm shift (Naess, 1998/2008). Finally, I review the current state of emotional

support in environmental education and the call for environmental educators to process their own emotions about the environment.

Love

I found several pieces of literature that support the idea that human beings may have an innate sense of attachment and love for the natural world. These concepts align with Wilson's (1984) biophilia theory that humans "focus on life and lifelike processes" (p. 1), and others, who have said that nature is a relationship required for human wholeness (Abram, 1997; NicholSEN, 2003). This love for nature stems from more than the recognition of the basics to life, such as food and water, but also an appreciation of how nature contributes to the human soul (Naess, 1998/2008; Wilson, 1984). Some sources also suggested a connection to nature that promotes physical and mental health (Kahn & Kellert, 2002; Nilsson, 2011; Roszak, 1995).

The type of love for nature suggested by Wilson's (1984) biophilia theory could cultivate a motivation to protect the Earth that is rooted in appreciation for nature's contribution to many facets of the human experience. Wilson stated that "to explore and affiliate with life is a deep and complicated process in mental development" (p. 1). He proposed that humanities approach to interacting with nature is not completely learned, but a part of us from birth. Wilson explained:

The biophilic tendency is nevertheless so clearly evinced in daily life . . . It unfolds in the predictable fantasies and responses of individuals from early childhood onward . . . These processes appear to be part of the programs of the brain. They are marked by the quickness and decisiveness with which we learn particular things about certain kinds of

plants and animals. They are too consistent to be dismissed as the result of purely historical events working on a mental blank slate. (p. 85)

Wilson suggested that humanities predisposition to interact with nature in certain ways is evolutionarily evolved. This evolutionary entanglement with non-human life on Earth blurs the boundary between human tendencies and the environment “out there.” Wilson claimed that “Life gathers human meaning to become a part of us” (p. 100). As humans move through life, both individually, and through generations, nature influences what it means to human. Wilson goes on to say environmental conservation goals should not be solely to conserve the fundamentals of life, such as food and water, but for the extent to which the protection of nature protects the “human spirit” (p. 140). Wilson explained,

It is time to invent moral reasoning of a new and more powerful kind, to look to the very roots of motivation and understand why, in what circumstances and on which occasions, we cherish and protect life. The elements from which a deep conservation ethic might be constructed include the impulses and biased forms of learning loosing classified as biophilia. (p. 139)

The concept of biophilia can reinforce a strong conservation ethic, because it will grow the awareness that humans have an innate relationship to the natural world, and the realization that preserving nature is preserving what it means to be human.

Naess (1998/2008) similarly suggested that by realizing nature's contribution to being human, people will take environmental action from a place of self-protection. Naess wrote, “We need environmental ethics, but when people feel that they unselfishly give up, or even sacrifice, their self-interests to show love for nature, this is probably, in the long run, a treacherous basis for conservation. Through identification, they may come to see

that their own interests are served by conservation, through genuine self-love, the love of a widened and deepened self. (p. 80)

Naess argued that by loving oneself individuals are also loving nature and therefore environmental protection is self-preservation.

Some theories suggest cognitive benefits resulting from humans' evolutionary connection to nature. Kahn and Kellert (2002), who studied the relationship between children and nature, stated, "Children's emotional, intellectual, and values-related development is greatly enhanced by varied, recurrent, and ongoing contact with relatively familiar natural settings and processes" (p. 146). Psycho-evolutionary theory proposes "a restorative advantage to natural environments and features over artificial environments" (Nilsson, 2011, p. 150). Another theory that suggests an innate human connection to nature is attention restoration theory, which means that "gaining psychological distance from tasks" (Nilsson, 2011, p. 151) can restore attentional fatigue and that attention restoration is believed to take place "more readily" (p. 151) in natural environments. Because we have co-evolved with nature since the beginning, we may in fact, require interaction with nature for our proper development and maintenance of mental health.

A relationship to nature is an essential component of human development. Abram (1997) explored this idea of humans requiring nature to feel whole:

The human body knows that it needs a multiplicity of relationships with the whole of its surroundings. Our bodies have co-evolved with all these other fleshy forms, all of these bodies—with cedar trees and salmon and windstorms and moon and sun, with critters and plants and herbs of every shape and size. (para. 12)

A part of the human psyche may be only fulfilled by befriending the earth. It makes sense that this dependence would translate into an innate sense of love, and fascination, for something that sustains an individual's very being. Abram (1996) wrote,

It is only at the scale of our direct, sensory interactions with the land around us that we can appropriately notice and respond to the immediate needs of the living world . . .

There in an intimate reciprocity to the senses; as we touch the bark of a tree, we feel the tree *touching us*; as we lend our ears to the local sounds and ally our nose to the seasonal scents, the terrain gradually tunes us in turn. (p. 268)

Becoming familiar with the local natural world, by engaging all of the senses, brings awareness to the gifts of nature offers in daily life. As Nichol森 (2003) stated, "Much of our intense feeling for the natural world is a form of love, based on intimate encounter" (p. 8). Cultivating this relationship to other forms of life sparks a feeling of responsibility in humans to give back and take care of the Earth. Of course, when humans fall in love, they are vulnerable to loss.

Difficult Emotions

Several authors, whose work I have read, were curious about the difficult emotions that can result from loving nature and becoming aware of its harm (Lysack, 2010; Randall, 2009; Weintrobe, 2013; Windle, 1992). Indeed, many people experience challenging emotions when they realize the decline of the natural world. Windle (1992), an ecologist, found that she was beginning to mourn the decline of the dogwood tree, and she wrote about her experience. She wondered why she was feeling this way for a tree, so she researched her experience. She found that, in addition to losing loved ones, "other types of loss also cause grief" (p. 363). It is natural, therefore, for humans to feel sadness when they lose a natural space that they feel connected to

or when they hear of trees or animals suffering on the other side of the planet. She found though that “mourning for ecological losses has no simple or predictable path” (p. 365). Given the complexity of environmental decline, individuals are grieving what they have already lost while also anticipating further loss (Randall, 2009), thereby making it extremely difficult to navigate or move through the many layers of emotions they might feel.

Lysack (2010) created a framework to categorize emotional experiences about environmental loss. The framework identified six dimensions of “our experience of loss in response to environmental deterioration” (Lysack, 2010, p. 50), which included the following:

1. “Guilt and Shame regarding Past Environmental Behavior” (p. 50);
2. “Despair and Helplessness regarding Influencing Change in the Present” (p. 51);
3. “Anxiety and a Diminishing Sense of Certainty about the Future” (p. 51);
4. “Environmental Disequilibrium with Climate Change” (p. 51);
5. “Environmental Trauma” (p. 52); and
6. “Cosmological Sense of Loneliness” (p. 52).

I found that Lysack’s (2010) framework of emotions about environmental loss revealed the complex and difficult feelings that many individuals endure while experiencing environmental education. Guilt and shame are often invoked when one realizes how humanity, and ourselves personally, have contributed to environmental loss (Lysack, 2010; Thomashow, 1995). Despair and helplessness can be experienced due to the powerlessness that many people feel about how to change the situation (Gifford, 2011; Lertzman, 2015; Lysack, 2010). Lysack (2010) stated that there is a “sense of powerlessness that gnaws at our awareness and sense of agency” (p. 51). Here, fear, anger, or frustration can also arise as individuals begin to blame external sources that are out of their control (Lysack, 2010; Thomashow, 1995; Windle, 1992). Indeed, a study of

participant's responses to viewing images of climate change resulted in reactions that included: alarm, anger, fear, upset, frustration, and misery (Leviston, Price & Bishop, 2014). Another of Lysack's (2010) dimensions is anxiety and uncertainty about the future, which he described as "our disheartening fear that we are significantly diminishing our children's health . . . and the biotic communities on Earth" (p. 51). Weintrobe (2013) also believed that anxiety can result from ignoring environmental problems. She stated, "When a problem is minimized and ridiculed, the sane part of the mind—which is always there even if eclipsed and made small—becomes increasingly anxious" (Weintrobe, 2013, p. 39).

Disequilibrium occurs with climate change as the seasons and natural processes, which people have counted on repeating, are now becoming unpredictable (Lysack, 2010; Roszak, Gomes, & Kanner, 1995). In addition, many people have already been directly affected by a degraded environment and changing climate, which has caused trauma (Lertzman, 2015; Lysack, 2010; Moser, 2015). Lysack (2010) listed examples of trauma induced from climate disasters and environmental loss including, "fatalities, injury, distress arising from loss of family, property, and the inability to physically sustain oneself" (p. 52). Lysack's final dimension, loneliness, speaks to the inner void that many humans are beginning to feel as their fellow species and life with which they share this planet, dwindle in numbers. He stated, "As other species suffer, die, and are lost through extinction, irreversibly and eternally, our biophilic web is disturbed and ruptured" (p. 52). Lysack's framework discloses the surprisingly complex emotions that humans can feel due to environmental loss.

Avoiding the Environment

An assumption I had prior to exploring the literature is that once people are reconnected to their love for nature, and become aware of the threats against it, their despair would

automatically lead them to protect it. Still, although scientists have emphasized the urgency of climate change and the dire environmental situation, we humans as of yet have not taken adequate action. I came to realize that for many people, the process of integrating environmental loss into their awareness in a way that leads them to take action, is complex.

I read several pieces of literature explaining the psychological processes that can block people from protecting the environment. Many authors described a similar process of humans avoiding the reality of ecological loss because they struggle to process their grief (Cramer, 2014; Lertzman, 2015; Randall, 2009; Weintrobe, 2013). This repression results in psychological processes such as denial or projections (Weintrobe, 2013). Gifford (2011) identified 29 “psychological barriers that limit climate change mitigation and adaptation” (p. 290), listed below. Gifford’s framework differed from the other authors’ theories. Several of the barriers to environmental action discussed by Gifford, that cause people to avoid the reality of ecological loss, correlate to the denial process described by the bulk of authors (Cramer, 2014; Lertzman, 2015; Randall, 2009; Weintrobe, 2013) on the topic of the psychology of environmental inaction. Unlike many of the authors that I researched, however, Gifford does not acknowledge ecological grief as a barrier to environmental action, and I believe that it could be added as a separate category to his framework. Norgaard (2012) built upon both approaches and described how the collective denial of a community can reinforce an individual’s denial. The literature revealed that many possible psychological processes can take place when a person hears about ecological loss.

The main group of authors who wrote about the psychological processes that can result after hearing about environmental issues describe a process of grief and avoidance of uncomfortable feelings. Lertzman (2015), who has applied psychoanalytical thought to answer the question of why people are not responding appropriately to ecological loss, coined the term

environmental melancholia to describe “a condition in which even those who care deeply about the well-being of ecosystems and future generations are paralyzed to translate such concern into action” (p. 4). Lertzman explained, “Unconscious processes such as denial, projection, splitting, disavowal and apathy” (p. xii) can lead to environmental melancholia.

Cramer (2014) defined denial as a defense “functioning to ward off upsetting perceptions of the external world” (p. 43). Weintrobe (2013) expanded on the psychological intricacies of these unconscious processes. She explained that climate change “alerts us to real threats and dangers to survival” (p. 36), and therefore, it is normal to have anxiety. Nevertheless, if “anxiety gets too much to bear, we may resort to two different sorts of denial: negation and disavowal” (p. 36). Negation, explained Weintrobe, can be a healthy stage of mourning, one that is often “our first response to reality when it faces us with shocking losses and changes” (p. 37). Indeed, “negation is hopefully worked through with strengthened inner resolve and outer support, so that reality is eventually faced, and loss is mourned” (p. 38). Disavowal, in contrast, “aims to block mourning at the stage before sadness, grieving and reconciliation, and in this sense may be seen as a form of arrested, failed mourning, or melancholia” (p. 39). Weintrobe suggested that disavowal “may be part of a more organized and enduring defensive structure” (p. 38). Due to the difficult emotions that often arise from environmental degradation and the psychological barriers in the way, people can become stuck in mental states that do not empower action.

Gifford (2011) has written about the psychological processes that can block people from protecting the environment. Gifford arranged his 29 psychological barriers to adequate climate change response into seven categories, including the following: (a) limited cognition; (b) ideologies, (c) comparisons with others, (d) sunk costs, (e) discordance, (f) perceived risk,

and (g) limited behaviour (pp. 291–296). His framework communicates just how complex and varied the reasons for avoiding pro-environmental behaviours can be. To convey Gifford's (2011) barriers, I describe each category in this section and, in many cases, the diverse subcategories or examples.

Gifford's (2011) first category, limited cognition, involved "ways in which individual thinking is not fully rational and thus acts as a barrier to mitigation and adaptation" (p. 291). Humans can lack knowledge about the science, the causes and extent of climate change, and it can be confusing for them to know what the best environmental action is, especially with mixed messages from the media and efforts by some to create doubt. Another form of limited cognition is environmental numbness, when individuals disregard climate change because it is "a phenomenon outside immediate attention because it is not causing any immediate personal difficulties" (Gifford, 2011, p. 292). Another example of environmental numbness is disregarding environmental messaging that a person has seen many times and becomes less impactful over time (Gifford, 2011; Thomashow, 1995). Uncertainty is another barrier under the category of limited cognition. Gifford (2011) stated, "Perceived or real uncertainty reduces the frequency of environmental behavior" (p. 292). People also tend to judge things as elsewhere and later, which is referred to as judgmental discounting because it "absolves oneself of responsibility" (Gifford, 2011, p. 292) in the here and now. "Optimism bias" is another form of limited cognition that occurs when people "discount personal risks and err on the side of agreeable outcomes" (p. 293). Perceived behavioural control and self-efficiency are also major barriers when "people do not act because they perceive they have little behavioral control over the outcome" (p. 293).

Gifford's (2011) second category—ideologies—occurs when “ideologies and worldviews that embody beliefs which clash with climate change mitigation and other forms of pro-environmental action are very strong barriers to behavior change” (p. 293). For example, some devout followers may believe that their religion and its teachings conflict with the existence of climate science/climate change, and therefore, may choose to deny reality rather than question or expand their worldview.

Social comparison can inhibit environmental action because people “derive subjective and descriptive norms from their observations about what is the ‘proper’ course of action” (Gifford, 2011, p. 294). In other words, people often look to their peers to define what is normal because they have a strong urge to belong. People may also think that it is not fair to engage in environmental actions if they feel like they are making a sacrifice for the common good when others are not doing the same. For example, Gifford wrote, “Well-known figures, other economic sectors, or other nations are cited as not cooperating, which serves as a justification for non-action” (p. 294).

The fourth theme, sunk costs are “investments of money, time, and behavior patterns” (Gifford, 2011, p. 294). Giving up an investment and the potential to make profit, “is more difficult than it would have been had one not invested in it” (p. 294). Gifford provided another example:

If a person has a direct financial stake in the fossil fuel industry, cognitive dissonance can result from hearing that burning these fuels damages the environment. Cognitive dissonance is often easier to reduce by changing one's mind than by changing one's behaviour . . . [This is] often a problem where current investments conflict with making environmentally friendly changes. (p. 294)

In this example, Gifford illustrated a strong example of a sunk cost investment, because many people have put time into building skills, a strong social network, and identity in a specific industry. Therefore, it can be difficult for someone to acknowledge that the industry that provides their livelihood is not aligned with other common values they hold, such as human health and safety. Changing careers can be perceived as a large lost investment of time and money.

Another common psychological barrier to taking action to protect the environment is “conflicting values, goals, and aspirations” (Gifford, 2011, p. 294). Specific examples included “buying a larger house, flying by choice, or driving a bigger car” (p. 295). If a person values exploring other cultures and aspires to travel the world, he or she may have trouble accepting that flying has a large ecological footprint.

Discordance is Gifford’s (2011) fifth category: “When individuals hold the views of others in a negative light, they are unlikely to take direction from those others” (p. 294). Many people put government, scientists, environmentalists, and activists, which are common sources of pro-environmental messaging, in this category.

Perceived risk is the sixth category, based on people’s perception of what might happen to them if they change to more pro-environmental behaviours. Gifford (2011) identified six kinds of risk. The first four include physical risk, financial risk, the risk of wasting time, and the risk of the behaviour not actually working. He also noted that there is a social risk to changing behaviours, leaving “one open to judgement by one’s friends and colleagues, which could lead to damage to one’s ego or reputation” (p. 296). Finally, an individual could feel that it is too risky to take environmental action psychologically if he or she suffers “damage to one’s self-esteem and self-confidence” (p. 296).

Gifford's (2011) final category, limited behaviour, results when people do accept the idea of climate change, but they take easier and less impactful environmental actions that make them feel good and yet do not make much of an impact (Corner & Randall, 2011; Gifford, 2011). An example of this behaviour is tokenism, which Gifford (2011) described as "climate-related behaviors [that] are easier to adopt than others but have little or no impact on greenhouse gas emissions" (p. 296). Another example of limited behaviour is the rebound effect that takes place "after some mitigating effort is made" (p. 296), but where afterwards, "the gains are diminished or erased by subsequent actions" (p. 296). A classic example of the rebound effect is when a person purchases a hybrid vehicle but drives more than he or she would have in a gas-powered vehicle. In his categories, Gifford described how a great deal of potential confusion, conflict, bias, mistrust, fear, and complexity can lead to mental states that do not empower environmental action.

Norgaard (2012), is a sociologist who conducted research on the collective denial of climate change in Norway, a country that is beginning to see the effects of climate change. She noticed that climate change was hardly mentioned in public conversation, yet Norway is a highly educated population. She found that on a cultural level, certain norms were in place that hindered the ability of the individual to express their concerns and emotions about climate change. Norgaard observed the following about Bygdaby, the Norwegian town she studied.

Community members collectively hid information about global warming at arm's length by participating in cultural norms of attention, emotion, and conversation and by using a series of cultural narratives to deflect disturbing information and normalize a particular version of reality in which "everything is fine." As such, public nonresponse to global warming is produced through cultural practices of everyday life. (p. 207)

The lack of action to reduce environmental issues that contribute to climate change in this case, did not just occur at the individual level. The societal norms and cultures within which individuals exist can stifle individual concern. Indeed, if individuals in Bygdaby care about climate change, they may not have many outlets to express themselves. In conversation with their peers, people may normalize the strange weather patterns. And, in a culture such as Norway, where emotions are not meant to enter the public sphere, little room exists to express feelings of environmental concern. Norgaard (2012) explained that individual knowledge about climate change becomes “actively muted in order to protect individual identity and sense of empowerment and to maintain culturally produced conceptions of reality” (p. 207). To remain part of the social network and go about day-to-day life at home, people may feel pressure to deny their personal concerns about environmental loss. It is possible that individual denial can lead to a collective denial, but Norgaard showed that it can also go the other way, whereby the collective culture can produce or reinforce individual denial.

The sources of literature that I discovered about the psychological barriers to environmental action differed yet also complemented one another. Some of the barriers to environmental action that Gifford (2011) described—including sunk costs, perceived risks, and limited behaviour—could trigger the denial process described by several of the authors (Cramer, 2014; Lertzman, 2015; Randall, 2009; Weintrobe, 2013). These barriers describe states in which a person may unconsciously know about ecological loss, but avoid fully processing the information because the knowledge triggers uncomfortable feelings. For example, if a person has purchased an expensive gas powered vehicle and then hears about the impacts of fossil fuel emissions, he or she may experience “unconscious processes such as denial, projection, splitting, disavowal and apathy” (Lertzman, 2015, p. xii). These psychological mechanisms will serve to

protect that person from feelings of discomfort that result from the conflict between enjoying the new car and his or her environmental values. Gifford's other categories, limited cognition and discordance, suggest that some barriers to environmental action occur prior to people even becoming aware of ecological loss.

The barrier of ecological grief could be added as an additional category to Gifford's framework. A number of authors explained how avoiding despair from ecological loss can get in the way of protecting the environment (Lertzman, 2015; Randall, 2009; Weintrobe, 2013). Gifford, however, does not acknowledge ecological grief as a psychological barrier in and of itself. Norgaard (2012) broadened the landscape by describing how an individual's ecological grief can be stifled by the cultural context within which that person exists. In addition, she explained how the root cause of Gifford's social comparison and perceived social risk barriers can come from the collective, such as pressure from cultural norms. Although the research addressing the psychological processing of environmental issues varied, it contained points of reiteration and expansion, creating a broad and rich topography.

Authors (Lertzman, 2015; Norgaard, 2012; Randall, 2009; Weintrobe, 2013) who explain environmental inaction support the aims of ecopsychology. As Roszak (1995) asserted, "Ecology needs psychology and psychology needs ecology" (p. 10). Human beings must take on a psychological lens to understand environmental issues. Especially with the impending ecological loss, those in the psychological field need to be prepared to address these unique existential issues.

Moving Toward Resolution

The literature suggests that, with support, it is possible to move through the stagnant mental states induced by ecological loss. Lertzman (2015) believes, "Arguably one of the keys to

this [understanding of environmental loss] is the act of naming, speaking to it, giving it life outside of the unconscious domains, so it can be processed and ‘worked through’” (p. 101). Indeed, we, as humans, may need to talk about the fear, conflict, confusion, and other feelings that we have about environmental problems to see how we may be avoiding the issue so that we begin to find solutions. This process can be difficult, however, as we begin to fully acknowledge the pain of the world (Pipher, 2013; Weintrobe, 2013). Macy (2003) described the process that needs to take place in order to access despair as “a time of spiritual void and turbulence” (p. 74). Nevertheless, the transformation of despair to expression permits “new and original approaches to reality” (Macy, 2003, p. 74). There is a real need for external support during this time of personal chaos (Macy & Johnstone, 2012; Pipher, 2013; Weintrobe, 2013). Marshall (2014) emphasized the need for societal support during environmental loss when he wrote,

Humans have a virtually unlimited capacity to accept things that might otherwise prove to be cognitively challenging once they are supported within a culture of shared conviction, reinforced through social norms, and conveyed in narratives that speak to our “sacred values.” (p. 230)

Marshall pointed to the need for people to collectively uncover the connections between environmental loss and their community values so that environmental concerns can be socially validated. The literature suggested that, although challenging, it is possible for individuals to accept the reality of ecological loss.

One of the most interesting ideas I read about in the literature was that when humans face loss with the necessary emotional support, they free up emotional energy that can be used for reinvesting in other things (Macy & Johnstone, 2012; Randall, 2009). Indeed, Mnguni (2010) described an environmental conference where defenses were high: “While defensive behavior

offered temporary relief from anxiety, an overreliance on defenses was, in the end, wasteful of both human and other resources” (p. 126). Therefore, when humans face the reality of ecological loss, the energy they were using to deny this loss is freed up and can be used for environmental action.

Existing Frameworks

I discovered several environmental education and communication techniques that acknowledge and support the emotional processes that humans experience when faced with ecological loss. I believe that it is beneficial for environmental educators to become aware of multiple frameworks and create their own “recipe” for their unique pedagogical practices. In this way, they can account for the gaps that one specific framework or concept may have.

As described earlier, Joanna Macy created a comprehensive program titled *The Work That Reconnects* (TWTR), with its central aim “to bring people into a new relationship with their world, to empower them to take part in the Great Turning” (Macy & Brown, 2014, p. 65). Macy and Brown defined the *Great Turning* as follows:

The emergence of new and creative human responses that enable the transition from the industrial growth society to a life-sustaining society . . . The central plot is about joining together to act for the sake of life on Earth. (2014, p. 5)

TWTR is offered typically as a workshop or series of workshops that consist of sequential experiential practices that align with and move participants through each stage of the fourfold spiral.

TWTR workshops always begin with gratitude exercises to welcome the participants and help them become present and express what they were thankful for (Macy & Brown, 2014). This gratitude attitude “opens us all to our pain for the world, because knowing what we treasure

triggers the knowing of how endangered it is” (Macy & Brown, 2014, p. 93). The aim of the next exercises in the spiral allows people to acknowledge their “pain for the world” (Macy & Brown, 2014, p. 107), “validate it as wholesome response” (p. 107), and “recognize how widely it is shared by others” (p. 107). One exercise in this section is the “Cairn of Mourning” (Macy & Brown, 2014, p. 117), during which people were asked to find an object that symbolizes “a particular part of their world, a place or being precious to them that is lost now or disappearing from their life” (p. 118). Afterwards, one by one, each participant walked to the centre of the group and described what the object represented to them and what their feelings were toward it, and then said goodbye to the object (Macy & Brown, 2014) while the others around the circle say, “We hear you” (Macy & Brown, 2014, p. 118). The exercises in the third spiral phase called “Seeing with New Eyes” (Macy & Brown, 2014, p. 38) support people to realize their despair about ecological loss is a way to relate with other people. The “moving forth” (Macy & Brown, 2014, p. 192) final part of the workshop “serves as a bridge between the experiences of our work together and the daily lives we are about to resume” (p. 192). In this final part of the spiral, the exercises enable “to discern more clearly the distinctive role we can each play in the Great Turning” (Macy & Brown, 2014, p. 192).

Macy’s work is the most comprehensive environmental education program that I found which offers emotional support. Her exercises and practices incorporated a wide spectrum of learning styles, including group work and individual work. She also includes movement and physical touch (always with permission), which can more likely lead to greater access of those emotions stored in the body that are possibly not accessible by words alone.

Although I believe that Macy’s framework is quite comprehensive and effective, it may be difficult to apply through certain educational means. For example, many large organizations,

such as government and non-profit, require educating a mass population through means such as advertising and communications campaigns. Although her work appears extremely effective in a classroom setting, scaling up her concepts and processes to be able to be delivered to large audiences, who may only be exposed to one message, I find difficult to do. A classroom setting with a great deal of time is likely a more ethical and effective way to deliver environmental education, however in many organizations this type of education is not always possible.

Lysack (2010) has also “developed an educational pathway that appears to assist people to re-connect with their desire to protect the environment, deepening their capacity to take action on behalf of the environment” (p. 57). His framework involved reflective questions that increase a person’s awareness of his or her connection to nature. He began by encouraging people to “identify the one part of nature . . . that they want to protect the most from environmental decline” (p. 58). He then prompted them to reflect on how “they have developed a bond or sense of attachment” (p. 58) to this piece of the natural world. Afterwards, individuals were encouraged “to articulate how they would experience the extinction” (p. 59) of this place and “what it would mean to them if they discovered that its extinction was due to human activity” (p. 59). Lysack then asked individuals to “universalize their sense of loss” (p. 59) by envisioning others experiencing a similar loss “and to imagine what impact this widespread sense of loss would have on the whole human community” (p. 59). Next, he asked participants to imagine a person witnessing their loss and the shared values between them. Finally, Lysack prompted them to identify “what specific actions they might take in order to protect the part of nature that they value” (p. 60), “who they might join with in order to strengthen their activity, or what community of environmental action in which they will participate that would amplify their

actions” (p. 60), and finally to “imagine what difference it would make for the biotic community on Earth” (p. 61). Ultimately, Lysack wrote,

The foundation of effective ecological education that enables us to make sense of our sense of loss . . . is to be found in the powerful biophilic attraction and the innate impulse to affiliate ourselves to other forms of life in the natural world. (p. 57)

Lysack prompted people to reflect on their love of nature, be validated socially, decide on actions, and finally strengthen these actions with community support. His approach was more reflective than other approaches because it focused on uncovering personal “ecological narratives” (Lysack, 2010, p. 48). Although Lysack’s educational pathway is a valuable exercise, he acknowledged, “Future research and ongoing practice will explore in greater depth how this educational process can be enacted as a form of community practice that encourages the emergence of committed environmental citizenship and courageous ecological politics” (p. 61). Indeed, I believe that in comparison to Macy’s comprehensive program, which offered ready-to-implement exercises, Lysack’s methodology was a framework that requires some thought on how to apply it in different educational situations.

Another helpful approach was Marshall’s (2014) work on climate change communication strategies. Marshall suggested several communication tactics to help people overcome psychological barriers and “biases against threats that appear to be distant in time and place” (p. 231). For example, Marshall suggested that “emphasizing that climate change is happening here and now” (p. 231) is important. Other solutions that he suggested included the following: create a “narrative of positive change” (p. 233), “do not fuel division” and “create a heroic quest” (p. 234). Marshall also encouraged participants to identify the “non-negotiable sacred values” (p. 236) of the person or group to whom this is being communicated. In contrast to Macy and

Brown (2014), and Lysack (2010), who have created environmental exercises or frameworks that can be used in a workshop setting, Marshall suggested ways to improve communication skills about climate change. Therefore, his method is suited for application to communications campaigns or personal conversations rather than an educational workshop.

Leighton (2014) also suggested several “education practices designed for the whole person” (p. 325). She spoke, however, about the overall essence and approach being just as important as the methods. She stated,

While techniques can be important for sure, finding diamond-edged words and elegant ways that precisely touch into what is precious at the core of learning takes educated practice, a well-worn capacity to feel, an excellent and canny sense of timing and the patience of experience. (p. 323)

Leighton suggested that, beyond prescriptive practices, a skill and intuitive sense could be built over time to support emotions in environmental education. In addition, she encouraged students “to become more of the essence of themselves, to let what they already hold inside, out. To let what they are most deeply called to be (first through sensing and feelings, then through their good minds)” (Leighton, 2014, p. 324). In other words, Leighton suggested that leading people to the values they already hold about the environment is effective in environmental education, and this personal reflection may more naturally result in them taking environmental actions. Only after considering the overall approach, does Leighton suggest specific methods. For example, she suggested that “ceremonies embedded into learning [are effective] . . . because it shifts the learning loci away from a single teacher, model, or body of knowledge and places trust in a larger and more ancient design” (Leighton, 2014, p. 325). In addition, Leighton suggested walking practices, journalling, talking circles, making art, “guided imagery” (p. 338) and “the

central component of going outside” (p. 325). Leighton emphasized that, although effective methods to environmental education exist in the literature, the overall approach of the educator and honouring the inner direction of the student are foundational components.

Environmental educator and author, Thomashow (1995) also encouraged practices to reclaim a reconnection to the fundamental relationship to nature. He adopts the term *ecological identity*, which describes “how people perceive themselves in reference to nature, as living and breathing beings connected to the rhythms of the earth” (Thomashow, 1995, p. xiii). He suggested three paths of exploration for the “expression of ecological identity” (Thomashow, 1995, p. 18), including “childhood memories, disturbed places and wild places” (p. 18). He suggested several educational practices in his books, such as the “trees of environmentalism” (Thomashow, 1995, p. 26). He asks participants to create “an artistic representation of a tree, comprising a personal view of the broad spectrum of environmental thought, including any people, ideas, events, or texts that have significantly influenced their approach to environmentalism” (Thomashow, 1995, p. 26). Another exercise that he designed is called, “Childhood Memory of Special Places” (Thomashow, 1995, p. 8), which involved drawing a map of a special place in childhood. Thomashow stated,

The purpose of revisiting the special places of childhood is to gain awareness of the connections we make with the earth, awakening and holding those memories in our consciousness of the present. Not to nostalgically pine for a lost, innocent childhood but to recover the qualities of wonder, the open-mindedness regarding nature, the ability to look at what lies right in front of us. (p. 9)

Thinking about childhood nature experiences brings back the discovery and magic of nature for the very first time. Thomashow described that “for those who can return to pleasant memories, a

dark side will inevitably emerge” (p. 12) as most “childhood places are in some way polluted, developed, or destroyed (p. 12). Therefore, there will be a “perception of disturbed places” (p. 12). He emphasized the need to create a safe place to discuss “conflicting feelings” (p. 13) in a way that provided “guidance for professional and personal choices” (p. 13). Indeed, Thomashow encouraged readers to avoid becoming stuck in depression and despair. He believes, “It is crucial to explore a third dimension of ecological work: the contemplation of wild places, for this provides the joy, wonder, inspiration, and happiness that also go to make up an ecological worldview” (p. 14).

Thomashow (1995) emphasized the need to create time and space to enjoy the outdoors because this helps cope with ecological loss. In addition, he explained that it is this relationship with nature that is the foundation of motivation to protect the earth. Thomashow explained,

As you probe the layers within, you might realize that your experiences in nature are the source of profound wisdom and personal happiness. What are the implications for your everyday life—your job, your personal relationships, your professional goals? (p. 23)

Thomashow’s exercises help individuals uncover their personal values and orientations toward the environment, and with this awareness, he posits, they can lead a more environmentally friendly lifestyle. I appreciate Thomashow’s explanations that environmental education techniques, which bring an individual’s identity into focus, can result in major shifts in his or her lifestyle and even relationships or career. Thomashow provided a comprehensive discussion of environmental education; however, readers have to extract the exercises as they read. Indeed, his exercises are not described step-by-step but instead described throughout his text. Nevertheless, as Leighton (2014) suggested, perhaps effective environmental educators develop through this type of holistic learning. Thomashow provided a breadth of knowledge of environmental

education and experience to expand the ability of any educator who reads his books. He has not, however, necessarily created a specific program or framework, and this may result in his work being less accessible.

Psychotherapist, Rosemary Randall (2009) created a program called “Carbon Conversations,” which provided the facilitation for small groups of people to meet personal environmental goals. Randall described the program as successful based on the participants’ account of their experiences:

Their emphasis [was] on the emotional significance of making deep changes: of the pain, loss, and grief that may be involved, of threats to identity and status, and of the importance of people coming to feel ownership and find their way to the changes that we all need to make. (p. 118)

Randall’s reflection revealed that acknowledging and navigating the emotions around environmental behaviour change was what made her sessions meaningful. In addition, she allowed each participant to bring his or her unique experiences and perspectives to the process. As someone who went through her program in the first Calgary chapter, I personally found it helpful in that it created a community of practice. My critique, however, was that the program focused highly on personal lifestyle changes to the point of extreme self-sacrifice but did not help the students influence systemic changes to the same degree, such as influencing policy or corporate organizations.

Consistent themes run through most of the frameworks that I discovered, even though the delivery methods often vastly differed. Common themes of significance included: reconnecting to a feeling of love for nature, acknowledging ecological grief, providing social support and

validation, encouraging personal reflection, and becoming aware of personal values. Macy and Brown (2014) and Leighton (2014) promoted a thoughtful approach to delivery and encouraged cultivating ongoing practices that include reflective, ritualistic, or physical movement. Lysack (2010) and Randall (2009) offered a primarily cognitive approach incorporating a variety of reflective questions and exercises. Both Thomashow (1995) and Leighton promoted artistic approaches. Marshall (2014), in contrast, explained environmental communications strategies for messaging and conversation. All of the frameworks were helpful for me to gain an in-depth idea of environmental education practices. The common themes that ran throughout the exercises gave me a sense of the fundamentals of any ESEE practice. Considering each of them also offered me unique perspectives or approaches.

The Shift to a Deep Ecological Perspective

As I reflected further on the frameworks that I have described in this literature review, the themes of deep ecology and the ecological self (Naess, 2008) emerged. Researchers developed the frameworks that I have discussed in this chapter to help participants “widen and deepen” (Naess, 2008, p. 82) their perception of themselves to include nature by gaining a greater awareness of their own values and connection to nature. The frameworks guide participants to take action that emerges from a thoughtful place, which aligns with a deep ecological approach. As Drengson (2012) explained, “The word ‘deep’ in part referred to the level of questioning of our purposes and values when arguing in environmental conflicts” (para. 2). Most of these educational frameworks do not instruct educators to solely tell people about the problems and technical solutions to environmental issues. Instead, the frameworks that I have described, serve to educate people to undertake a deep level of personal reflection and questioning. This is helpful for people to gain a greater understanding of how their pre-existing values – what matters most

and what they care about, are connected with the environment, and how becoming aware of this connection may result in a stronger motivation to take action to protect it from harm and continued loss.

Emotions and Environmental Educators

Before an educator can support others in expressing and moving through their emotions about ecological loss, he or she must have ways to fully feel and process their own emotions. Mnguni (2010) summarized what it is like working in the environmental field: “Grappling with the implications of humanity’s estrangement, both from itself and from nature, is a daily preoccupation. Sustainability work means constantly being confronted with the real possibility of the end of the world as we know it” (p. 125). Thomashow (1995) has observed many people in the environmental field doing the following:

Carry[ing] planetary distress as a nagging chronic pain, never really plunging into its psychospiritual meaning, often responding with an overriding anger, and using this anger as motivation to take incessant action. Sometimes it can cause them to burn out on environmental work. (p. 148)

Thomashow urged environmental educators to spend time personally reflecting on, and discussing together, the emotional difficulties and conflicts of their work (1995). He wrote that many “environmental practitioners become so involved in their work they lose this reflective perspective” (p. 164). To support their students, environmental educators must personally acknowledge and process their own feelings of environmental loss. Beauchamp (2009) looked at “ways in which seasoned activists maintain their well-being throughout their activist work” (p. 46) and found the “suppression of emotions” (p. 55) to be a contributor to activist burnout. In addition, Beauchamp found that being “aware of their inner dialogue” (p. 64), being “in

alignment with heart and spirit” (p. 65), and “reflecting on progress” (p. 67) were all positive methods that activists could use to stay motivated.

Emotional Support in Environmental Education

Environmental education programs that do not acknowledge the emotional immensity of the topic may be ineffective for some audiences. Unfortunately, it cannot be expected that simply telling the public what they may lose will move the majority to action. Lakoff (2014) explained that “98 percent of what our brains are doing is below the level of consciousness. As a result, we may not know all, or even most, of what in our brains determines our deepest moral, social and political beliefs” (p. 9). Therefore, logical information is not necessarily processed in a straightforward way in the brain. Alcorn (2013) believed, “Integration of evidence is not through the work of reason, but through the work of emotion” (p. 2). Solely information-based environmental communication may not help people to overcome the cognitive and emotional challenges to environmental loss. Indeed, Roeser (2012) stated, “Integrating emotions in the debate about climate change . . . can serve as a more reliable source of motivation than purely rational, abstract knowledge” (p. 1038).

Moser has researched and reviewed the environmental communication landscape for a number of years. She stated, “It is not unreasonable to ask whether we in the environmental communication field may be losing touch with the very heart of communication at a crucial time” (Moser, 2015 p. 403). She believed that environmental communication is a discipline needed to support people through crisis. Moser (2015) explained, “It is not just about speaking to an *environment in crisis*, and that something ought to be done about it, but it is about communicating meaningfully and supportively to those *living through crisis*” (p. 406).

Therefore, she argued for “environmental communication oriented toward human welfare and

connection” (p. 403). Moser outlined the ways in which this approach will support humanity including, “supporting those in crisis compassionately” (p. 406), providing a space for “expressing grief safely” (p. 407), “visioning alternative futures” (p. 407), and “fostering authentic hope” (p. 407). She believed that it is not enough to spread the urgent facts and calls to action, but there must be a focus on the human experience of environmental loss and acknowledgement of the “substance (its weightiness and meaning), not just the contents of communication” (p. 405). It should be noted, incorporating emotional support may be a necessary alternative, or complementary focus, to information-based environmental education. Moser suggested that environmental education may be losing touch with the very heart of communication at a crucial time and calls for a more compassionate approach.

In 2016, Moser researched climate change communication “through a selective literature review” (p. 345). She stated, “The article delineates significant advances, emerging trends and topics, and tries to chart critical needs and opportunities going forward” (p. 345). She explained, “Maybe the most challenging, yet more fruitful avenue going forward lies in greater transdisciplinarity” (p. 361). In particular, she highlighted a “crucial need to improve the interaction between climate communication research and practice” (p. 345). Moser also urged professionals in the field to focus on “how the social, psychological and cognitive processes involved in dialogue interact to cause observed shifts in attitudes and opinion” (p. 361). Moser implied that environmental educators and communicators need to be aware of the psychological processes people experience when they struggle with environmental loss. This knowledge will aid educators in supporting people through difficult reactions. Overall, Moser believed that educators must begin to reflect on their work, share what has gone well, and bridge disciplines for support.

Moser's review is helpful in painting a current picture of the environmental communication landscape, but less so in providing tangible ways to move forward. Moser does well in highlighting the need for environmental educators and communicators to become more compassionate and the results that that this compassion will entail. I also relate to the description of the difficulties to bridge disciplines and the need to stay up-to-date regarding research for both environmental researchers and practitioners. I believe, however, that her review is a foundation where she lays out the current landscape and gaps in the environmental education field, but she herself does not provide tangible resources or suggestions about *how* to do this in practice.

The Gap in the Pavement: Where This Research Attempts to Grow

In conclusion, I have built upon my theoretical framework with literature that speaks to the emotional experience of environmental education. I began with theories about human love for the natural world, which suggest that that humans have an intrinsic relationship to nature and other living beings. When people cultivate this love for Earth however, difficult emotions may result because of the threats posed against it. These challenging mental states may contribute to humans taking inadequate action to protect the planet. In this chapter, I have attempted to illustrate the ways in which the subconscious mind can protect individuals from uncomfortable feelings, including those that result from environmental loss. I also outlined the complex and multiple ways that such uncomfortable feelings can result in processes of denial, including conflict with identities, values, pressure to stay within social norms, sunk costs, and even ecological grief itself. Later, I revealed how some individuals have hope and believe that, as a community, they can overcome these psychological barriers that prevent them from taking action to protect this planet. I have outlined frameworks, concepts, and exercises that environmental practitioners have created to support people to navigate the emotional terrain of environmental

knowledge and loss. Finally, I touched on some work that has been done in review of the state of the environmental communication field and reveal a call for a more compassionate approach and the bridging between academia and practice and between the disciplines of psychology and environmental education.

Through this literature review, as a foundation for knowledge, I gained a great deal of understanding into the psychological complexities of why people struggle to take action to protect that upon which their very life depends. Furthermore, some environmental practitioners have created thoughtful techniques to help people overcome these challenges. As someone who practises environmental education with the public, I believe that I would benefit from an increased understanding of the human experiences of the practices that I have described in this chapter. I think this would support me in delivering relevant practices in a real-world setting. In addition, I believe that further research into the experiences of ESEE practices might aid other educators to more effectively apply them in their own work.

Chapter 3: Research Methodology

This chapter reveals my journey toward, and a description of, the methodology that I chose to address my research questions. I chose to conduct a case study through the lens of phenomenological hermeneutics. I begin with other methodologies that I had first considered and the reasons that I did not pursue them. This is followed by a discussion of case study and phenomenological hermeneutics, and my rationale for following the philosophies of these methodologies in this research project. Next, I lay out the process of data collection from participants of a workshop that was focussed on ESEE practices, which included written submissions and interviews. I then describe the method of data analysis that I applied, van Manen's (1997) "thematic analysis" (p. 78). Finally, I discuss my research bias.

Research Design and Rational

Orientation. Schram (2006) encouraged the researcher to ask, "What perspective, or intellectual orientation, am I bringing to this research? Why is that important?" (p. 39). Based on my course work at Royal Roads University, I began to look at the world in the sense that "all observers are a part of their observations" (Maturana & Poerksen, 2002/2004, p. 26). Therefore, I approached my research through the lens that humans co-create their reality with the external world because everything "out there" must be processed through their perceptions (Schram, 2006). This orientation is important to my research because I believe that to learn about a phenomenon, I need to explore the ways in which people perceive the phenomenon.

Language was important to consider in my orientation and data analysis because it is how people express their experiences and perceptions (Abram, 1997) and how I presented the results. To express the human experience, individuals attach the best language to their experience that they have available, and this also influences how they understand their reality. Indeed, "whatever

we are able to say about (that) truth or reality is dependent on the availability of language” (Maturana & Poerksen, 2002/2004, p. 27). Therefore, I need to pay attention to the language that people are attaching to the experience I am researching. I also need to be thoughtful of the language I use to relay that experience to others. Ultimately, I must remember language is not the thing itself. My orientation drove me to view what people experience as reality of ESEE and what language they attach to that experience as valuable information for myself and other educators.

Methodological journey. Although, I was first drawn to grounded theory because it would fulfill the exploratory aims of my research, I chose not to use it. The process involves coding, theming, and categorizing the data, followed by creating a theory about the topic under study (Robson, 2011; Schram, 2006; van Manen, 1997). I was attracted to grounded theory because the methodology does not ask the researcher to have a specific hypothesis, but to instead allow a theory to emerge from the data. Schram (2006) stated, “The explicit aim of grounded theory is to develop a substantive theory that is derived from and grounded in data” (p. 100). I realized, however, that I did not want to create a theory about ESEE practices. I did not believe that developing one theory about ESEE would be as valuable as discovering broader knowledge and deeper understanding on the topic. I also did not want to solely look at the data through the frequency of codes and themes. I was worried that applying grounded theory could cause the loss of some unique and complex emotions of the participants. I identified with Lertzman’s (2015) worry in her research: “While codification was helpful in processing the material in terms of patterns or key objects, once I began to isolate an object from its context . . . I began to lose the thread” (p. 75). As I moved along my journey, I found I needed to reflect on other methods.

I also considered ethnographic as a possible research methodology. An ethnographic study provides “a description and interpretation” (Robson, 2011, p. 142) of the culture of a social group (Robson, 2011; Schram, 2006; van Manen, 1997). I thought that perhaps I was looking to study the experience of environmentalists. I realized, however, that I was not interested in any specific group. I wanted to explore what any student of ESEE might experience. The focus was on the phenomenon of *experiencing* ESEE practices, not on the participants or the workshop.

Case study. The next methodology that I considered was case study. Case study is “research that investigates a few cases, often just one, in considerable depth.” (Gomm et al., 2009, p. 3). At first, I thought because I was creating my own workshop, and it was not an already occurring natural case, this study may not be considered a case study. With further research I discovered, however, case studies can be, “created by the actions of researchers but where the primary concern is not controlling variables to measure their effects.” (Gomm et al., 2009, p. 4). Therefore, I was creating a case to study, which I was allowing to unfold naturally. Stake (2011) stated of a case study: “It’s best use appears to me to be for adding to existing experience and humanistic understanding” (p. 24). I felt the case study methodology aligned with my research, because I had created a case to study by designing a workshop and my goal was to increase the understanding of the experiences of the workshop participants.

Phenomenological hermeneutics. In addition to case study, the methodology of phenomenological hermeneutics began to distinguish itself in unique ways. Phenomenology looks at “the world as we immediately experience it pre-reflectively rather than as we conceptualize, categorize, or reflect on it” (van Manen, 1997, p. 9). In other words, phenomenology is “what people experience rather than what they consciously know” (Flood,

2010, p. 9). I began to understand phenomenology as a study of the immediate feeling of a life experience. But how do I make the lived experience of ESEE relevant to educators?

To truly understand what influence the workshop I designed for this case study had on the participants, I knew that I must also explore the meanings that the participants attached to their experiences of the workshop. By focussing on the immediate aspect of lived experience, phenomenology “aims at making explicit and seeking universal meaning” (van Manen, 1997, p. 19). Van Manen (1997) explained, “The ‘things’ of the world are meaningfully experienced, and on that basis, these ‘things’ are then approached and dealt with” (p. 14). Therefore, it is not enough for me to merely attempt to describe the lived experience of the workshop participants. The phenomenological method also instructs the researcher to *explore the meaning derived* from lived experience to offer greater insight into the impact that the experience had on the subject.

In phenomenological terms, the meaning that humans are searching for is the “universal quality or essence of a certain type of experience” (van Manen, 1997, p. 97). Importantly, “the researcher seeks to convey a meaning that is fundamental to the experience, no matter which specific individual has had that experience” (Schram, 2006, p. 99). Therefore, I knew that phenomenology would encourage me to find the aspects of experiencing ESEE that would likely be relatable to most anyone. Hermeneutics aids in this process as “it is the interpretive study of the expressions and objectifications (texts) of lived experience in the attempt to determine the meaning embodied in them” (van Manen, 1997, p. 38). Hermeneutics provides a process to reflect on the meaning of the collected lived experiences and to convey their universal essences through writing.

Hermeneutic phenomenology differentiates in unique ways from the other methodologies that I had considered because I perceived a phenomenological text to be the most valuable way

to enhance environmental educators' knowledge about ESEE. Phenomenology does not create a theory or generalize as grounded theory does. As Flood (2010) explained, "The epistemology of phenomenology focusses on revealing meaning rather than arguing a point or developing abstract theory" (p. 7). Instead, phenomenology offers "the possibility of plausible insights that bring us in more direct contact with the world" (van Manen, 1997, p. 9). Although ethnographies may also address the meaning of experience, they differ from phenomenology:

[Ethnographies] focus on a certain situation, a group, a culture, or an institutional location to study it for what goes on there and how these individuals or members of this group perceive things . . . this state of affairs or culture may change quite drastically over time, and from place to place. (van Manen, 1997, p. 22)

In contrast, by applying phenomenology, I found the meaning of an experience that could happen to anyone whenever they experience it.

Significance. I believe it is valuable for environmental educators to know more about the possible human experiences of ESEE practices. Since the environment is a complex topic, I thought that effective environmental education should not be overly simplified. Van Manen (1997) stated, "Phenomenology does not problem solve . . . Meaning questions can be better or more deeply understood, so that, on the basis of this understanding I may be able to act more thoughtfully and tactfully in certain situations" (p. 23). Therefore, my goal with this research was to produce a phenomenological text that could offer myself and other environmental educators a greater understanding of the experience of ESEE. This increased awareness will hopefully lead to improving one's overall skills and knowledge as an educator. I hope that this increased ability will enable educators to empower their students to take positive and adequate environmental action.

Nevertheless, it is important to remember that the phenomenological text that I create does not provide a complete answer to the meaning of ESEE but only adds to the conversation.

Van Manen (1997) cautioned,

In some sense meaning questions can never be closed down, they will always remain the subject matter of the conversational relations of lived life, and they will need to be appropriated, in a personal way, by anyone who hopes to benefit from such insight.

(p. 23)

Therefore, the people who read this text will need to draw their own conclusions and take into consideration how the results apply to the unique aspects of their work.

Data Collection

This section describes the procedures that I used to collect my data. I designed and co-facilitated an original workshop, consisting of ESEE practices, for participants who I recruited. I collected two written reflections at the workshop from each participant: one at the beginning and one at the end. I also interviewed four participants and my co-facilitator 2 to 3 weeks after the workshop.

Workshop site. I chose a space for the workshop that was easily accessible and that I perceived would be a comfortable atmosphere. It was an art studio located near to inner-city Calgary. The location was a 10-minute walk from the light rail transit station, and I provided detailed email instructions for participants to find the studio easily. The studio was decorated with many natural objects and had an indoor enclosure with birdlife. I thought that it was a good place to hold an environmental workshop with the presence of nature incorporated into the design.

Workshop design. I created my own workshop, instead of delivering a framework that had already been designed, to have greater control over the participants' experiences. I also wished to improve my skills in designing and facilitating a workshop. Amy Spark, who co-founded Refugia Retreats, an organization that runs similar workshops to the workshop I created for this study, consulted with me in the design process and co-facilitated the workshop. I based the workshop on the practices and concepts from the work of seven professionals, all with diverse backgrounds. I have described many of their frameworks earlier in the literature review. The professionals that I discuss include the following:

- Joanna Macy, PhD, an “eco-philosopher, activist and scholar of Buddhism and systems theory, has an international following thanks to 50 years in movements for civil rights, global justice and ecological sanity” (Macy & Brown, 1998, p. 342).
- Molly Young Brown “combines the Work That Reconnects, ecopsychology and psychosynthesis in her work” (Macy & Brown, 1998, p. 343).
- Mishka Lysack, PhD, has developed a framework for educational practice emerging from a social work perspective that leads people to reconnect to their feelings of biophilia, and kindle personally motivated environmental action (Lysack, 2010).
- Renee Lertzman, PhD, is a psychosocial researcher who teaches psychology and works with environmental organizations as a communications consultant (Lertzman, 2015).
- George Marshall cofounded the Climate Outreach and Information Network (Marshall, 2014).

- Mitchell Thomashow, PhD, is “currently engaged in teaching, writing, and executive consulting, cultivating opportunities and exchanges that transform how people engage with sustainability, ecological learning and the arts” (Thomashow, n.d.).
- Hilary Leighton, PhD is “associate professor and program head for the Master of Arts in Environmental Education and Communication program in the School of Environment and Sustainability” (Royal Roads University, n.d., para. 1) She teaches ecopsychology at the graduate level, is a trained TWTR facilitator, an ecopsychologist and Registered Clinical Counsellor in private practice at True Nature Counselling & Psychotherapy.

I focussed on these seven individuals because, throughout my research, they surfaced as those who have developed practical frameworks, programs, or ideas to carry out ESEE (see Appendix A for the workshop outline).

Participant recruitment. I recruited participants through snowball sampling (Biernacki & Waldorf, 2016) and Facebook posts. I also created an event on the *Eventbrite* platform to share the details of the event. I was not looking for any specific demographic. I assumed that those who wished to partake in a workshop about ESEE were experiencing some emotions about the environment. Six people, including my co-facilitator, of various ages from approximately 25 to 65 attended. Those who responded either emailed me or registered through the Eventbrite page. Upon their inquiry, I sent them the invitation letter (see Appendix B) and research consent form (see Appendix C) informed them that they may be asked to be interviewed 2 to 3 weeks after the workshop.

Written submissions and interviews. I constructed the written submission and interview questions (see Appendix D) based on Seidman's (2013) "Structure for In-Depth, Phenomenological Interviewing" (p. 15). Seidman suggested that the ideal way to interview phenomenologically is to conduct three separate interviews per participant. He suggested, however, that alternative frameworks are possible. Therefore, I substituted the first two interviews with two written submissions: one at the start and the other at the end of the workshop. Part of the reasoning for Seidman's suggestion for a first interview is to create a face-to-face meeting to establish comfort, but I believed that this would be achieved adequately in the workshop. The topics for Seidman's interview series are the following: "establish focussed life history" (p. 17), "details of the experience" (p. 18), and "reflect on the meaning" (p. 18). Therefore, the first written submission questions focussed on the participants' relationship to their emotions about the environment up until the workshop, and the second written submission asked participants about their experience of the workshop. To address Seidman's third interview topic, I asked questions in the interviews that encouraged participants to reflect on the meaning of their experience in the workshop and the experience of their emotions about the environment. For example, the following was an interview question: "Given what you've said so far about your experience before and during the workshop, how do you understand your emotional experience about the environment now?" If the participants were having trouble answering, I would ask, "Is there a moment since the workshop where you experienced emotions about something to do with the environment?" These questions helped to reveal what implications the ESEE workshop may have had on their experiences of their emotions about the environment and the significance that they may have attached to those experiences.

I applied Seidman's (2013) techniques to maintain my integrity as an interviewer. Seidman's advice included the following: "follow up on what the participant says" (p. 81), "explore, don't probe" (p. 83), "listen more, talk less, and ask real questions" (p. 84), "follow up, but don't interrupt" (p. 85), and "tolerate silence" (p. 92). Seidman stated, "Every aspect of the structure, process, and practice of interviewing can be directed toward the goal of minimizing the effect the interviewer and the interviewing situation have on how the participants reconstruct their experience" (p. 26). As a novice interviewer, I applied Seidman's tips to give me foundational approaches to interviewing, which helped me obtain the best data I could.

Data Analysis

I realized early on that there is a "lack of structure in the phenomenological approach" (Flood, 2010, p. 7). As van Manen (2014) explained,

Phenomenology does not let itself be seductively reduced to a methodical schema or an interpretive set of procedures. Indeed, relying on procedural schemas, simplified inquiry models, or a series of descriptive-interpretive steps will unwittingly undermine the inclination for the practitioner of phenomenology to deepen himself or herself in the relevant literature that true research scholarship requires, and thus acquire a more authentic grasp of the project of phenomenological thinking and inquiry. (p. 21)

Therefore, pursuing a phenomenological inquiry required me to gain a significant understanding of it. I was not able to apply a clear set of step-by-step instructions that may be adequate in some other methodologies. By conducting an inquiry into phenomenology, I gained a deeper understanding of the fundamentals of the phenomenological method regardless of my sources or chosen approach. I therefore decided to read different authors' perspectives about phenomenology and data collection and analysis.

Van Manen (1997) was my main support in phenomenology, given the complexity of the method; however, I exposed myself to different perspectives to gain a greater understanding of the fundamental approach. Hycner (1999) described phenomenology as an “investigation of the constituents of a phenomenon while keeping the context of the whole” (p. 161). This explanation helped me to understand that, although I was looking for themes emerging from parts of the text, I had to always keep in mind what that theme described about the overall experience of ESEE. Indeed, van Manen (1997) stated, “In determining the universal or essential quality of a theme our concern is to discover aspects or qualities that make a phenomenon what it is and without which the phenomenon could not be what it is” (p. 107). Putting this into practice, I asked myself if a theme that I derived would likely be relatable to everyone. Flood (2010) further explained, “The researcher’s task is to analyse the intentional experiences of consciousness to perceive how the meaning of a phenomenon is given meaning and to arrive at its essence” (p. 11). In other words, I found the immediate experiences of ESEE from the participants’ perspectives and then tried to find what it was about the experience that resulted in the meaning the participants had attributed to it. From reading several perspectives, I realized that phenomenology did have fundamental approaches that could ground me in my analysis.

Although the phenomenological approach does not instruct any one set way of doing things, van Manen (1997) acknowledged, “It is not entirely wrong to say that phenomenology has a certain *methodos*—a way” (p. 29). Groenewald (2004) also emphasized, “Some guidelines are necessary, especially for novice researchers” (p. 6). Therefore, I conducted my data analysis based on van Manen’s (1997) hermeneutic phenomenological human science methodological approach: thematic analysis.

Thematic analysis. I chose van Manen's (1997) thematic analysis method to analyze my data. A main reason for choosing van Manen's method was his acknowledgement that "hermeneutic phenomenological research is fundamentally a writing activity" (p. 7). Therefore, his approach supported me from when I began collecting data through to writing the phenomenological findings.

Van Manen (1997) stated that thematic analysis refers "to the process of recovering the theme or themes that are embodied and dramatized in the evolving meanings and imagery of the work" (p. 78). Themes are the "experiential structures that make up that experience" (p. 79). He suggested what a theme is, how it comes about, and how it relates to the notion being studied (see Appendix E). These descriptions helped me understand what a theme could be and what it could not be.

After becoming familiar with the characteristics of a phenomenological theme, I began to look for themes in the written submissions and interview transcripts. Van Manen (1997) suggested that three approaches can be used to find phenomenology themes in a text: (a) "the holistic or sensuous approach" (p. 92), (b) "the selective or highlighting approach" (p. 92), and (c) "the detailed or line by line approach" (p. 92). I approached the text holistically by asking, "What sententious phrase may capture the fundamental meaning or main significance of the text as a whole?" (p. 92). For the selective approach, I asked, "What statement(s) or phrase(s) seem particularly essential or revealing about the phenomenon or experience being described?" (p. 92). I followed the detailed approach when I looked at every appropriate sentence or paragraph and asked, "What does this sentence or sentence cluster reveal about the phenomenon or experience being described?" (p. 92). For example, below is an excerpt from one of the interview transcripts:

The biggest part was as I mentioned like feeling like I can always do more, and I have a lot of judgement towards others that I feel do not do enough. And I think that being in the workshop helped me process those things.

The theme that I derived from this text was that human emotions about the environment can surface as judgment toward others and also as guilt that the individual should do more. Another theme that emerged from this text was that experiencing ESEE helps people to process emotional experiences about the environment. In this way, van Manen's (1997) three approaches of thematic analysis helped me capture valuable themes from the data.

Groenewald (2004) helped me further understand the fundamental essence of phenomenology by comparing the similarities and differences between her approach to analysis and van Manen's (1997) approach. Groenewald described a simplified version of Hycner's (1999) explication process, whereby she promotes beginning with "those statements that are seen to illuminate the researched phenomenon are extracted or 'isolated'" (p. 50). This suggestion aligns with van Manen's (1997) instructions to analyze sentence clusters. Groenewald (2004) then suggested, "Clusters of themes are typically formed by grouping units of meaning together" (p. 19). Van Manen (1997) did not have a similar suggestion, but I found Groenewald's (2004) advice helpful. I clumped similar themes together, which created broader categories to organize the data and inform the structure of the text. Groenewald finished summarizing Hycner's (1999) method by stating, "The researcher concludes the explication by writing a composite summary, which must reflect the context or 'horizon' from which the themes emerged" (Groenewald, 2004, p. 21). This advice aligns with van Manen's final step of creating a phenomenological text to convey the findings.

While I was finding themes in the data, I had to be careful to “differentiate between essential themes and themes that are more incidentally related to the phenomenon under study” (van Manen, 1997, p. 106). In other words, I had to ask myself — is the theme I have discovered inherent to the experience of that phenomenon, or is it possibly “historically and culturally determined or shaped” (van Manen, 1997, p. 106)? Van Manen (1997) also asked, “Is this phenomenon still the same if we imaginatively change or delete this theme from the phenomenon?” (p. 107). This question helped me to discover if a theme was really a part of the essence of the phenomenon, instead of something that may have only happened because of specific factors in the workshop.

I studied phenomenological hermeneutics extensively and used my best judgement and intuition to reflect on what would be most valuable to environmental educators. After discovering the themes in the data, I needed to create a phenomenological text to reflect on the meaning of the experiences and convey the results.

Creating phenomenological text. After I gathered phenomenological themes from the data, I created a descriptive text to convey the results in a valuable way to myself and other educators. As van Manen (1997) explained, “Creating a phenomenological text is the object of the research process” (p. 112). I wished to create the best quality phenomenological text I could and, therefore, studied his instructions on how to write phenomenologically. Van Manen called for “language that authentically speaks the world rather than abstractly speaking of it is a language that reverberates the world” (p. 13). He offered paragraphs in his book as examples of phenomenological text, which I used to presents my results. The following is an example:

We commonly say that to be a parent or teacher is to have expectations and hope for a child. But “hope” is only a word, and a word soon becomes overworked, worn out, and forgetful of its original relation to our basic life experience. (van Manen, 1997, p. 96)

Excerpts like this helped me to take the themes that I had gleaned from my transcripts and communicate their meaning and fundamental human experience. I needed to craft a text that was as raw and honest as possible and not simply a distant or observational description. Van Manen (1997) also stated, “A description is a powerful one if it reawakens our basic experience of the phenomenon it describes, and in such a manner that we experience the more foundational grounds of the experience” (p. 122). I used this idea to write my text in a way that anyone could relate to the experience and hopefully evoke a similar emotion within him or herself.

Research Bias

Most of the phenomenological sources that I read acknowledged Husserl’s approach to phenomenology of bracketing (as cited in Flood, 2010), or epoch, as “the ability to suspend, distance ourselves from, or ‘bracket’ our judgements and preconceptions about the nature and essence of experiences in the everyday world” (Schram, 2006, p. 99). The literature appeared split on this topic. Some authors applied the original and strict definition of bracketing in their studies (Flood, 2010; Groenewald, 2004; Schram, 2006). Others believed that the idea of bracketing was problematic and researchers should instead do their best to suspend their bias while acknowledging that they will still apply their assumptions in some way (Leighton, 2014; Robson, 2011; Seidman, 2013; van Manen, 1997). I aligned my orientation with the latter and approached my research with the belief that people create their own realities. Although I tried my best to suspend judgement, I believed that my preconceptions of the nature of ESEE would inevitably be a part of my research. I identified with Leighton’s (2014) approach:

While bracketing off and describing without interpretation is not literally possible, a kind of suspension of belief is important, a suspending of the kinds of everyday judgements of the way things may appear as we open to the world as it is. (p. 46)

Therefore, although I approached my phenomenological research knowing that my perspective will impact the results, I still attempted to be as aware as possible of the influence I would have.

It is my bias that ESEE practices will help the participants to process their emotions and come out of the journey more whole than they were before. Of biases, Seidman (2013) stated, “That is why it is important that the researcher identify his or her interest in the subject and examine it to make sure that the interest is not infused with anger, bias, or prejudice” (p. 117). Therefore, if I found that participants’ experiences were incongruent with my assumptions, I remained open to these perspectives. I tried not to assume that the practices would be helpful or that participants would have an overall positive experience.

An approach that I applied to reduce my research bias was member checking, defined as “returning (either literally or through correspondence, phone, email, etc.) to respondents and presenting to them material such as transcripts, accounts and interpretations you [the researcher] have made” (Robson, 2011, p. 158). To apply the concept of member checking to my study, I sent the workshop participants the themes that I derived from their data and asked if they believed I was accurate in my interpretations. It is possible that I interpreted the participants’ experiences incorrectly and, therefore, answered the research questions incorrectly. I applied member checking to my study because I wished to capture the purest experience from the participants as possible.

Jumping off Firm Ground: Developing Results from My Methodology

In conclusion, gaining comprehensive knowledge of phenomenological hermeneutics gave me the ability to complete my data collection. Understanding my orientation and exploring other possible methods helped me to choose case study and phenomenological hermeneutics confidently. I believe that the fundamental experiences people have about ESEE, and the meanings that they attach to their experiences, offer valuable information to myself and other educators. In this way, environmental educators can grow in awareness of what might be happening for their students and can apply the most appropriate techniques possible. Despite having difficulty coaxing participants to describe their immediate lived experiences, instead of their opinions about the experiences, I still managed to obtain valuable data and rich descriptions.

In the next chapter, I present my findings through phenomenological text. The data I collected were vast, and therefore, my results are extensive.

Chapter 4: Results

In this chapter, I present the results through a phenomenological text created from the essential themes derived from the data. The results focus on the four research questions:

1. What is the experience of emotionally supportive environmental education practices from the perspective of workshop participants?
2. What meaning can people create from their experiences of emotionally supportive environmental education practices?
3. How do these understandings possibly influence behaviour?
4. What are the implications of these findings for my own work as an environmental educator and for the environmental education and communication field?

In addition, much of the data spoke to the question of “what are the participants’ experiences of the environment?” I have added this question as a fifth dimension, as I believe that it is valuable for myself and other environmental educators to increase their understanding of how people relate to nature and the environment in general.

Participants

I believe that there is value in first describing the individual experiences of the participants in my study. Their unique perspectives give an idea of the different types of personalities that an environmental educator may encounter. In this section, I highlight what I found to be unique or key responses to the research questions from each participant. I refer to the participants by names; however, to protect their identities, I use pseudonyms. Each participant related to the environment in a different way and had his or her own unique experiences in the workshop. I begin with Sarah, a woman with a busy life who is grappling with how she can act on her concern for the environment.

Sarah. Sarah expressed that she wants to spend more time in nature, and she viewed this interaction as a foundation for protecting the environment:

Yeah, I mean definitely I would in some way like to be more involved. At even just on the physical level being in nature more. And enjoying it as I can, you know? Just being more outside and feeding the birds and looking at the sunshine and the moon. Yeah, and then you know, maybe I will become like a budding activist in some way, shape, or form.

Sarah infers that a part of her foundation of acting to protect the environment, including impacting political decision-making, is to connect to her fundamental relationship to nature.

In the workshop, Sarah became more aware of her distress about environmental loss and the ways that this distress emerges in her day-to-day life. After the workshop, she expressed, “I find I have more emotional distress than I realized around everyday events that can occur in my life in regard to nature and the environment.” She reflected on how she noticed this distress emerging: “The biggest part was feeling like I can always do more, and I have a lot of judgment toward others that I feel do not do enough.” She said that she feels guilty she is not doing enough and angry at other people who she sees not doing enough. When Sarah intentionally took the time to reflect on her emotions about the environment, she became aware of the distress that she feels. Furthermore, she directs her feelings about environmental loss both inward toward herself as guilt and outward toward others as anger.

After the workshop, Sarah increased awareness of her emotions about the environment and became thoughtful about her actions. She claimed, “I guess I never really had thought intentionally about my emotions in regard to the environment, so I think in this process it gives you more intention and more awareness, and that was helpful.” Sarah’s heightened awareness of her emotions helped her to make more conscious decisions about how she wishes to express and

act on them. She continued, “I found the process helpful because we had an open discussion about the environment, our feelings about the environment, and actions we take to improve the environment.” The structure of the workshop helped Sarah to reflect on what her emotions about the environment meant to her, which in her case, is that she needed to take actions to improve the environment. Like Sarah, Tracy also found that spending time in nature was connected to her emotional journey in regards to the environment.

Tracy. Tracy’s relationship with nature is tied to her mental health and well-being. She said that she felt her time out in nature was a wholistic experience. She stated,

Often, this would mute into a wholistic experience that I can only describe as “being there”, fully present, embedded in what was going on around me. It was in those moments that I noticed animals opening and revealing themselves to me.

In being completely attentive to nature, Tracy noticed the animals were engaging with her. This relationship with nature could be positive for Tracy’s mental well-being. She explained, “I began to recognize the ‘antsy’ feeling, that I called anxiety before, and transferred it into a sign that I needed to get back out there.” She finds that now she craves being fully present in nature. A disconnection to the natural world reveals itself as anxiety for Tracy. Completely immersing herself in the outdoors relieves her anxious feelings.

Tracy provided a great deal of insight about the experience of ESEE in both her written submissions and her participation in the workshop. She noted that silence was a factor to help emotions emerge: “I felt a moment of upwelling grief at the cairn of loss ceremony. I think it happened in the space after people shared, in the silence, good to remember that.” Silence allowed space for emotions to rise to the surface of Tracy’s consciousness. She also described why she struggled with the conflict embedded in the role-playing exercise: “I always find role

playing difficult because it usually involves acting out conflict, which is so hard for me. I am the peacemaker.” Tracy expressed that her sense of identity did not align with engaging in the conflict inherent to the role-playing exercise.

Eesha. Eesha, an engineer, desires to have a relationship with nature, which she knows contributes to her well-being, joy, and connection to others. She described how she is innately motivated to go outside: “I didn’t feel any burden going or any extra effort of going there. My body would take me without thinking about it.” Eesha intrinsically wants to have a relationship with nature, and this connection helps with her mental health:

I felt like I added another dimension to my life by just being outside. Just being connected to nature. And it makes me feel happy, it relaxes me. It just puts things in perspective, and I look at the big picture and it’s a stress reliever.

Being outside, embedded in something bigger than herself, helps Eesha to gain perspective on her problems. Nature has also helped facilitate her relationships with others. She explained,

Nature or the environment connects us all, like appreciating being out there and enjoying it. It pushes me to step outside of my comfort zone and starting to have close relationships with people that I wouldn’t have if I did not put myself out there.

Eesha has a close and positive relationship to the environment, which brings along benefits such as a way to connect with others and relaxation.

Eesha had not thought about environmental loss in an emotional way, and she was impacted by hearing the other people’s stories in the workshop. She stated at the end of the workshop,

The only thing I knew related to the environment was more of the technical aspect of like climate change: how can we reduce carbon emissions? Like you know technology, but I

didn't see the other side of it. The human side of it. How it actually affects people emotionally.

Eesha's experience in the workshop revealed to her the emotional impacts that can result from the loss of the physical environment. She developed this revelation when she heard the other participants sharing their stories, especially Tracy, who had decided to stop flying because of carbon emissions. Eesha explained, "It was a shock to me that Tracy said she would not travel by plane. So that part of the workshop, I feel like it impacted me, to be honest. Like again I am in total respect to her." ESEE can expand a person's perspectives and introduce new possibilities of being. Eesha's participation in the workshop made her aware of the depth to which people can have emotions about the environment and the impact that experience can have on their lives and behaviour.

Eesha's workshop experience gave her the opportunity to hear other people's perspectives on a topic that is not often talked about in everyday conversation. When asked if she thought that these conversations needed to be sparked in some way, she replied, "I think they do. To be honest, I have never discussed the environment with people in an in-depth level as I did in the workshop." Even though she goes on hikes with other outdoor enthusiasts, Eesha does not have these types of conversations with them. She explained,

I never had that conversation with them. I wouldn't claim that it would be different.

Yeah, it would be actually interesting. Maybe to have conversations about nature and the environment and how they are related in other ways than just going for a hike.

Going to the workshop meant that Eesha was able to hear other people's stories about the environment and have space to express her emotions in an intentional way.

As a result of the workshop, Eesha is starting a new journey, which she said will likely change her in some way. She stated, “[The workshop] kind of evolved my relationship and emotions toward the environment. Just thinking about the experience, and I feel like this workshop is a starting place for me.” Indeed, Eesha has stated that her emotional journey in the workshop will lead to taking action. In reference to Tracy not taking a plane, she said, “So definitely that part of the workshop, I would tie it to how I would relate now and think about and seek more ways to learn how I can take care of the environment.” Eesha’s experience reveals how ESEE can lead to people applying the essence of another’s experience to their own lives.

Larry. Larry is distressed over climate change and environmental degradation and deals with his concerns by taking a great deal of action. In his first written submission, he wrote, “The planet I grew up on is gone.” Larry is experiencing great grief over what humans have lost so far on Earth. In the interview, he revealed how his distress pushes him to engage in many environmental activities and explained, “Because it’s too painful. It’s just easier to try and work on solutions. You know?” Larry is uncomfortable feeling his emotions about the environment and does not believe that there is a point expressing them. Therefore, he has decided to cope by focusing on action. He is, however, unsure about the actions that he is taking: “It feels good to take the action, but again in the end, sometimes I’m wondering if I’m doing the right thing. I’m spread thin.” Larry avoids his pain about the environment and focuses his energy toward taking action to prevent ecological loss.

Although Larry is extremely educated about environmental issues and involved in solutions, he struggles to look at his emotions about the environment. After the workshop, he stated, “Dealing with emotions, facing them, expressing them was difficult.” Larry was

uncomfortable having conversations with the other participants about his feelings about environmental loss. He pointed out,

I was getting kind of teary because we were talking about the future—how do you see the future in 50 years and 100 years—and I said there would be 3D printers everywhere, and we'd be growing all our own food and everything. But I don't think in my heart of hearts that's going to happen. There are going to be millions of people starving.

Larry is experiencing anticipatory grief over future environmental and human loss. He stated that he tried to hide these feelings about the environment, but they surfaced as physical tears.

Undoubtedly, people do not want to spread pain to others. However difficult it is to express the reality of environmental loss; emotions find ways to reveal themselves. Although Larry resisted feeling his emotions about the environment, they were strong when he was asked about them.

In the interview, Larry expressed that he wants to learn more about what he experienced in the workshop. Larry emphasized, "I need to learn more about how to grieve." In fact, 9 months after the workshop during a follow-up phone call to confirm the themes I drew from his data, he told me that he had begun a grief course. The course was helpful for coping with his strong feelings about the environment. He had forgotten that he had said he wanted to learn more about grief in the workshop, but it is possible that the experience helped to evolve his relationship with his feelings about environmental loss, which was perhaps a factor in him taking the course. In contrast to Larry, other participants had reflected in greater depth on their emotions about the environment prior to the workshop.

Andrea. Andrea has vastly reflected on both her joyful and difficult emotions about the environment. She wrote,

Generally, my relationship to the environment or nature is one of awe. When feeling overwhelmed, I find it helpful to go for a walk—even in the back alleys or sit under a group of trees in a little city park.

Andrea finds that spending time in nature is important to her well-being and helpful in managing her mental health. Her awe, however, can lead to pain: “Well, for me, the environmental crisis gets heavy.” Andrea has a complex and multifaceted relationship to the environment resulting in both positive and negative emotions: for example, both awe and despair.

Being a mother adds another dimension to Andrea’s emotional experience about the environment. She expressed that having children during environmental loss is complex. She observed how her emotions about the environment changed when she became a parent:

Then it wasn’t just about me and my lifetime and the environment; it became a bigger thing, right? It became, you know, my kid’s lifetimes also and possibly my kid’s kid’s lifetimes. I guess . . . in terms of the emotions that got stirred up it was definitely a great grief, and then also an anger in a way that you know, now I have to raise these kids. I don’t have time to be fighting, and you know I don’t have time to be angry at everyone.

Andrea described what it is like to raise a child in today’s environmental situation. She is experiencing anticipatory grief for the world that her children will live in and expressing that pain as anger toward humanity. She also is quite frustrated that it is not in her power or capacity to change it. Parents have the task to create a sustainable environment for their children, but with global environmental loss, that is now beyond their control. Like Sarah, Andrea’s life is busy as a parent; having to focus on her children’s immediate needs is in conflict with trying to protect the natural resources that they will need in the future. Indeed, people think that there is not enough time in a day to address the environmental crisis, and the task is in conflict with the

demands of day-to-day life and the desire to live a normal life. Ultimately, Andrea stated, “Your task as a mother now is almost an impossible one,” revealing her feelings of hopelessness and powerlessness.

Andrea found that the workshop helped her to check in and validate her emotional journey about the environment, even if she may not have learned anything new. She explained, “I didn’t feel any strong emotions nor any numbing. I felt in many ways like the work I am doing is enough, and I am on the right path.” Although she did not become aware of new emotions, Andrea still found the workshop helpful to know that she was not likely repressing any feelings.

Andrea also stated that the artistic exercises validated her identity as an artist and her place in taking action:

In many ways the artists/poets are the new prophets/mythmakers and play a very important role in our times. I can stop feeling guilty about not participating in the marches, rallies/fights that are better left to different personality types. This would burn me out fast. I need to do what I love.

ESEE helped Andrea affirm her identity and how she contributes as an artist to the collective movement protecting the environment. In particular, the song that the workshop group listened to, which reflected environmental loss in musical form, helped to validate that she could apply her preexisting artistic talents to the environmental protection movement.

In contrast to Larry, Andrea has some peace with doing what she can and is best at. Andrea concluded at the end of her interview, “I guess it’s just something you have to hold and know that nobody really knows the right answer.” She stated that a person must find a way to live with the awareness of environmental loss, accepting its complexity and lack of clear solutions.

Vanessa. Vanessa has complex emotions about the environment, which have been shaped by her life experiences. In the interview, she remarked that nature gives her a “sense of freedom, independence, safety, and security,” but also, she claimed,

My relationship to the environment is rocky sometimes. I have so much pressure to love it, internally and externally, as an environmentalist. And I do love it . . . Except, that profound love often makes me feel guilty when I’m in nature and I can’t relax or enjoy it.

Like all of the participants, Vanessa experiences positive emotions about nature, but the threats against it also cause her difficult emotions.

Although Vanessa found aspects of the workshop to be helpful, at other times, she struggled. She described one scenario,

Someone else mentioned that “small steps can make a big difference,” and in my brain, I kept screaming, no! We need big actions to change this world. As hypocritical as it sounds, sometimes I don’t think small actions are enough. We need to be doing more, so I am left wrestling with this anger and guilt.

The contrasts between participants’ perspectives in ESEE can trigger emotion and distress.

Given that people have an innate urge to follow social norms, this distress may not be acknowledged or expressed at the time. Vanessa’s quotation revealed that she had to regulate her emotions in the presence of others.

Vanessa also expressed that many of the exercises did not move her into any place of feeling. She stated,

I think what I sort of realized that day is my emotions about the environment are felt most strongly when I’m in the environment. When I’m sitting in a workshop, I just feel dull. I think that’s because I’m not in the environment; I’m removed.

Vanessa highlights how it is difficult to facilitate people to connect to their emotions about a topic, especially if they are not having that experience in the present moment. When asked if any of the exercises did bring her into a place of feeling, she responded, “Definitely the music or the poem that we listened to. I think for me music is such a trigger of emotion.” This quotation shows that art was one of the most effective ways for Vanessa to connect to her emotional self about the environment. Therefore, if she cannot be in nature, art is a good emotionally supportive environmental practice for Vanessa, as it is a way that she can bring awareness to her feelings and begin to process them.

Combined Results

After looking at each participant’s experience, I combined the themes that I gathered to see the overall collective experience. I have decided to acknowledge the experience of nature, first for context of participants’ previous familiarities with their experience of the environment, and then move into the three main research areas: (a) the experience of emotionally supportive environmental education, (b) the meaning of emotionally supportive environmental education, and (c) the results of emotionally supportive environmental education. I continue referencing the participants by their pseudonyms to create a sense of their personas for the reader. Tables 1, 2, 3, and 4 summarize the categories of themes that emerged about each topic.

Experiencing the environment. This section describes the participants’ lived experiences of the environment. All of the participants spoke of their relationship to nature and the environment overall before they began to describe their experiences in the ESEE workshop. The section is divided by the experiences of the environment that were emphasized by the participants, including the experience of nature and the outdoors, the experience of

environmental loss, the experience of acting to protect the environment, and the experience of the environment as a parent.

The experience of nature and the outdoors. The participants experienced a variety of emotions when they were in nature. Eesha stated when she is immersed in the outdoors,

It's just an amazing feeling like when I'm at the top of the mountain, and at the summit or after a hike. The sky is so awesome, and the clouds are amazing and you see everything below you: the rivers and the towns and the landscape, the flowers. Yeah, it's like everything.

Indeed, all participants reported feelings of awe and of being stunned by nature. They described additional emotions or sensations in nature's presence including fun, happiness, and relaxation.

The participants also experienced uncomfortable feelings about nature such as fear. Vanessa described this paradox well:

I was always trying to wrestle with these emotions of being scared of the water, like scared of what's beneath me, all these fish, and then finding some peace with that as well; so again, this mixture of emotions, feeling at peace and remembering there are fish around me.

Like Vanessa, many of the other workshop participants described contrasting feelings in nature, for example, the sense of independence and freedom but also of safety and security.

The theme of cultivating a personal relationship to nature also arose among all the workshop attendees. For example, Tracy mentioned, "While in these natural places, I tried to focus on being fully present with all five senses to my surroundings. As I connected more deeply, I noticed I started to 'crave' more connection." Nature engages all five senses, and when people stop to allow this, they can feel more connected to the biosphere. Eesha thought that

interacting with nature was how she connected to her relationship with the environment. She said, “I feel connected to the environment when I do outdoors activities: hiking, rock climbing, skiing.” Each participant had a special relationship to nature and personal ways that he or she engaged with it. All of the participants have a sense of belonging in the world when they spent time in or engaged with nature.

Transcendent experiences can be felt in the presence of nature. Eesha stated that she “added another dimension” to her life by “just being connected to nature.” Spending time with nature can remind us that we are a part of something bigger than ourselves and helps us connect to a sense of place in the biosphere. Andrea expressed that bringing nature into her home was “a way of kind of marking time and connecting to the external world, instead of being too stuck in my internal world.” Incorporating nature into our lives allows us, as humans, to become aware of our being within the larger system of life. This unique perspective that nature sparks can support mental health and put problems into a greater perspective.

The data showed a connection between the relationship to nature and the mental health of the participants. Andrea stated, “I have had difficult times living in cities like Toronto or Oshawa where little sanctuaries of nature were harder to find.” When people are not exposed to nature, it impacts other areas of their lives. Eesha stated that “[nature] just synchronizes my life” and that when she “went through a little bit of depression and struggle with anxiety,” she “wanted to be out there [in nature] and it has helped.” Nature can feel like a nonjudgmental and unconditional friend, and we can experience anxiety when we do not fulfill the very human need to spend quality time with nature. As living beings of the planet, humans require time in natural environments for their mental well-being, because we too are nature.

The participants also cultivated a connection to other humans when they spent time in nature. Vanessa said, “Thinking about my relationship with my partner we really bonded, and continue to bond, in times in nature.” Humanity’s shared link to nature facilitates bonding with friends and loved ones. Eesha stated, “So, you all go out to bike, for example, to do something outdoorsy [that] we have in common; and so nature or the environment connects us all.” This love is often built through life experiences, and as Tracy noted, nature is a “common thread” that people share.

Several participants spoke of how they developed their experiences or perspectives of nature. Indeed, family and childhood experiences, such as in school and clubs, can be a factor in the experiences that foster emotions people have about the environment. Vanessa reflected that what happens to people in their youth can impact how much they care about the environment in adulthood:

It just kind of goes to show that those childhood experiences are so important for framing positive experiences with the environment, but then I really think about what are other experiences that kind of shaped where I am today, and how I haven’t thought about that story in a while, but it probably did shape me in a lot of ways.

Past experiences, especially those in childhood, can contribute to the relationship people have with the environment.

Children can experience nature differently than adults. Vanessa explained, “To my childhood brain, the park was limitless. I still have that fantasy, as an adult. Except my annoying adult brain likes to kick in and ruin it by being unpractical.” Without a doubt, children do not have the same perspective or experience as adults and, therefore, can see natural environments in a different way.

The experience of environmental loss. The loss of nature affects humans psychologically. Most of the experiences experienced painful emotions. Andrea expressed, “Well, for me, the environmental crisis gets heavy,” whereas Larry said that ecological loss is “shocking and depressing at the same time.” Damage to the earth and loss of other species can evoke a deep sadness in humans. Larry explained,

When I found out about climate change, the more I learned the scarier it became, and deep issues and some really deep concerns you know and so it’s been like that, it has actually been getting worse. It kind of fluctuates.

Andrea’s and Larry’s experiences in the workshop illustrate the psychological depths and fluxes that can be felt about environmental loss.

Despair and other painful emotions about the harm to nature can block a person’s ability to enjoy it. Vanessa described what often happens to her emotions when she goes outdoors:

It’s almost like the underlying positive emotions are still there, since they are masked or covered up by all of these negative emotions. A more physical or tangible expression of this is every time I go for a hike, I get this sense that I’m really happy to be there, and I’m really happy to be looking out at the mountains, but then there’s also this anxiety.

Vanessa has trouble enjoying nature because when she acknowledges her love for it, she is also reminded of its loss. The participants also revealed that they can have both positive and negative emotions about the environment.

Many parts of the earth have died, and to experience emotions about environmental loss is to experience both grief for the past and sometimes, anticipatory grief for the future. Larry stated, “It’s grief. I kind of like the old place.” It is natural to feel longing for the natural areas and rich biodiversity that existed more readily in past decades. People miss what is gone, but

they can also worry about the future. Larry commented, “I feel sorry for the other generations coming up,” which reveals that he knows that humanity will lose ecological stability in the future, and he is experiencing grief in anticipation of these events. Emotions about environmental loss can be complex because it is an ongoing and long-term degradation.

When several of the participants considered environmental loss, they experienced uncertainty. These participants are fearful for the future and worried about their own survival. As Larry shared, “I have food for my family for probably 3 months.” Larry does not know what to expect with ecological loss, so he prepares as much as he can. He tries to obtain some sense of control in an uncertain future and is also suspicious toward the social systems created to protect society.

Environmental issues can also compound on personal issues, and it can be difficult to cope. Sarah explained, “Well, I think it’s because I’m dealing with so many of my own personal emotions that the bigger picture becomes more overwhelming.” Sarah experienced environmental issues that can paralyze or numb.

The participants alluded to feelings of hopelessness and powerlessness about their perceived or real lack of influence on environmental problems. Sometimes the participants thought that few options exist. In her written submission, Sarah remarked, “I’m reducing energy as much as I can to a point. I just kind of surrender how much power I have.”

The experience of acting to protect the environment. The participants’ love for nature and worry over losing it pushed them to want to protect it. Eesha stated, “It’s given us so much, so the least we can do is take care of it.” Indeed, all of the participants were grateful for nature’s gifts, which caused them to feel responsible for its protection.

Environmental issues can sometimes evoke a sense of urgency to act. Vanessa stated,

Once I started learning about all the things that can go wrong with the environment, it was restlessness in a sense like I just have to be working faster, harder and longer or like I'm not working fast enough, you know? To preserve this environment.

Larry expressed a similar sentiment: "I never feel like I'm doing enough. I just feel I do not have time to do things." Urgency and limited time were pressures that Andrea, Vanessa, and Larry all said that they felt when they experienced difficult emotions about the environment.

Human degradation of the environment also inherently causes people to feel a sense of guilt around their actions. Sarah expressed, "Emotionally I feel guilt at times that I do not do enough or could do more." Engaging in actions that cause a negative impact to the planet evokes feelings of guilt. As Larry emphasized earlier, he felt especially guilty passing down the consequences of human-caused environment degradation to the next generation.

Emotions about the environment can arise indirectly in behaviour and in the way that we relate to others. Referring to her habit of recycling, Sarah stated, "I do get emotionally upset when I see others not doing the same." Sarah's worry about the environment showed up as judgment toward others. When people view others as not worried about the environment, they can get angry and, as Sarah expressed, she was "frustrated when the sense of urgency wasn't there." People may experience secondary emotions sparked by their distress and urgency about environmental loss but may not realize it. Intense feelings about the environment can affect behaviour in reactive ways, such as speaking, or acting, out.

Environmentalists can feel like they must say something. Andrea reflected on this urge in her past: "The two sort of delusions that were a part of my crisis was, one, it was the end of the world, and, two, I was a prophet." When we are aware of environmental problems, we can experience a sense of urgency and want to alert others of the danger to humanity and the planet.

Unfortunately, this can be met with surprising responses. To speak out against the cultural norm or current system is to risk being attacked. When concern about something is believed by others to be exaggerated, people can feel as Vanessa did, that it is “an invalidation of [her] emotions.” The urge to speak out about a threat to humanity can be strong, yet it can be met with backlash which can cause further emotional pain. When concerns are brought up, some people might feel that they need to justify themselves. This contrast in opinions can cause difficulty in relationships.

Some people can experience burn out from taking environmental action and need a break, but this pause can help them to take more action later. Andrea explained,

I think for the past year or so I've gotten away from reading about the environment at home because I was really sensing burning out, and I could not [participate in activism] anymore; but I think I started to kind of return to that again. I think just the workshop kind of sparked me. I think I'm ready to tackle some of these thoughts again.

At times, rest may be necessary to maintain emotional stability and environmental action in the long term.

When people take action to protect the environment, they can also experience increased positive feelings, even in a busy life where actions that take a lot of time or effort may not be possible. Sarah finds that she is able to take small actions in her busy life that help her cope with environmental loss. Near the end of the interview, Sarah revealed,

I think in some ways I'm more at peace, I don't know, because I know that even the small steps that I take can make a difference. That's where I am in my life right now. There's so much going on, I can only take one day at a time.

Even though Sarah leads a busy life, she can still fit in small environmental actions, and this calms her distress about environmental problems. Taking some sort of action was important to all of the participants.

A parent's perspective. Two of the workshop participants who were parents wanted their children to have similar experiences in nature that they had growing up. Some people wish to pass onto their children their feelings of oneness and belonging to the planet. Andrea said, "I see my boys playing in the trees and I hope they grow up with this same awe and love for natural spaces." Some parents also wish for their children to feel the same way toward nature as they do. Sarah explained, "I am glad that as a mother that I have even just a little bit of knowledge and that I can encourage those practices in them." Protection of the environment may be an instinctual thing to pass down to children, because parents know their children need a healthy environment for a high-quality of life.

When children are young and just beginning to discover and explore nature, adults feel a need to protect them from world issues or threats. Andrea explained, "I need to keep these kids in a fairly safe container so they can establish themselves and then they can go out into the world." A few participants believe, however, that today's children have different emotions about the environment than children had a generation ago. Some children today do not experience the ignorance of environmental loss for as long as their parents did.

Sarah also finds meaning in the fact that her actions may influence her children and ultimately prepare them for the future. Sarah explained, "Well, I want them to feel it's an important thing to protect and to be stewards of the environment." It is important for Sarah to act because she wants to pass on this motivation to her children. When parents take action to protect the environment, they may influence their children to do the same. This influence might

ultimately help their children to work toward sustaining the earth upon which they need to live.

Table 1 summarizes the themes presented within this section.

Table 1. *Experiences of the Environment*

Phenomenon	Essential Themes
The experience of nature and the outdoors	<ul style="list-style-type: none"> • Nature can evoke love and awe. • People can experience play, fun, happiness, relaxation, fear, independence, freedom, safety, and security in nature. • Nature can draw humans into the present moment. • Nature can provide a sense of belonging. • Transcendent experiences can be felt in the presence of nature. • People require time in natural environments for their mental well-being. • Spending time in nature is to experience something bigger than being human. • Some people yearn to have a relationship with nature. • Nature facilitates bonding with friends, family and community. • Experiences in people's childhood, and education, can shape identity toward nature in adulthood. • Children mostly experience nature differently than adults.
The experience of environmental loss	<ul style="list-style-type: none"> • The loss of nature can affect humans psychologically. • People's despair can sometimes block their ability to enjoy nature. • Damage to the earth, which risks the future of the human species, can result in despair and grief. • Environmental uncertainty can evoke worry about personal survival. • Environmental issues can compound on personal ones. • Some people can have feelings of hopelessness and powerlessness about the environment. • Some people's emotions about the environment can fluctuate. • Some people's emotions about the environment are complex and paradoxical.
The experience of acting to protect the environment	<ul style="list-style-type: none"> • Some people feel responsible to protect nature. • Some people are grateful for nature's gifts. • Environmental issues can evoke a sense of urgency to act. • Human degradation of the environment can evoke guilt. • Some people feel they do not have enough time to take the action they need to take. • It is difficult to know what actions to take. • Some people's emotions about the environment can show up indirectly in their behaviour and relationships. • Some environmentalists can feel like they must speak out. • To speak out is to risk being ridiculed. • Taking care of the environment can cause distance in people's close relationships. • Taking action can help to cope with emotions about environmental issues.
The experience of the environment as a parent	<ul style="list-style-type: none"> • Some people wish to give their children the similar experiences in nature they had as children. • Some people wish to pass down stewardship to the environment to their children to build their resiliency in the future. • Some people feel the need to protect children from the reality of environmental loss. • Having children can expand the time people care about the environment. • To experience ecological loss with children means that some people will experience grief and anger.

The experience of emotionally supportive environmental education. This section describes the lived experiences of ESEE exercises from the perspective of the workshop participants in this study. I describe the experience of ESEE overall, the experience of specific ESEE exercises, the experience of a group dynamic in ESEE, the experience of a safe space in ESEE, and the experience of an ongoing ESEE practice.

The experience of ESEE overall. ESEE helped the workshop participants to intentionally look at their emotions about the environment. For example, Eesha came to the workshop and remarked, “I’ve never thought about the environment in an emotional kind of way.” Indeed, people may not think about their emotions about the environment in their day-to-day lives. Sarah remarked, “I find I have more emotional distress than I realized around everyday events that can occur in my life in regard to nature and the environment.” When people allow themselves to feel their emotions about the environment, they may realize they that have stronger feelings than they thought. ESEE makes space for participants to consider why people feel emotions about the environment. Vanessa thought,

I think this workshop, as well as my own personal work over the past couple of years, has really tried to tease out those emotions a bit more, so it is like, okay, where is this anxiety coming from? Where is this restlessness coming from? And I think another big one is guilt.

ESEE helps people to cultivate an understanding of their emotions and to consider how those emotions may be influencing their behaviours.

ESEE can help to navigate emotions about the environment. Sarah remarked, “The biggest part was feeling like I can always do more, and I have a lot of judgment toward others that I feel don’t do enough. I think that being in the workshop helped me process those things.”

ESEE helped Sarah reflect on her emotions and work through them. Andrea also explained, “I think taking intentional time to think about emotions or finding a name for those emotions is helpful, and I think the workshop was really good for that.” A part of the process of ESEE is to allow emotions to come into awareness.

To process emotions about the environment is to not suppress or resist them. Vanessa explained, “Try to not fight those emotions, but just sit with them for a while. It’s okay to feel guilty, upset, and a bit anxious; but don’t try to shove them aside, but just really sit with them.” Allowing the expression of emotions requires the ability to accept the experience of feeling them in the moment.

When people process and acknowledge their emotions about the environment, the experience of that feeling evolves in that moment. Tracy observed, “When we did the go around, the little ritual, where we just spoke what we were grieving. Yeah, I think that it’s just nice to speak it. Kind of let it pass through you.” Simply the act of naming and talking about an emotion can help it to pass; consequently, the experience of the emotion does not last forever.

However insightful it can be to reflect on emotions, it can also be challenging. As Larry shared, “Dealing with emotions, facing them, expressing them was difficult” or, as Sarah explained, “I have a hard time putting my thoughts into words for you.” Environmental educators might find that sometimes participants will struggle with expressing their emotions or may not even be able to put words to their feelings. For some people, their emotions are too uncomfortable to face.

People may experience depression when the future is uncertain. Larry explained, “Well, it is kind of, I try not to go there because it’s just too uncomfortable. But when I do, I get kind of

down. Kind of depressed, yeah. So, it is a tough one.” Some students of ESEE can experience strong difficult emotions when they are asked to reflect on environmental loss.

Emotions about the environment can be connected to other treasured things in people’s lives, and at times, experiencing ESEE can surpass environmental topics. Eesha described,

The moment where we stood up in front of the table, and everyone shared something they were grieving, or lost, related to the environment. It somehow, like, transcended to something, like, way above that. I thought that was very powerful. Even though we were focusing on the environment, it also made us think about other personal things.

Emotions about the environment can also connect to feelings about loved ones and other personal topics.

ESEE can illuminate the complexity, conflicts, and compromises that may arise as a result of caring about the environment and taking action to protect it. Eesha stated, “You know you want to live to your beliefs and principles, but at the same time, your loved ones are not so on board with you, so there’s this struggle.” Caring about the environment often conflicts with other priority areas in people’s lives because almost everything they do connects with nature in some way.

The experience of specific ESEE exercises. ESEE requires a multipronged approach. Vanessa suggested, “Maybe these practices warrant having a toolkit for either multiple ways that you can adapt to your emotions, and also realizing what worked for you today might not work for you tomorrow.” Depending on the circumstances, people may benefit from different ways to process their emotions about the environment at different times. For example, one day an individual may need to write about their feelings, and on another day, he or she may need to talk

to a friend. More than one way exists to process emotions about the environment, and effective ESEE requires a varied approach.

An example of an impactful ESEE exercise is to help people connect to their fundamental relationship to the environment by reflecting on their childhood. Considering childhood places in nature reconnects people to the reasons that they care about the earth, as Andrea explained: “It brought me back to why I love what I love. You know?” When people reflect on their fundamental relationship to nature, they can re-evaluate the reasons why they act to protect it. Reflection is also a way that they can experience nature without being overwhelmed by negative feelings. After reflecting in this way during the workshop, Sarah said, “I just felt really at peace, and it just brings back all those feelings of joy that you have as a child. You know, joy and being carefree.” ESEE practices concerning childhood relationships to nature create a reconnection to the fundamental bond that people have with the earth.

An awareness and understanding of existing frameworks in psychology can help people navigate their feelings about environmental loss. Andrea expressed, “Ecopsychology and Joanna Macy’s work, that really helped me, and that draws a lot from like the Buddhist psychology and, The Hero’s Journey, Joseph Campbell, and depth psychology.” Vanessa also remarked, “I want to learn more and think more about ecological identity,” a theory the participants learned about in the workshop. Pre-existing frameworks, or theories, whether they were developed for the environment or not, can give people a kind of map to help navigate feelings about environmental loss and action.

Another way to access people’s emotional selves is through visual, audio, or physical exercises. Visual and physical environmental education exercises can impact people on more levels than just cognitive. For example, Eesha stated,

The visual component of watching people moving from one side of the room to the other was powerful to see how people's opinions shifted from one statement to another. It was more impactful than hearing people say whether or not they agree with the statements.

Exercises that allow people to understand information in physical or visual ways can impact them in a unique way and can, therefore, better help to retain or process information.

Poems and meditation evoked a great deal of reflection from the participants in the workshop. Andrea explained, "The poetry and the guided meditation . . . yeah, like I think that's all kind of part of trying to figure out what's going on inside." Music or art can help people move from the intellectual into a place of feeling and processing of their emotions.

Individual, personal activities can help to process emotions about the environment too, such as meditation, writing, reading, or quiet time. Andrea stated, "I think it requires some kind of, you know, work right? Meditation time, reading, I don't know. Quiet time or processing time. Reflecting time." It can be helpful to take time alone to reflect about our relationships to the environment, as this helps us process our emotions in ways which cannot be achieved through discussion with others. Reflective prompts and free writing are some ways to stimulate reflection in environmental education. Andrea also said that "the writing, the having a question and writing on it as a practice to kind of work through the confusions and those emotions." Writing was beneficial to unpack and process emotions in a private way for her. Another way that emotions can surface is when they are given enough time to do so in a safe environment.

Silence and space in an environmental education practice allows the time for individuals to turn inward and have deeper emotions come to the surface. In her written submission after the workshop, Tracy noticed her own grief "in the space after people shared, in the silence." She also stated it was "good to remember that." Silence can allow time for participants to think about the

exercises and for emotions to be completely felt. Connecting to the external, however, is just as important as the internal.

Rituals can connect people to nature and the external world. Andrea's ritual of bringing nature into her home to mark the seasons is impactful to her as "a way of marking time and connecting to the external, instead of being too stuck in my internal world." It is important for participants to feel grounded—in the present moment—when they are processing their emotions about the environment; gratitude or small rituals can help them do this and can offer a way to balance connecting the internal and external worlds.

Each participant had unique experiences. Some exercises worked well for certain participants, whereas they were ineffective for others. Role-playing, for example, was mentioned by both Sarah and Tracy to be uncomfortable. Sarah said, "I found the role-playing exercise difficult to get into in the time we had." Larry enjoyed it, however, and exclaimed, "The role play was fun!" Exercises can feel different for everyone. Even for one person, the experience of practices can differ from day to day. Vanessa noted, "Yeah . . . it makes me realize different practices often work some days, and then don't work others." People may experience different results from a practice, depending on the circumstances. Engaging with others, however, was an important aspect of all participants' journeys into their emotions about the environment.

The experience of a group dynamic in ESEE. In ESEE, people learn from one another and are impacted emotionally by others. It should be noted, group interaction is helpful to fully process emotions about the environment. In her interview, Andrea expressed, "I think it's important for me, and probably everyone, to meet in intimate group settings. To be able to have that experience." The process of verbalizing and expressing thoughts and feelings about the

environment to others can be, for some people, a necessary component of emotional support for the environment.

Many of the participants said that they felt less alone in their emotions about the environment by sharing their experiences with others. Andrea explained, “It was the act of putting it out there and hearing everyone say, ‘we hear you.’ I felt that that was validating, so I was no longer holding so much inside myself.” Indeed, Andrea stated that her ecological grief “became more of the group’s” experience of grief. Connecting with others over a difficult topic can make it feel less of a burden. Eesha also touched on this notion that the group process aided her grief. Eesha reported, “We all feel grief toward this, so you’re not alone with it. It’s not all on you.” Sharing ecological grief with others can help people to feel that they are not alone in the struggle to save the environment or grieve an ecological loss.

People can also become more aware of and can connect to their own emotions by witnessing the emotions of others. Tracy stated, “I felt a moment of upwelling grief at the Cairn of Loss ceremony. I think it happened in the space after people shared.” Most participants could relate to the experiences of others.

On the other hand, it can be difficult for people to express the true extent of their emotions when they are around others. An example is when Larry admitted:

I said there would be 3D printers everywhere and we’d be growing all our own food and everything, but I don’t think in my heart of hearts, I don’t think that’s going to happen, there are going to be millions of people starving.

People may not wish to be completely truthful with others in a group setting because they think that their perspective is negative, or they do not feel comfortable expressing the extent of their emotions. Vanessa elaborated on Larry’s experience:

Although I knew a lot of the people in the room, it still felt like I had to keep my emotions regulated in a sense. I don't think that's an issue with the workshop; I think that's anything. We're constantly regulating our emotions.

It is not easy to express emotions among others, and people may not fully connect to their pain until after the workshop is over. Some may experience the full extent of their emotions about environmental loss when they are alone. Vanessa shared,

It's almost like when you lose a person, I found I grieve the most myself. I find when I am with other people, it is not grief that I am feeling. It is mutual sadness or mourning. It is actual grief when I am by myself.

People often feel most comfortable to show all their emotions or to express their emotions outwardly at home. Of course, everyone will have different experiences in environmental education.

Sharing ESEE can be meaningful, despite often resulting in discomfort. By hearing other people's pain about the environment, Larry said that he felt less alone in his own grief. He observed, "I guess the awareness of going through the same thing with other people, so you are sharing that, so you are not alone." He realized the inherent value in processing his emotions with others in the workshop.

Sharing emotions about the environment can also leave a person feeling vulnerable. Eesha said that she felt some shame after the workshop and stated, "I felt that I was imposing my opinions sometimes about certain topics related to the environment. I apologize about that." Sometimes, social norms and tensions can arise when people are talking about sensitive topics.

Participants can also feel nervous about going to an ESEE workshop. Eesha said that she felt "worried not having enough knowledge or experience in the topic." Group meetings with

strangers can be stressful at first. Participants can make assumptions about other participants and their relationships to the environment. For example, Vanessa's thought process in the workshop at first was, "I don't know their relationship to the environment, and they don't really know mine." When people come together as strangers to talk about polarizing or political topics, they can often create stories about what others are like.

The experience of a safe space in ESEE. Feeling safe is important to being able to express and process emotions in a group. Andrea defined safe space in the following way: "Where emotions come up and they're released; they are not expressed, they are not ignored, that is how I feel. That kind of safe group space where emotions can be processed and moved through." Feelings of safety can allow for a full spectrum of emotions to be expressed, acknowledged, and accepted. A peer-to-peer learning environment also helped participants to feel safe expressing their emotions. Eesha stated, "I didn't feel like a bunch of experts telling me about what I'm supposed to do." In addition, agreements that are established at the beginning of a session can contribute to a nonjudgmental atmosphere. Sarah remarked, "I do feel the agreements at the beginning helped. It set the precedent for the day to be a safe place to openly discuss our thoughts and feelings." A safe space allows for spontaneity and the freedom to express thoughts and emotions; therefore, creating a safe space is critical in ESEE.

Even small touches can affect how comfortable people feel in a space. Impacted by the atmosphere of the workshop, Tracy stated,

The lovely food and setting were amazing. Great choices. The location was magical and inspiring because such beauty was being created from found/second-hand recycled materials. Very juicy! I loved having the birds witnessing our work. It was great to have the connection to nature nearby.

Food, location, and access to nature all affect how participants in a learning environment feel, which impacts their engagement during ESEE.

The experience of an ongoing ESEE practice. Experiencing ESEE practices is one part of a larger and evolving relationship to the environment for these participants. A continuous practice to support people's emotions in an ongoing way about the environment seems necessary. Andrea said, "It was continuing to maintain my own practice," which helped her to manage her emotions about the environment.

When people follow their instincts about which ESEE practice to do, they can more easily manage their emotions about the environment. Vanessa described her experience: "In the past sometimes, I've done the Cairn of Mourning, and it's really impacted me. But that day, it didn't do much for me; while drawing out that map tree impacted me a lot that day." An ongoing practice needs to be flexible and fit one's personality and needs at the time in order to become a lasting practice.

An important part of fostering mental health in regard to the environment can be taking breaks from a preoccupation with the environmental crisis. We cannot feel and acknowledge our full emotions about the environment all of the time. Indeed, taking breaks can be a part of sustaining environmental action in the long term. We also need to remain grounded in some way—in the present moment and in gratitude; spending time with others, performing rituals, and being outdoors.

ESEE can have a lasting effect in people's lives. Vanessa expressed in the interview that she took concepts away from the workshop that could help her later on. Vanessa stated,

My emotions about the environment on the day [of the workshop] were not that intense either way—not to say that the tools that we learned won’t help me later. I’m also a slow processor, so I like taking things away.

This reveals that even though she did not feel a difference in her emotions about the environment on the day of the workshop, she took away tools that can support her emotional journey overall.

Experiencing ESEE can bring up difficult emotions that may remain unresolved even after the exercises. Vanessa wrote in her submission after the workshop, “I am left wrestling with this anger and guilt.” It can sometimes take a while to fully understand what an experience means in someone’s life, and some participants may still be processing exercises long after the workshop. In addition, not every experience of environmental education is positive. To Vanessa, ESEE meant experiencing difficult emotions and highlighting conflicts. Table 2 summarizes the phenomenological themes that I discovered in the data about the experience of ESEE.

Table 2

The Experience of Emotionally Supportive Environmental Education

Phenomenon	Essential Themes
The experience of ESEE overall	<ul style="list-style-type: none"> • ESEE can help people intentionally bring awareness to their emotions about the environment. • ESEE can help people understand why they feel certain emotions about the environment. • ESEE can help to navigate emotions about the environment. • To process emotions about the environment is to not push down or resist them. • When people feel and acknowledge their emotions about the environment, the feelings can move through them. • However insightful it can be to reflect on emotions, it can also be challenging. • It is possible to experience depression when the future is uncertain. • Emotions about the environment can be connected to other treasured things in people’s lives, and at times, experiencing ESEE can surpass environmental topics. • ESEE can illuminate the complexity, conflicts and trade-offs of caring about the environment and taking action to protect it.

Table 2 (continued)

Phenomenon	Essential Themes
The experience of specific ESEE exercises	<ul style="list-style-type: none"> • ESEE requires a multi-pronged approach. • Exercises where people reflect on their childhood help create a reconnection to their fundamental relationship to nature. • Being aware of existing frameworks or understanding psychology can help people navigate their feelings about environmental loss. • Another way to access people's emotional selves is through visual, audio or physical exercises. • Poems and meditation evoked a great deal of reflection from the participants in the workshop. • People often require some time alone to process their emotions about the environment, such as meditation, writing, reading or quiet time. • Silence and space in environmental education practices allow the time for individuals to turn inward and allow deeper emotions to come to the surface. • Rituals can connect people to nature and the external world. • Exercises can never be experienced the same way each time by a participant or the same way by every participant.
The experience of a group dynamic in ESEE	<ul style="list-style-type: none"> • In ESEE, people can learn from one another and can be impacted emotionally by others. • Many of the participants felt less alone in their emotions about the environment by sharing their experiences with others. • People can become aware of their own emotions by seeing them in others. • It can be difficult for people to express the true extent of their emotions around others. • People can sometimes experience the full extent of their emotions about environmental loss when they are alone. • Despite often resulting in discomfort, ESEE is still meaningful. • Interacting with others about environmental emotions can be vulnerable work.
The experience of a safe space in ESEE	<ul style="list-style-type: none"> • Feeling safe is important to being able to express and process emotions in a group. • Physical surroundings affect how comfortable people feel in a space.
The experience of an ongoing ESEE practice	<ul style="list-style-type: none"> • Experiencing ESEE practices can be one part of an ongoing experience of emotions about the environment. • A continuous practice to support emotions about the environment is necessary. • To manage emotions about the environment can be to follow instincts. It can be good to have multiple approaches available to you. • Taking breaks around ESEE can be an important part of managing mental health. • ESEE can have a lasting effect. • Experiencing ESEE can mean that people bring up difficult emotions and sometimes leave them unresolved.

The meaning of emotionally supportive environmental education. The participants attached various meanings to their experiences of ESEE in the workshop. For Vanessa,

supporting her emotions about the environment assisted her in processing her feelings, which meant that she was able to pass on the fundamental joy of nature to others. Vanessa stated,

I want to translate my love of the environment to my nephew. I want to be able to do a walk with him, and really be able to talk with that kind of wonder, without my own bias on his experience.

ESEE offers opportunities for people to engage differently within their close relationships.

Given that ESEE can help regulate emotions about the environment, Andrea explained, I am not trying to project here what isn't there, not trying to get mad at my kids because I'm angry at something [about the environment] on Facebook. Things like that are projections of your anger right and that is really hard. Really hard.

When people reflect on their environmental loss, they may realize that they are taking it out on the people that they love. Experiencing ESEE can help mitigate projecting emotions about the environment onto others. Andrea goes on to say that one needs to “bring [oneself] into that position, where you respond wisely than to just kind of react to everything around you.” When people have an increased awareness of their emotions, they can better identify the source of the emotions in the moment that they come up and make more informed choices about how to express them. This consciousness can help people to avoid unknowingly directing their frustrated emotions about the environment toward others.

To express ecological grief means people can better manage their emotions as those emotions are less burdensome. For example, Andrea found that ESEE meant that she was less likely to become overwhelmed and depend on others for support. She stated,

To not let [my emotions] overwhelm me, so I take them out on other people in my life, or that I go into crisis and have to have other people do everything for me, that's the other thing I don't want to do.

Andrea finds that regularly processing her emotions about the environment helps to regulate them and, therefore, decreases the chances that they will overwhelm her.

Tracy, Andrea, Sarah, and Vanessa all found that the ESEE workshop was validating, which to them meant a strengthening of their identity. Andrea explained, "I actually felt very emotionally validated today. I didn't feel any strong emotions nor any numbing. I felt in many ways like the work I am doing is enough, and I am on the right track." Indeed, ESEE can contribute to people's sense of self about the environment. Sarah asserted, "I'm an activist in my own right in a sense," whereas Andrea affirmed, "I can stop feeling guilty about not participating in the marches, rallies/fights, that are better left to different personality types. This would burn me out fast. I need to do what I love." These quotations show that when ESEE helps people reflect on their relationship to the environment, it can solidify their sense of self and their place within the environmental movement.

Participants also found that it was valuable to repeat what they had learned or to simply check in with themselves regarding how they were doing. The group dynamic of ESEE can support the development of community, which can provide a feeling of taking action in itself. Tracy explained that "It felt empowering to come together. I think because it is familiar to working on building community, which feels like one of the crucial things we need to get better at for the coming chaos."

An ESEE workshop brings people together around a common cause, and participants may realize that they are stronger and more resilient together. Larry explained further that

“developing community is going to be so important to tackle our environmental issues. A group dynamic is empowering, it gives a sense of community—a key thing we need for environmental issues.” Both Larry and Tracy mentioned that the group aspect of the workshop was empowering. When people work together on an issue, it can help dispel feelings of hopelessness and powerlessness and they may feel less alone in tackling humanity’s problems.

A few participants attached being able to support others to the experience of ESEE. Andrea reasoned, “I think the biggest thing I guess is to be an example, and to have my own grounding in it, so that I can handle other people’s big emotions around it.” Ultimately, Andrea expressed that the results of her environmental work are to help others on their emotional journeys. Andrea sees the emotional domain about the environment to be an important place to contribute to the movement with her art and capacity to support others. Ultimately, Andrea finds that ESEE tools help her regulate and cope with her own crisis about the environment, which enables her to be there for others. When people learn to manage their emotions about the environment, they are more enabled to support others in their despair. Table 3 summarizes the meaning that participants attached to their lived experiences of ESEE.

Table 3

The Meaning of ESEE

Phenomenon	Essential Themes
The Meaning of ESEE	<ul style="list-style-type: none"> • The participants attached various meanings to their experiences of ESEE in the workshop. • ESEE can help people to increase intention in their relationships. • Expressing ecological grief can allow some people to feel less burdensome. • Tracy, Andrea, Sarah, and Vanessa all found that the ESEE workshop was validating, which to them meant it strengthened their identity. • Some participants also found it was valuable to repeat what they had learned, or simply check in regarding how they were doing. • The group dynamic of ESEE supports the development of community, which can feel like taking action in itself. • Some people attribute being able to support others to the experience of ESEE.

Results of emotionally supportive environmental education. ESEE can allow people to have a greater capacity to enjoy nature. Vanessa explained, “I need to grieve almost every time I’m there. When I allow myself that grief or powerlessness involving nature, then I find myself enjoying it again.” Vanessa’s emotions about environmental loss can block her ability to enjoy nature. If she embraces and expresses her grief however, it can pass, and she can connect to nature again. Facing difficult emotions about the environment can be a path to feeling more positive emotions about the earth.

ESEE can change people’s relationship to the environment and their emotions about it. For some, it can begin a new journey. Eesha stated, “[ESEE] kind of evolved my relationship and emotions toward the environment. Just thinking about the experience. And I feel like this workshop is a starting place for me.” Eesha went on to say that she plans to “explore and connect with more people who are passionate about the environment” and “seek new experiences and new opportunities.” Acknowledging emotions about the environment can also lead to spiritual journeys and psychological exploration. In her interview, Andrea stated of her previous ESEE

experiences, “That’s what really pushed me into some deeper psychological and ecological kind of readings, and spiritual readings and that kind of thing.” Reflecting on her emotions prompted Andrea to learn more and further explore her personal and spiritual relationship to the environment. ESEE can result in people leaving with a changed connection to the environment.

ESEE can support and inspire environmental action. Vanessa felt this was partially because “action and thought require one another.” In other words, to take action, people first need to take the time to think or feel about it. Eesha also said that the workshop was valuable because the participants were “sharing their stories, sharing their experiences, sharing the pain, sharing the emotions. That’s how we can together make governments do some policy changes and actions.” Eesha explained that environmental change requires an understanding of the impact that this change has on others. The participants’ reflections on ESEE revealed that they felt the workshop supported environmental action they were currently or planning to take part in.

Processing emotions about the environment can help people feel more stable and have greater capacity to take action. Andrea explained, “It’s possible I’m more sensitive to kind of everything than when I’m feeling more . . . stable. I feel more capable or actually kind of doing what needs to be done, like taking my water bottle.” By managing feelings of overwhelm and anxiety about the environment, some participants felt more able to lead an environmentally sustainable lifestyle.

Seeing people making environmentally conscious lifestyle changes and hearing their stories can make others consider taking similar steps. Eesha said, “Those people in the workshop were so passionate and connected to [nature] I felt like I can be like them. I would like to be part of that.” It is inspiring when people see others taking action. Some people can have an urge to

connect and share environmental concerns, solutions, and hope. Hearing about other people taking positive action for the environment can motivate people to change their own behaviour.

ESEE can also inspire other educators. My co-facilitator remarked,

I think one outcome of the workshop is introducing some other frameworks into The

Work That Reconnects . . . like I would love to do that, maybe try it at the beginning and at the end, and just experiment how it goes.

Even if educators are already aware of how to support student's emotions about the environment, they might broaden their perspective and tools even more by learning about and incorporating other frameworks and ideas into their practice. Table 4 summarizes the outcomes that resulted for the participants after experiencing ESEE.

Table 4

The Results of ESEE

Phenomenon	Essential Themes
The Results of ESEE	<ul style="list-style-type: none"> • ESEE can give people a greater capacity to enjoy nature. • ESEE can change people's relationship to the environmental and their emotions about it. • ESEE can support and inspire environmental action. • ESEE can help people to feel more stable and have greater capacity to take action. • ESEE can help people consider making environmentally conscious lifestyle changes.

Considering the Results

By describing each participant's lived experience of his or her emotions about the environment and a workshop on emotionally supportive environmental education, I wanted the reader to develop a sense of each participant's relationship to the environment and experience of ESEE. Perhaps educators can begin to approach their own work in a similar way, by taking into

consideration the personal perspectives of their audience. By exploring the data from all of the participants combined, I wanted to convey the fundamental essence of the human experience of the environment and ESEE. I hope this chapter has been valuable for readers to draw their own insights and conclusions from the participants' experiences, as these insights are a complement to my own discussion and recommendations to come.

Chapter 5: Discussion

In this chapter, I summarize the key results of the study and discuss connections to the literature in Chapter 2. The concepts I discussed in the Literature Review helped me to analyze and draw further insights from my results. Throughout this chapter, I list 12 key findings. I also provide 12 recommendations for environmental education based on the findings from the workshop, written submissions, and interviews. Afterwards, I discuss surprises from the data, areas for improvement, and topics for future research.

Summary of Key Findings and Ties to Literature

In this section, I introduce the 12 key findings from the results. Each of these key findings is paired with a recommendation.

Finding 1: Longer journey. A key finding from this study is that, for the participants, any environmental education that they experienced became a part of a larger and evolving relationship to the environment. The participants in this study all brought their unique pre-existing experiences about the environment to the workshop. Although all the participants were concerned about environmental problems, some had barely reflected on how they felt about environmental loss. In contrast, other participants had a great deal of self-awareness. The workshop then assisted the participants' pre-existing relationship to the environment to evolve. The participants also engaged with and experienced the exercises in the workshop differently, depending on their unique relationship to the environment.

The pre-existing environmental experiences held by the participants impacted how they received the workshop, whereas the workshop conversely impacted their relationship to the environment. For instance, Sarah, Eesha, and Larry increased their awareness regarding their emotions about the environment, whereas Vanessa, Andrea, and Tracy were validated in what

they already knew. Subsequently, the impacts of ESEE also continued after the workshop as participants processed the experience, and integrated the new information, into their pre-existing knowledge as became evident by the post workshop interviews.

Recommendation 1: Approach developing environmental education with the understanding that the audience is experiencing a continuous environmental journey. I suggest that environmental educators develop and deliver environmental education that takes into consideration the participants' pre-existing and future experiences of the environment. For example, it may be beneficial to acknowledge that everyone has a unique relationship to the environment that will impact how they will receive environmental education. It is beneficial to allow opportunities for participants to reflect upon their past experiences and emotions related to the environment as this awareness will help to integrate new information into their perceptions and lifestyles in the future. Acknowledging people's environmental journeys also makes education a mutual engagement between the teacher and the audience, instead of a one-directional knowledge transfer. Indeed, Eesha expressed that it assisted her to relax to not to be surrounded by experts in the workshop, but instead by real people sharing their stories. When environmental educators value participants' past experiences, including childhood, and existing knowledge, this acknowledgement results in the participants feeling less intimidated. It may also be helpful for educators to know that participants may not appear to have major transformations immediately, but that this education will possibly play a role later in their ongoing environmental journey. In conclusion, educators can experience several benefits to their work if they take into consideration their students' pre-existing and future experiences.

Finding 2: Ongoing practice. The findings from this study suggest that an ongoing practice of supporting emotions regarding the environment is beneficial. The participants in the

workshop who had reflected substantially on their feelings of environmental loss had integrated ways to support their emotions in their day-to-day lives as indicated in both the written submissions and post-workshop interviews. Often, they had created a holistic practice, which included both time with others and time by themselves in nature. Practices included journalling about their feelings about the environment, discussing environmental issues with a like-minded friend, spending time in nature, or performing various rituals. They also engaged in activities that were not directly related to the environment, but which supported their emotions indirectly, such as practicing general self-care and taking breaks from environmental volunteering or activism. In the workshop, these participants found the repetition of key messages and check-ins about how they were doing emotionally to be valuable. Although they were resilient and able to support others, they continued to require tools to regulate their emotions.

Recommendation 2: Offer tools for ongoing support and empowerment. It could be a beneficial addition to environmental education to encourage participants to use reflective exercises in their day-to-day lives and other methods to cope with their emotions about the environment. Findings from this study suggest that helping participants cultivate tools in their lives that support a full expression of their emotions about the environment for the long term can be helpful. This support can help increase their mental stability and their capacity to take effective environmental action. This could include suggesting different tactics that they can integrate into their day-to-day lives, such as journaling, meditation, or art (Leighton, 2014; Lysack, 2010; Thomashow, 1995). Participants could also share what has worked for them to regulate their emotions in the past about other issues, and that method could be used to acknowledge their emerging emotions about the environment. In addition, I suggest that participants find or nurture friendships and social groups with like-minded people on a

continuous basis through which they can find support for their emotions regarding the environment.

Finding 3. Connecting to nature. Most of the participants in the workshop felt a desire to tell the origin stories of their relationship to nature as a foundation to describing their present emotions about the environment. Stories included experiences in childhood, secondary education, or the Canadian wilderness. When describing these periods of their lives, the participants often mentioned how these times were when they could enjoy nature without the heaviness of the knowledge of environmental loss. When they did become aware of ecological degradation, their pre-established connection to nature led to their urge to protect it. To have deep emotions about environmental loss, people first require a love for nature. This affection is often wrapped up in stories of experiencing and learning about the natural world as a child. Connecting to a foundational relationship with nature may be an important part of experiencing the emotions that motivate people to protect it.

Thomashow's (1995) environmental education concepts around ecological identity (Naess, 1998/2008) may help to unpack the participants' desire to talk about the environment through their personal stories and relationships to nature. Thomashow defined ecological identity as "how people perceive themselves in reference to nature, as living and breathing beings connected to the rhythms of the earth" (p. xiii). Thomashow suggested that a deeply personal intertwinement between nature and people's identities and experiences move them to take environmental action. The participants needed to speak about their relationships to nature as context for the emotions that they felt about it. Next, the participants described their lifestyles and the actions that they take to protect the environment. Thomashow's pedagogy of ecological identity helps to explain why the data revealed it was important for the participants to speak

about their relationship with nature because when people revisit how they have formed their identity around nature, they remember how their fundamental values are connected to taking care of the environment. Thomashow (1995) stated,

The purpose of revisiting the special places of childhood is to gain awareness of the connections we make with the earth, awakening and holding those memories in our consciousness of the present. Not to nostalgically pine for a lost, innocent childhood but to recover the qualities of wonder, the open-mindedness regarding nature, the ability to look at what lies right in front of us. (p. 9)

When people think about their childhood nature experiences, they remember the magic of discovering nature for the very first time. All of the participants noted that a profound way to access this relationship was through the childhood mapping exercise. Environmental education may benefit from honouring people's identities in relation to the environment through exercises such as childhood mapping, which could support sustained and motivated environmental actions.

Recommendation 3: Help people to connect to their fundamental relationship to nature. Based on this study, I suggest that environmental educators help people connect to their fundamental relationship with nature to remind them of the foundational reasons that lead them to take environmental action. This connection can be contemplated through exercises, such as place mapping or reflecting on their childhood memories or presently preferred natural spaces. During exercises that involve childhood reflection, it is important that environmental educators remind people that they have the option to reflect on other times in their life, because not everyone had access to safe spaces in nature as children. Another option is to incorporate a component of the education outdoors and have participants interact with and reflect upon their relationship to nature in real time. Encouraging the participants to connect to their fundamental

relationship to nature may also give them a resource to support their mental health, as can be seen in the next finding.

Finding 4: Mental health. Participants found that time in nature was beneficial to their mental health. Although Tracy was spending time outdoors to treat her anxiety, she eventually realized that spending too little time in nature was one of the sources of her anxiety. Connecting to nature can be a necessary activity contributing to the well-being of human beings (Kahn & Kellert, 2002; Nilsson, 2011; Roszak, 1994). Eesha also found that in her times of depression, nature was a place she could go to put her problems into perspective. Nature may benefit mental health in that it helps people feel a part of something with a purpose greater than themselves. Vanessa, however, explained that although being in nature contributed to her well-being, it could also cause her negative feelings because it reminded her of environmental loss. Vanessa's distress highlights the complexity of our relationship to nature and the simultaneous and diversity of emotions that people can experience toward it. Spending time in nature did appear to benefit the participants' foundational mental health overall, even if it could also spark feelings of loss.

The participants' tendencies to be drawn to nature to benefit their mental health correspond with several theories found in the literature. Abram (1997) emphasized that humans yearn for relationships with many other living things beyond the human world, not just other humans. This theory aligns with Tracy's experience of feeling that the animals began to emerge around her when she was fully present in nature, and this connection led to the reduction of anxious feelings. She stated that she realized that her disconnection from nature was the reason for her anxiety in the first place. This experience of wholeness in nature also corresponds with Wilson's (1984) idea that "we are human in good part because of the particular way we affiliate

with other organisms” (p. 139). It is possible that some of Tracy’s anxiety stemmed from her unfulfilled primary need to have relationships with the ecological world. Eesha’s description of her experiences in the mountains reducing her stress and helping her relax also aligns with psychoevolutionary theory, which proposes “a restorative advantage to natural environments and features over artificial environments” (Nilsson, 2011, p. 150). Several points in the literature aligned with the participants’ experience of mental health benefits from nature.

Recommendation 4: Promote time in nature and highlight benefits to mental health. I suggest that environmental educators encourage their students to spend time in nature for their mental health. Leighton’s (2014) “site sitting” (p. 213) exercise, which was given to the participants during the workshop because they were unable to go outside in the storm, is an example of a way to connect to nature intentionally. I would also highlight that spending time in nature is a tool that people could use to reduce anxiety and possibly find more fulfillment in life. The study suggested that promoting time in nature could help people to take environmental action in a couple of ways: first, feeling more mentally stable helps people to take more sustainable and focussed environmental action; and second, as discussed earlier in the chapter, cultivating a love for nature could be motivational to protect it.

Finding 5: Cultivating awareness. To experience ESEE is to cultivate awareness of emotions regarding the environment. Lertzman (2015) advocated for bringing people’s awareness to their subconscious emotions about the environment when she stated, “Arguably one of the keys to this [understanding of environmental loss] is the act of naming, speaking to it . . . so [that] it can be processed and ‘worked through’” (p. 101). Indeed, the participants alluded to the powerful experience that simply realizing their emotions about the environment had on them. Some participants said that they began to process their feelings in the workshop, whereas others

processed them after the workshop. Although Larry struggled with his increased awareness to his emotions, he could have processed his emotions after the study. As I mentioned in the results, when contacted nine months later, he said that he was participating in a grief program for help in coping with his emotions about environmental loss. When asked about their experience of the workshop, all participants mentioned that the conversations about their emotions and the exercises that prompted them to feel their emotions more thoroughly were powerful. A main objective of ESEE practices may be to intentionally bring awareness to people's emotions so that the process of moving through them can begin.

Recommendation 5: Cultivate awareness. ESEE can support bringing awareness to emotions about the environment. The fundamental experience of ESEE that the study participants reported was cultivating awareness regarding their inner relationship to the environment. I would recommend for environmental educators to incorporate an emotionally reflective component into their programs and curricula. With a little creativity it is possible to incorporate a reflective question, or message, into most forms of environmental education. Even a small reflective or artistic exercise into a technical environmental workshop could help the participants to understand how their emotions may be impacting their actions. For example, during a scientific information session about climate change, the environmental educator could ask participants what emotions are coming up for them as they listen to the information. Although a simple concept, cultivating awareness of people's emotions about the environment is powerful and most likely beneficial to include in environmental education practices.

Finding 6: Challenging emotions. Participants can experience challenging emotions during ESEE. A few people in this study had never considered their emotions about the environment before the workshop. For example, Eesha expressed that she had thought of the

environment in a technical way only, such as how much greenhouse gas emissions that certain activities emit. This new emotional awareness can be difficult for participants as uncomfortable feelings move from the unconscious to the conscious. All participants stated that these feelings have the potential to immensely impact their mental health and described their challenging emotions about the environment can manifest as: depression, anxiety, hopelessness, and uncertainty. For instance, Larry found it difficult to bring awareness to his emotions, stating in the interview that he began to tear up in the workshop. Although ESEE attempts to support painful feelings, it also brings them into conscious awareness, and often, time is required to process them. It is also likely some emotions will remain unresolved after the workshop; therefore, it is important to have an ongoing practice.

Several of Lysack's (2010) six dimensions of "our experience of loss in response to environmental deterioration" (p. 50) aligned with the experiences that the participants described in this study. Sarah, Larry, and Vanessa experienced "guilt and shame regarding past environmental behavior" (p. 50). Vanessa said that she felt confusion with the emerging unpredictable seasons caused by climate change, which could be interpreted as "environmental disequilibrium with climate change" (p. 51). Many participants said that they felt "despair and helplessness regarding influencing change in the present" (p. 51), given they did not have control over environmental issues, no matter what, or how much, action they took. Some participants also experienced "anxiety and a diminishing sense of certainty about the future" (p. 51), especially Andrea who was concerned about her children. During the workshop, Larry described his experiences of "environmental trauma" (p. 52), which he had felt when he realized that the planet that he grew up on is no longer. It is helpful for environmental educators to know that the feelings about environmental loss experienced by the participants fit into these categories by

Lysack (2010). If educators can increase their ability to identify and understand the emotional states that their students feel in regard to environmental loss, they can be more strategic in the delivery of lessons.

The participants' experiences of mental health challenges also align with The American Psychological Association report called *Mental Health and Our Changing Climate: Impact, Implications and Guidance* (Clayton, Manning, Krygsman, & Speiser, 2017). The authors outlined the implications of climate change on the mental health of individuals and communities:

The psychological responses to climate change, such as conflict avoidance, fatalism, fear, helplessness, and resignation are growing. These responses are keeping us, and our nature, from properly addressing the core causes of and solutions for our changing climate, and from building and supporting psychological resiliency. (p. 4)

Even though the workshop participants were knowledgeable in environmental issues, took actions to protect the environment, and often wanted to do more, they all struggled with mental health challenges in regards to environmental loss. At times, these psychological difficulties created barriers to fully realizing the environmental crisis and to understanding the adequate solutions required or feeling motivated enough to act.

Recommendation 6: Offer support for difficult emotions. Given the intensity of emotion that some people can feel because of environmental loss, it may be beneficial to offer ESEE participants resources for supporting difficult emotions. Indeed, it is likely that people may not reach the depth of their pain about the environment during ESEE, and that intense emotions could manifest later when they are alone. At the end of an environmental education session, educators could support participants by acknowledging that the session contained challenging information. Educators could also suggest counselling, participating in support groups, reaching

out to a friend, spending time in nature, or taking an eco-grief course or workshop. It is also beneficial to students if educators are available to be contacted after the education session to connect participants to other resources.

Finding 7: Parenting. For the participants who were parents, their children added another dimension to their emotions about the environment. Andrea said that her distress regarding the uncertainty of the future was increased because her children elongated the timeline during which she was worried about the health of the planet. She was also angry and frustrated that she did not have the time to fight for the future of her children because she was busy ensuring that they are being taken care of in the present. Furthermore, Sarah credited most of her motivation for taking environmental action to her concern for her children. She wanted them to have similar pure experiences in nature that she had as a child, and she said that, by passing on her environmental values, she would be preparing them to take care of themselves in the future.

Recommendation 7: Reflect on how to educate parents about the environment. Given that parents can be sensitive to hearing about environmental loss because of the potential impacts to their children, environmental educators may have to be thoughtful with this audience. Simply acknowledging the complexity of having children during times of environmental loss and saying that there is no perfect answer could be enough. Although parents may experience increased distress about environmental issues, they could potentially be an extremely motivated audience to take environmental action.

Finding 8: Barriers to environmental action. Participants experienced some of Gifford's (2011) psychological barriers to adequate climate change mitigation and adaptation—such as “comparison with others” (p. 294), “optimism bias” (p. 293), and “limited behavior” (p. 296). None of the workshop participants were in complete denial over environmental issues;

however, they did struggle with barriers to taking their desired, or adequate, action to protect the environment. One such obstacle was comparison with others. For example, both Larry and Vanessa wished to speak out more but had difficulty expressing their perspective about the environment for fear of backlash or a lack of validation from family and friends. Another obstacle that materialized among the participants was optimism bias, which is “where we air on the side of desirable outcomes, and discount personal risk” (p. 293). This obstacle could have been the reason Eesha and Sarah said that everything was going to be okay in the future, even though they showed a great deal of worry in the present moment. In addition, “limited behavior” (p. 296) could have been an obstacle for the participants who were happy with taking small actions, which made them feel good but potentially could not contribute much to environmental protection. The presence of Gifford’s barriers experienced by the workshop participants indicates that even people who are concerned about the environment struggle with psychological barriers to taking adequate action to protect it.

Recommendation 8: Support people to overcome barriers to taking environmental action. In addition to teaching people about how to conserve and protect the environment, environmental educators could also support their students to overcome personal and psychological barriers to taking environmental action. In this study, participants had an understanding of environmental issues and their solutions, but they had either emotional or practical issues that prevented them from fully realizing their own potential to taking environmental action. Barriers included a lack of time, despair, anxiety, feelings of being overwhelmed, and social discomfort among others. Examples of support that environmental educators could provide are offering resources to cope with grief, creating like-minded social circles or suggesting time spent in nature. Environmental educators may be able to motivate

more people to protect the environment by offering supports and strategies to assist in overcoming barriers to taking environmental action.

Finding 9: Dissonance. All participants portrayed some forms of denial or psychological minimization of environmental issues. As Weintrobe (2013) explained, “When a problem is minimized and ridiculed, the sane part of the mind—which is always there, even if eclipsed and made small—becomes increasingly anxious” (p. 39), and this “can lead to an escalation of underlying anxiety that can feel increasingly unmanageable” (p. 39). It is possible that Larry’s anxiety and strong emotions were a result of him minimizing or turning away from his uncomfortable feelings about environmental loss. Although Larry was not denying environmental issues, Weintrobe (2013) might argue that Larry was in a form of denial regarding his emotions regarding environmental loss. By not acknowledging or processing his feelings, he may have heightened his emotional state and felt overwhelmed. Perhaps if Larry processed his emotions about the environment, his anxiety might have diminished, allowing him to take more focussed action without unresolved anxious energy below the surface. Sarah may also have been experiencing the type of denial that “aims to block mourning at the stage before sadness, grieving and reconciliation, and in this sense may be seen as a form of arrested, failed mourning, or melancholia” (Weintrobe, 2013, p. 39). She stated that she experienced despair about present environmental conditions, while also maintaining that she was not worried about the future. It is possible that the future implications of environmental loss are too uncomfortable for Sarah to face, and she has blocked that out. The guilt, anger, and shame that she does experience can be the indirect expression of her denying the future effects of environmental loss. Based on Weintrobe’s (2013) theory, most participants indicated that they experienced varying degrees of denial, which were manifesting externally in different ways. The environmental education field

may benefit from helping people to become aware of the ways to process the emotions about the environment. Avoiding feelings about the environment can cause anxiety and reduce one's ability to act on behalf of their planetary home.

Recommendation 9: Recognize and understand environmental denial. I recommend that educators understand and recognize how people might try to protect themselves from uncomfortable feelings about environmental loss. Even though a participant may say that they are not worried about the environment, on an unconscious level they might be saying this to protect themselves. It could be helpful to carry out ESEE exercises designed to navigate the denial process so that the participants could possibly recognize denial in themselves. I suggest highlighting how facing uncomfortable emotions can reduce anxiety and provide other benefits. When people increase their awareness of denial, they can have a greater understanding of how hidden emotions impact their lives. For example, during the workshop, Sarah began to see the connection between her despair about the environment and her feelings of guilt toward herself and anger toward others. It may help educators to identify common reactions from participants that may signify denial and allow them then to explore the topic transparently with all participants. Even though most environmental educators are not psychologists, they can be open with participants that denial may be taking place.

Finding 10: Diversity of approaches. Effective ESEE may require a diversity of methods. At times during the workshop, more cognitive approaches, such as discussing frameworks and psychological theory, helped participants to logically *understand* the process behind their emotions. Artistic exercises, however, such as meditation, art, and music, helped people to *feel* their emotions. In addition, exercises that involve cultivating the participants connection to nature are key to include. The results suggest that participants found the cognitive,

artistic and nature approaches to be valuable for different reasons. In addition, the exercises that involved physical activity also impacted some participants. For example, during an exercise where participants were asked to reveal their opinion on a statement by standing in a certain area of the room, Larry mentioned this movement helped him to understand the information better and in a different way. In addition, silence during the workshop was another powerful method of giving people the space to bring awareness to their emotions. Likely no one perfect approach to ESEE exists, and a combination of a variety of approaches is best.

Recommendation 10: Use multiple methods of emotionally supportive environmental education. The results of this study suggested that delivering ESEE by using multiple methods and approaches can be effective. Clearly, people have a diversity of learning styles, and even one person can be responsive to different exercises on different days. Different methods to choose from can include activities that involve time in nature, movement, discussion, personal reflection, theoretical conversations, meditation, visualization, music, or art. Educators can use multiple ways to help people connect and bring awareness to their emotions in ESEE.

Finding 11: Community. The group dynamic was a profound aspect of the experience of ESEE for the workshop participants. For instance, many participants remarked that they did not realize that others felt the same way that they did about the environment. This kind of validation of emotions helps people to feel supported to live according to their values. Bringing like-minded people together can also promote the shifting of social norms. Eesha, for example, had no idea that some people were as committed to living in alignment with their environmental values as some of the other participants in the workshop. As a result of this realization, she said that she could take more action to protect the environment. A group dynamic can even promote greater self-awareness, such as when Tracy remarked that she recognized the grief of another

participant within herself. Three participants also mentioned that being in a group felt like the start of building community, and this gave them a sense of empowerment and security. They saw building community as a means to both prevent and cope with environmental loss.

In the interviews after the workshop, participants did reveal that they found the contrast between the participants' opinions uncomfortable at times. Some participants believed that small actions can save the environment, whereas others said that they felt frustrated by this idea because they did not think that small actions reflected the urgency of the current environmental situation. Others were worried about offending the other participants by bringing up alternative points of view in discussion.

Simply bringing people together to experience ESEE as a group adds another dynamic to the experience. By ensuring a safe space for participants, environmental educators can create a group dynamic that is beneficial to the participants. It is valuable to incorporate some group component into an ESEE experience, if possible.

Recommendation 11: Incorporate a group dynamic and promote community. I recommend that educators include a group component that promotes community-building in environmental educational practices. The group dynamic in this study was an exceptionally powerful addition to the participants' experience of ESEE. I believe including a group portion to any environmental education practice is extremely impactful. Even better would be to facilitate the expansion of the group into a network or ongoing circle that could advocate for policy or other systemic changes.

Finding 12: Benefits. Participants experienced benefits from bringing awareness to and processing their emotions about the environment. Vanessa found the distressing emotions that she felt regarding environmental loss blocked her joy for nature. When she acknowledged this

experience and allowed herself to feel her painful feelings, she found that the feelings would pass and that she could again access the feelings of joy that nature elicited. Therefore, ESEE can help people process their emotions to access a broader spectrum of feelings. In addition, if being connected to nature is a foundation to protect it, then moving through distressing emotions so that people can enjoy Earth again can support greater action.

The findings from this research suggested that people's relationships can be improved when they experience ESEE. Vanessa found that processing her emotions about the environment gave her a greater capacity to regulate them and, therefore, convey nature in a positive light to her nephew. This experience enabled her to support him to build his foundational love for the Earth. Andrea found that she would project her feelings of environmental loss onto her family in inadvertent ways. She said that supporting and processing her emotions about the environment could keep her out of emotional crisis and avoid needing someone to take care of her.

Realizing the potential benefits of ESEE is important because people do not always see the value in facing and processing their emotions about the environment. Other possible benefits of ESEE that participants mentioned were a sense of decreasing anxiety, a further validation of self and identity, and a potential increase of self-control and intention. Indeed, when people process their emotions about the environment, they may increase their ability to act because they feel less anxious and more stable.

Recommendation 12: Acknowledge the process and benefits to processing emotions about the environment. As an environmental educator, I recommend acknowledging the benefits of processing emotions about the environment. Within this study, some participants believed that it was unnecessary to face their difficult feelings about ecological loss. They were at first, unaware that repressing these emotions likely impacted their behaviour indirectly. Ensuring that

participants are aware that facing uncomfortable emotions can be a part of a larger process that has personal as well as potentially planetary benefits may move them to engage in ESEE practices. Possible benefits, as revealed by participants in this study, include reduced anxiety (Weintrobe, 2013), greater energy (Randall, 2009), improved relationships, and a greater capacity to take effective environmental action.

Summary of Recommendations

The following 12 recommendations are based upon the key findings of this study:

- approach environmental education with the understanding that the audience is experiencing a wider environmental journey,
- offer tools and practices for ongoing support and empowerment,
- help people to connect/reconnect to their fundamental relationship to nature,
- promote time in nature and highlight benefits to mental health,
- cultivate awareness,
- offer supportive practices for difficult emotions,
- reflect on how to educate parents about the environment,
- support people to overcome barriers to taking environmental action,
- recognize and understand environmental denial,
- use multiple methods of emotionally supportive environmental education,
- incorporate a group component that promotes community, and
- acknowledge the process and benefits to processing emotions about the environment.

Surprises from the Data

Some surprises, which are important to the understanding of the experience of ESEE, arose from the data. First, I observed a broad range of perspectives even among the like-minded individuals in the group. Second, I was surprised by the reaction to the cognitive exercises. Finally, I did not expect the instances of denial that emerged even among environmental advocates.

I was surprised that although all of the participants were concerned about the environment, they still displayed a broad range of perspectives. Sarah and Eesha said that small actions were still beneficial and made them feel good, whereas Larry and Vanessa said that small actions were not enough. Some participants said that the lengths to which others lived their environmental values were drastic. There was also a difference between the amount of hope that people had about the future, with a few who were unconcerned about the future, whereas others felt a great deal of despair. I realize now that even with a group of like-minded people, there will be contrasts to navigate. If the goal of ESEE is to support people to take adequate environmental action, educators may need to be prepared to tailor their lessons to the range of opinions present within a class.

Another surprise that I had was that the exercises explaining the theory behind ESEE were not as impactful as the other exercises. A few participants said that they found understanding the theory behind ESEE exercises to be valuable; however, these explanations did not make a large impact on most of the workshop participants. This surprised me because, as a researcher, I am very interested in why people do the things that they do and the data behind theories. The workshop participants, however, were not as interested as I was. It is possible that exercises are better to engage with people under the conditions of a workshop within short

periods of time and that they may not need to understand the theory behind what is taking place in order to benefit from the results. Possibly some explanation for the exercises would be helpful, but I have concluded that it does not need to be a major focus if time is limited.

I was surprised that people could be extremely aware of environmental issues and still struggle with aspects of denial that impact their lives. Larry, for example, seemed to have more access to this information at a cognitive level but had not turned to it emotionally. He was avoiding those uncomfortable feelings, at first thinking that there was no point to turning toward them. His struggle to cope became clear to him over time, and he did seek support for his difficult feelings. In addition, Sarah had a disconnect between the despair that she felt about the environment in the present and the lack of worry that she had for the future. Even though all the participants were aware of environmental issues and took actions to protect nature, they still struggled with their emotions, which impacted their lives in some way.

Study Improvements

If I were to do this study again, I would improve upon certain parts. Although the participants had some remarks on specific exercises, the emotional experiences of specific environmental education practices included in this study are hard to identify. Although still valuable, the data speak to a broader experience of ESEE. I could have made the practices more explicit in the workshop, however, and followed up with a survey about specific exercises in the workshop. This extra detail may have helped educators to act on these results by equipping them with more information to create an effective ESEE curriculum.

As a novice interviewer, I believe that I could have improved on how I conducted the interviews. An improvement of this study would have been to ask more in-depth interview questions. I had trouble coaxing participants to express their pre-reflexive experience of the

workshop instead of their opinion of the experience. At times, when I analyzed the data, I wished that I would have followed up on what people said or that I had asked them their interview question in a different way. I attempted to follow up with them after the workshop through email, but not everyone replied or remembered how they felt in the workshop.

Implications for Future Research

After completing this study, I have further questions that could be valuable as a focus of a separate study. I suggest two areas for future research: parenting in times of environmental loss, and the long-term experience of emotions regarding the environment.

This study indicated that being a parent in times of environmental loss is a unique experience. As a facilitator, I found it difficult to navigate exactly how to interact with the parents, as they have unique sensitivities, or I did not wish to upset them. Perhaps the parental love for children is so strong that it amplifies emotions, such as fear, guilt, and compassion that people feel about environmental loss. Although parents said that they felt the increased need to protect the environment for their children, they often lacked the capacity and time to do so, which may have resulted in greater anger and frustration. Environmental education may improve from having a greater understanding of being a parent faced with environmental loss as perhaps a special approach is required for this demographic.

A study of the experience of emotions regarding the environment over a longer time would complement this study. In my workshop, the broader context of the participants' journeys about the environment played a significant role in their experiences of the ESEE practices. Although all the participants cared about the environment and took environmental action, I found that they were at different stages of processing their emotions about environmental loss. Understanding this broader emotional journey and whether any common patterns exist may help

educators to tailor education for different phases. In addition, I wonder how the place that people are at in their emotional journey impacts their environmental actions. At first glance, the participants who had spent more time processing their emotions had a greater understanding of their identity and the actions that they wished to take. Understanding the broader journeys of emotions about the environment could help to inform environmental education practices and also assist educators in understanding the long-term implications and combined results of multiple ESEE experiences. As participants identified, it was often several experiences that led to change.

Recommendations in Practice

I derived the 12 recommendations in this chapter from the key findings in the results that I found most important to incorporate ESEE into environmental education. At times, they are broad guidelines; however, I wanted the recommendations to be general enough to incorporate into most educator's unique work. As mentioned earlier, my aim is to enhance insight and overall "tactfulness" (van Manen, 1997, p. 23) of myself and other educators. In the next chapter, I will reflect upon the four research questions, including how working on this thesis has impacted me and how the results apply to my own work and life.

Chapter 6: Conclusion

When I began my environmental journey, I struggled to understand why humanity was not taking urgent action to protect the planet. I had a sense that human psychology and emotions played a role, but I wanted a greater understanding. By creating an emotionally supportive environmental education workshop and applying the guidance from the practitioners whose exercises I used, I grew as an environmental educator. In writing the phenomenological text, I aimed for readers and educators to gain a deeper understanding of people's experience of the environment and ESEE. I have tried to create a text in which readers can draw their own insights by becoming familiar with each participant individually. Therefore, the readers' knowledge of ESEE may both broaden and deepen in ways that differ from my own discussion and recommendations. My personal understanding of the fundamental human experiences of ESEE has increased, and I also offer the results of this thesis to provide a similar understanding for other educators.

Research Questions

As I revisit my research questions, I realize that the answers drawn from this study are not straightforward, but complex and multifaceted. Each participant was unique, and many factors both within and outside of the workshop may have contributed to the participants' experiences. This study generated a great deal of raw data and many recommendations for environmental education. I tried to write a phenomenological hermeneutic description to reveal the characteristics of each participant, using many of the participant's verbatim comments. I hope educators who review the experiences of the workshop participants can draw their own insights and conclusions from my descriptions. I also encourage educators to critically consider

my discussion through their own understandings of the results and apply the recommendations that are useful for their work.

Research Question 1: What is the experience of emotionally supportive environmental education practices from the perspective of workshop participants?

Surprisingly, during the interviews, all of the participants reflected on their relationship to the environment before they spoke about their feelings about environmental loss or action. Stories about their lives were also often the medium through which they expressed both their connection to nature and their emotions about the environment. For example, the narratives included how they developed love for nature through childhood moments and how they react to their neighbours with anger. Given that the participants wanted to explain their relationship to nature to offer context for their emotions about the environment, I added the experience of the environment as another dimension of the results.

Overall, the experience of ESEE seemed to increase the participants' awareness of their relationships to the environment, resulting in varied experiences. Many found that they had not had the opportunities to do so in their day-to-day lives until that point of the workshop. This increased awareness promoted reflections about how their emotions may have been connected to what seemed to be separate behaviours. Some of the participants found that facing and expressing their emotions in the workshop was uncomfortable. For instance, embracing grief appeared to be a part of the process for many of them. ESEE did offer the participants strategies to cope with and process their emotions about the environment. For some, however, it appeared as if they had already done a great deal of reflection on their emotions, and the workshop was a check-in to see how they were maintaining their mental health in regard to environmental loss. These participants still found the workshop valuable to strengthen their identity in relation to the

environment. Indeed, the participants in this study had a diversity of experiences in the ESEE workshop.

Different exercises evoked different experiences sometimes from the same participant. It appeared that participants required both time alone to reflect and time with others to connect. For instance, silence and artistic exercises helped move the participants into a place of feeling and offered them the ability to connect to their emotions. Participants also found value in discussing concepts with others and in sharing stories. Thomashow's (1995) childhood mapping exercise combined both time alone and time with others. Participants created art about their childhood relationship to the environment and then shared their work with others. In addition, environmental educators would likely increase success in their work if they use both group and individual exercises.

All of the participants emphasized that the experience of a group dynamic influenced them in the workshop. Experiencing ESEE with others resulted in multiple outcomes. Participants learned from one another and influenced each other in a way that could not have been planned or predicted. At times, the participants were comfortable and at other times tense because of the group dynamic. Both states may have been helpful for them to reflect on their own emotions.

The experience of ESEE is ongoing. The participants remarked that they were still processing their experience of the workshop after it ended. In addition, their emotions about the environment continued to evolve, and the participants who felt most at ease with their emotions about the environment had incorporated ESEE into their day-to-day lives. Spending time in nature and general self-care were examples of ways that participants supported their emotions beyond the scope of the workshop. Based on the experiences of the workshop participants in this

study, environmental educators may benefit from helping people to create a plan for practicing ESEE in their daily lives.

Research Question 2: What meaning can people create from their experiences of emotionally supportive environmental education practices? When people understand the meaning that they can attach to the experience of ESEE, they can realize the impact of ESEE on their lives. The meanings that the participants attributed to the workshop and ESEE practices were personal. For one person, it was the ability to process her grief about environmental loss so that she could create the ability to enjoy the nature that was still around her. For another, it was so that she would not project her repressed emotions about the environment onto her family. Those participants who were parents or grandparents believed that ESEE meant that they could pass on something to their children, whether it was a love for nature or the motivation to protect it.

Another group of people in the workshop had already reflected a great deal on their emotions about the environment. The workshop was validating for these participants because it resulted in them strengthening a sense of their identity. Indeed, they said that they could focus on an area of environmental action that best fit their talents and capabilities. When people direct their energy to fewer environmental initiatives, perhaps they can accomplish more in that area. For one participant, feeling stable in her emotions about the environment also meant that she could support other people to navigate their difficult emotions.

A few of the participants remarked that experiencing ESEE as a group meant that they were able to create a sense of community. They also said that creating community is a key action to building resiliency to climate change and environmental degradation. From this perspective,

the workshop was seen by some participants as an action to fight environmental loss in itself. It is possible ESEE could be designed to promote an ongoing sense of community.

Research Question 3: How do these understandings possibly influence behaviour?

Some participants in the workshop indicated that their experience motivated them to take action to protect the environment. One participant in particular said that taking action required periods of reflection or thought. Therefore, ESEE could result in thinking about the actions that they wished to take. Another participant said that she felt more stable in her emotions, and this meant that she had a greater mental capacity to act. By engaging with one another, the participants also appeared to expand their perceptions of what environmental action could look like. This inspired some participants to re-examine the steps that they could take to protect the environment.

The participants also experienced behavioural changes after the workshop, and this may lead to increased environmental action. ESEE helped some participants to begin a journey to explore their emotions about the environment further. Several participants also wanted to learn more about certain concepts taught in the workshop. Others expressed the desire to continue to engage with like-minded groups. In addition, ESEE could inspire other environmental educators to try new approaches. Although some results of the workshop did not directly result in environmental action, perhaps ESEE could help promote behavioural changes that support environmental protection over time.

Research Question 4: What are the implications of these findings for my own work as an environmental educator and for the environmental education and communication field? The results of this thesis reveal that the experience of environmental loss is a complex and unique experience for many people. The immediate experiences from participants in the workshop and the meanings that they attributed to those experiences offer understanding into

environmental education that takes into consideration the emotional experiences of its audience.

The results from this thesis do not promote a specific formula for environmental education.

Instead, the recommendations encourage a continuous learning of environmental education and experience in the field to expand the knowledge upon which an educator can draw in each teaching situation. Therefore, I believe that educators can take a variety of insights from the descriptions of the participants' experiences in this study. The recommendations that I drew, possibly with a little creativity, can be incorporated into many forms of environmental education.

I am still processing the implications of this thesis journey to my professional and personal life. No easy formula for environmental education exists, and it is a long process for many to live an environmentally friendly lifestyle. Nevertheless, I have taken away insights and techniques to enable me to support and encourage people along their way.

I have matured in my approach to environmental education and communication during my time writing this thesis. At the beginning, I was frustrated that I could not understand those people who did not believe in the urgency of environmental action. Now, I understand the complex mental processes, the uncomfortable feelings, and the conflicts that many people may be experiencing. I still think that motivating environmental change in society requires a multitude of tactics, including activism. I now realize, however, that listening, empathy, and thoughtful dialogue also play an important role in environmental education. I do want to spend time understanding why people have different perspectives than myself. This understanding will involve engaging in conversations with a diversity of people and actively listening to their perspectives. This thesis has taught me that the process of listening helps to create respectful, but also effective environmental education. I also plan to consciously practise the communication

techniques that I have learned during this process. Throughout this thesis journey, I have grown in my ability to empathize with others and have respectful and meaningful conversations.

I have realized that, as an environmental educator, I need to practise the recommendations from this thesis in my own life. I believe that I have a strong awareness of my emotions about the environment, but I need to improve my ongoing practice to process my emotions as they emerge. I plan to journal and discuss my emotions with like-minded friends, among some of the other practices suggested here. I will also take the time to reflect on my own perspective and be open to expanding my viewpoints. This reflection will help me to regulate my own emotions as an environmental educator so that I can focus on the emotional needs of my students.

I have struggled to directly apply the recommendations from this thesis to my work, but potential certainly exists. Currently, in my professional role, I do not often interact with the people whom I am attempting to promote a certain behavioural change. Instead, I design and coordinate broader educational campaigns or programs where one-on-one interaction seldom occurs, such as a communications campaign. Nevertheless, I can approach the design of environmental education programming in my work by taking into consideration the psychological processes I learned about in the literature review. The insight I gained from the workshop participants' experiences can also help me to decide how to incorporate ESEE into program design. For instance, I am working on how to empower communities by creating programs whereby groups can come together to learn and support one another. In addition, I can apply certain recommendations from this study to the communication campaigns I create in my work. I can pose reflective questions to help people to cultivate awareness of their emotions about the environment and to acknowledge their barriers to environmental action. Additional learnings I

can incorporate into communication campaigns include an emphasis of the benefits of sustainability, and the promotion of a connection to nature. This study has shown that environmental educators can support people who already care about the environment to take more action by helping them to navigate their unique barriers. I think that I could apply this theory to my work, as environmental educators currently focus more on convincing the people who do not care instead of supporting those who want to take action but may have barriers to doing so.

Outside of my formal work setting, I plan to apply the insight I have obtained from conducting this research in a variety of ways. I will discover opportunities to share the results more broadly including conducting talks at organizations who are interested in this thesis topic, or present at relevant conferences. In addition, I will increase my engagement in the ESEE network by connecting with other practitioners and attending community events. I also plan to continue to conduct similar workshops to the one in this study. I plan to share and move forward the work I have begun in this thesis, although I am not completely clear on what the manifestation of that journey will look like.

Looking Back While Moving Forward

Creating this thesis has been a long journey with many challenges and rewards. I had to read an abundance of literature on the topic at hand, improve my academic writing, and understand research methods. I also had to revisit the data often and revise each chapter several times. I have realized that research is a dynamic, complex, and nonlinear process that takes time and reflection. There were many stages where I could not see the way forward, and I had to take breaks to allow time to process and think. I felt stuck and frustrated at times, but I would remind myself to honour the process. I knew that writing a thesis was an experience that I had to go

through completely, and that I could not take shortcuts. In the end, I have improved my skills as a writer, researcher, and environmental educator. My master's program as a whole has expanded my perceptions and matured me as a person.

I believe that it is more necessary than ever for the environmental education and communication field to help people to cope with their emotions. In the midst of writing the end of this paper, millions of people around the world have been participating in global climate strikes. Indeed, environmental issues have become more apparent in the collective discourse. I do wonder if changes are coming fast enough or if humans are too late to avoid the worst. I believe environmental educators need to have some element of emotional intelligence when it comes to teaching about the complex and immense topic of ecological loss. Perhaps just as importantly, educators must have a great deal of self-awareness. They require tools to take care of their mental health so that they can be sustainable in their work and support the emotions of others. It is my hope that the results from this study will assist environmental educators in their work and contribute to the collective knowledge of environmental education and communication.

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Appendix A: Workshop Outline

This agenda provides an overview of the different activities and experiences included in the ESEE workshop from which the data was derived for this study:

Morning 9 am to 12 pm

- Welcome, Introductions, Schedule, Agreements
- Explanation of Research
- Ecological Identity Activities
 - Visualization to conjure childhood memories
 - Create maps of “Childhood Memory of Special Places” (Thomashow, 1995, p. 8)
- Participants take turns sharing maps
- Quote discussions
- Biophilia discussion (Wilson, 1984)
- Break
- “I don’t care” (Macy & Brown, 2014, p. 116) exercise
- “Cairn of Mourning” (Macy & Brown, 2014, p. 117) exercise
- “Honoring our Pain” (Macy & Brown, 2014, p. 107) discussion

Lunch 12 pm

- Eating together
- 12:45 Walk
- “Site sitting” (Leighton, 2014, p. 213) exercise
- Thomashow quote discussion

Afternoon 1:30 to 4 pm

- Oldest tree in the world exercise
 - Listened to the song: *The Oldest Tree in the world* by Leanne Simpson followed by discussion
- Psychological Challenges Exercise
 - Created from Gifford’s (2011) 29 “psychological barriers that limit climate change mitigation and adaptation” (p. 290).

- Roleplay exercise with conversation tactics from Marshall (2014)
- Break
- “Great Turning Meditation” (Macy & Brown, 2014, p. 269)
- Writing reflection
- Conclusion

Appendix B: Sample Letter of Invitation

January 28th, 2018

Dear Participant,

I would like to invite you to be part of a research project that I am conducting. This project is part of the requirement for a Master's Degree in Masters of Arts in Environmental Education and Communication, at Royal Roads University. My name is Roberta Waddell and my credentials with Royal Roads University can be established by telephoning Dr. Hilary Leighton, MAEEC Program Head.

The purpose of my research is to contribute to what inspires, motivates and supports effective environmental action. To do this, I will be exploring environmental education techniques that are emotionally supportive. My research findings will inform my work as an environmental educator. The data may also be used to contribute to the environmental education and communication field.

My research will consist of a one day workshop and you may be asked to participate in a follow-up interview two to three weeks later. The workshop will consist of discussion, reflection, art-making and other exercises. There is no experience necessary to participate. All supplies will be provided for you. A maximum of ten participants will take part in the workshop and up to five of them will be interviewed.

The foreseen interview questions will ask about your emotional experiences regarding the environment before, during and after the workshop. The interview will consist of open ended questions and is foreseen to take about sixty minutes. Interviews will be audio recorded and hand-written notes will be taken. Comments from participant interviews will likely be included in the thesis but will not be attributed to the individual who said them as pseudonyms will be used to protect the participant's identity.

Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes.

Sincerely,

Roberta Waddell

Appendix C: Research Consent Form

My name is Roberta Waddell, and this research project is part of the requirement for a for the fulfillment of a Masters of Arts in Environmental Education and Communication at Royal Roads University. My credentials with Royal Roads University can be established by telephoning Dr. Hilary Leighton, MAEEC Program Head.

This document constitutes an agreement to participate in my research project, the objective of which is to explore emotionally supportive environmental education practices. My ultimate purpose is to contribute to what inspires, motivates and supports effective environmental action. My research findings will inform my work as an environmental educator. The data may also be used to contribute to the environmental education and communication field.

The research will consist of a one day workshop, and you may be asked to participate in a sixty-minute interview two to three weeks later. The foreseen interview questions will refer to your emotional experiences regarding the environment before, during and after the workshop.

Given the workshop will touch on environmental loss, there is the possibility having a strong emotional experience during, or after, the workshop. There are potential benefits to participating in the workshop. You may be inspired to increase your connection to nature, which can result in improved mental and even physical health. This workshop may help to process some difficult emotions around the environment that are causing you anxiety, and release energy to re-direct to other things. The workshop is also meant to give participants a sense of agency and possible continued community support with like-minded people.

There may be a conflict of interest in that I am using my supervisor's environmental education technique in the workshop, and he could potentially benefit from having his practice explored in my thesis. However, I was drawn to it prior to him becoming my supervisor, so it was chosen in a similar way to the other contributors. He did not pressure me to use his framework.

In addition to submitting my final report to Royal Roads University in partial fulfillment for a Masters of Environmental Education and Communication degree, the research results may be published in journals or used to present at conferences and the thesis will be published in RRU's Digital Archive, Pro-Quest and Library and Archives Canada.

Information will be recorded in hand-written format and audio recorded. Loss of anonymity will occur for participants in the workshop group setting, however, I will maintain participant confidentiality in any report. Comments from participant interviews will likely be included in the thesis but will not be attributed to the individual who said them as pseudonyms will be used to protect the participant's identity. All documentation will be kept strictly confidential.

You are not compelled to participate in this research project. If you do choose to participate, you are free to withdraw at any time, without prejudice, up until the analysis stage where participant data will be combined. Similarly, if you choose not to participate in this research project, this information will also be maintained in confidence.

I will secure your permission for disposal of raw data. I will dispose the raw data by deleting audio and transcriptions by December 1st, 2018. In the event a participant leaves the study prematurely; prior to data combination in analysis, their information will be destroyed after confirmation of withdraw.

Please check this box if you would like to receive findings via email.

By signing this letter, you give free and informed consent to participate in this project. Alternatively, you may contact me via email. The email can also constitute as an agreement to participate.

Ensure you retain a copy of this consent form for your reference.

Name: (Please Print): _____

Signed: _____

Date: _____

Appendix D: Interview Guide

The following interview guide provides sample questions for one-on-one interviews. Please note that changes were made during actual interviews based on participant engagement and time restrictions.

Can you tell me about yourself in light of emotions about the environment up to this time?

How did you come to these feelings? Or why do you have them?

What did you feel during the workshop?

Talk about the relationships you have that are significant to your environmental emotions.

Or the day of the workshop

What does experiencing these practices mean to you?

Given what you've said about your emotional experience about the environment before the workshop, and your experience in the workshop, how do you understand your emotional experience around the environment now? What sense does it make for you? What have those practices meant to you?

Given what you have reconstructed in these interviews, where do you see yourself going in the future?

Take me through a moment, if you had one, where you had an experience after the workshop affected by what happened there?

Appendix E: Characteristics of Essential Themes

Table 1

What is A Theme?

Characteristic	Explanation
Theme is the experience of focus, of meaning, of point	As I read over an anecdote I ask, what is its meaning, its point?
Theme formulation is at best a simplification	We come up with a theme formulation, but immediately feel that it somehow falls short, that it is an inadequate summary of the notion.
Themes are not objects one encounters at certain points or moments in a text	A theme is not a thing; themes are intransitive.
Theme is the form of capturing the phenomenon one tries to understand	Theme describes an aspect of the structure of lived experience.

Source: van Manen, M. (2014). *Phenomenology of practice: Meaning giving methods in phenomenological research and writing*. New York, NY: Routledge, p. 87.

Table 2

How themes Come About

Characteristic	Explanation
Theme is the needfulness or desire to make sense	As a parent I have the deep need to understand what is the pedagogic significant of the child's experience of feeling left or abandoned.
Theme is the sense we are able to make of something	As I try to put into symbolic form (words) what something means to me then I produce theme-like statements
Theme is the openness to something	While I have the experience of fixing something with a theme, I can only do so by opening myself to the fullness, the promise of the notion embedded in lived experience.
Theme is the process of insightful invention, discovery, disclosure	As I arrive at certain thematic insights it may seem that insight is a product of all of these: <i>invention</i> (my interpretive product), <i>discovery</i> (the interpretative product of my dialogue with the text of life), <i>disclosure of meaning</i> (the interpretive product "given" to me by the text of life itself).

Source: van Manen, M. (2014). *Phenomenology of practice: Meaning giving methods in phenomenological research and writing*. New York, NY: Routledge, p. 87.

Table 3

How Theme Relates to the Notion Being Studied

Characteristic	Explanation
Theme is the means to get at the notion.	The theme is my tool for getting at the meaning of the experience of “feeling left.” There is a certain instrumentality, a technique to the employment of theme and theme formulation
Theme gives shape to the shapeless	A notion such as the experience of “feeling left” can find expression in an infinite variety of forms – theme fixes or expresses the ineffable essence of the notion in a temporary and exemplary form.
Theme describes the content of the notion	A good theme formulation somehow seems to touch the core of the notion we are trying to understand
Theme is always a reduction of a notion	No thematic formulation can completely unlock the deep meaning, the full mystery, the enigmatic aspects of the experiential meaning of a notion.

Source: van Manen, M. (2014). *Phenomenology of practice: Meaning giving methods in phenomenological research and writing*. New York, NY: Routledge, p. 87.