AN INVESTIGATION OF PLACE ATTACHMENT FOR OUTDOOR EDUCATORS WITH PRO-ENVIRONMENTAL BEHAVIORS: A PHENOMENOLOGICAL STUDY

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ABSTRACT

The bonding that occurs between individuals and their meaningful environments is called place attachment. These bonds form over time, through repeat interactions with a place and inform our sense of identity, give meaning to our lives, build community, and influence action. Research indicates that place attachment is linked to behaviors aimed at contributing to the solutions of environmental problems. This phenomenological study investigates the process of place attachment of outdoor educators with pro-environmental behaviors. Findings indicate an intentional commitment, experiences of depth, and being known by a community are essential elements of the process of place attachment. Suggestions for increasing place attachment are given.

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CHAPTER 1.

INTRODUCTION

Our environment can be a source of pleasure and a place of profound attachment and love (Tuan, 1974). The bonding that occurs between individuals and their meaningful environments is called place attachment (Scannell & Gifford, 2010a; Scannell & Gifford, 2010b). These bonds form over time, through repeat interactions with a place (Oh, Lyu, & Hammitt, 2012; Smaldone, 2006; Vaske & Kobrin, 2001), and inform our sense of identity, give meaning to our lives, build community, and influence action (Manzo & Devine-Wright, 2014). In his book, *Last Child in the Woods*, Louv (2008) talks with many individuals, mostly children, about places that were meaningful to them. As a child himself, Louv knew "every bend in the creek and dip in the beaten dirt paths" (p. 1) of "his" woods. One young lady described how a hole she dug in the ground near a waterfall in the woods became "her" place and made her feel "free" (p. 14). A young man recounts how weathering a storm in an ancient Native American cave made him feel like he was "alive" and "part of nature" (p. 70). Some authors believe that an active relationship with their place is something, at least in part, that all children need (Louv, 2008).

It is not just children who experience bonds with nature. Barr, Ehler, and Wiley (2003) claim that the huge number of artistic works (paintings, photographs, books, poems, etc.) about the ocean and how we value its shores as vacation and recreation sites are evidence of our deep ancestral and spiritual connection with the sea. Telford (2001), photographer for *Coyote's Canyon*, portrays a clear fondness of and connection to the Utah desert. He feels a "kinship" with the Utah desert and describes the landscape as a "sanctuary" and a "work of art" (p. 2). In a recent study, farmers discuss their place attachment to their lands. One gentleman describes his farm as his "haven" (Quinn & Halfacre, 2014, p. 123) and a place of great personal value while

another described his land as his "baby" (p. 125). The observations and reflections of these individuals seem to point toward feelings of attachment between humans and their environments.

Weil (1952) suggests that being rooted in a place is extremely important, yet rootedness is likely the least acknowledged need of the human soul. Furthermore, Sobel (2005), an advocate for education that restores the essential links between a person and their place (place-based education), suggests that the work of students who are rooted in a place tends to be better quality and more focused than non-rooted students. Sobel (2008) encourages bonding with and empathy for the natural world through exploration of local places.

Educators and advocates for the environment have long sought to motivate people to care for places. Studies show that environmental knowledge alone is not enough to motivate people to action (Hanna, 1995; Marcinkowski, 1998; Vaske & Kobrin, 2001). What gets lost when we focus on facts are the intimate experiences, "the moments of transcendence when the borders between the natural world and ourselves break down" (Sobel, 2008, p. 12). People care about certain places because a place is more than a collection of physical attributes, places symbolize a sense of belonging and purpose to life (Williams, Patterson, Roggenbuck, & Watson, 1992). Natural experiences can anchor an attitude of enthusiasm and commitment toward the natural world and feed a hunger for knowledge that ultimately leads to conservation behavior (Sobel, 2008). Research indicates that place attachment is linked to behaviors aimed at contributing to the solutions of environmental problems (Marcinkowski, 1998; Scannell & Gifford, 2010b; Vaske & Kobrin, 2001) such as volunteering in parks or nature refuges, community clean ups, or carpooling (Kudryavtsev, Krasny, & Stedman, 2012). In the words of American naturalist, John Burroughs (1919), "Knowledge without love does not stick, but if love comes first, knowledge is pretty sure to follow" (p. 28).

A large portion of the current place attachment literature is dedicated to predictors of place attachment (Lewicka, 2011). While some predictors of place attachment are surely left to be revealed, research indicates that strong social ties (Lewicka 2010; Lewicka, 2011) and a significant amount of time in a particular place (Oh et al., 2012; Smaldone, 2006; Vaske & Kobrin, 2001) are among the most prevalent predictors of place attachment. Lewicka (2010, 2011) explains that identifying the predictors of place attachment is not the same as identifying the process of place attachment. Predictors of place attachment may help give direction to identifying possible mechanisms of place attachment but they do not explain *how* people become attached to places. The research concerning place attachment has spent little time on the process of development and more research is needed to understand how place attachment is formed (Lewicka, 2011; Quinn & Halfacre, 2014; Williams & Vaske, 2003).

Within the current place attachment literature there is also an increased interest in attachment to places of recreation, wild places, and the natural environment rather than attachment to permanent residences (i.e. towns, neighborhoods) (Lewicka, 2011). Outdoor educators spend a large amount of time in one particular natural environment, often leading trips day after day in the same locations. Due to the possession of at least one well know predictor of place attachment (time spent in a location) and the growing focus on natural based place attachment, facilitators of outdoor experiences are a population of interest in the place attachment literature. Investigating how outdoor educators develop place attachment may be able to add to the understanding of place attachment. Hutson, Montgomery, and Caneday (2010) attempted to highlight different ways outdoor professionals construct meaning related to places in which they work but the researchers did not attempt to understand factors that may lead to place attachment. While the literature concerning how place attachment is formed is quite sparse

(Manzo & Devine-Wright, 2014; Moore & Graefe, 1994), there is little literature regarding the process of place attachment of outdoor educators. Therefore, the purpose of this study was to investigate how outdoor educators who have repeat exposure to an ecosystem develop place attachment. This study assumes that place attachment leads to pro-environmental behaviors and that increasing place attachment could increase pro-environmental behaviors (Halpenny, 2010; Scannell & Gifford, 2010b; Vaske & Kobrin, 2001). Consequently, only the place attachment of outdoor educators who act responsibly toward the environment was investigated. Snowball sampling along with a criterion for participation was used to find participants for this study. Two surveys were used to identify outdoor educators who report having place attachment and pro-environmental behaviors. Individuals who scored above average in both surveys were invited to meet for phenomenological interviews. A more complete view of place attachment may be achieved by examining the development of place attachment and not merely predictors.

Research Question

What is the process that led outdoor educators with pro-environmental behaviors to form place attachment with the environment in which they work?

Definition of Key Terms

Place attachment – "the strength and nature of the emotional bonds people form to their surroundings." Includes "together two constructs, place dependence and place identity" (Hutson et al., 2010, p. 419).

Place dependence - "the importance of a resource in providing amenities necessary for desired activities. This functional attachment is embodied in the area's physical characteristics (e.g., accessible rock climbing routes, hiking trails, or whitewater rapids) and can increase when the

resource is close enough to allow for frequent visitation…thus suggests an ongoing relationship with a particular setting" (Vaske & Kobrin, 2001, p. 17).

Place identity - "the ways an individual defines her or his sense of self in relation to external environments" (Hutson et al., 2010, p. 419).

Outdoor adventure education – "A variety of teaching and learning activities and experiences usually involving a close interaction with an outdoor setting and containing elements of real or perceived danger or risk in which the outcome, although uncertain, can be influenced by the actions of the participants and circumstances" (Ewert & Sibthorp, 2014, p. 5).

Pro-environmental behavior – "Behavior is considered environmentally responsible when the actions of an individual or group advocate the sustainable or diminished use of natural resources" (Vaske & Kobrin, 2001, p. 1)

CHAPTER 2.

LITERATURE REVIEW

Many people who engage in frequent adventure and leisure activities in the same place express an emotional bond toward the locations they use often for their activity of choice. People might use words that convey ownership to describe a preferred location: “their place” or “a favorite place” (Oh et al., 2012). Individuals may not set out to form a bond with nature. In fact, those that have formed an attachment to a place may realize that they were attached only after the place has changed (Kudryavtsev et al., 2012). A person’s connections to their place influence their commitment to caring for and acting responsibly toward that place (Scannell & Gifford, 2010b).

Place Attachment

Many studies have examined place attachment (Hutson et al., 2010; Kudryavtsev et al., 2012; Kyle, Graefe, Manning, & Bacon, 2003). The ideas of place attachment span several educational fields of study including human geography, anthropology, and environmental psychology (Kyle et al., 2003; Vaske & Kobrin, 2001). In the field of environmental education and leisure studies, place attachment is generally considered both an emotional and a functional bond that an individual develops with a particular place through repeat “people-place interaction’s” (Oh et al., 2012, p. 74). Place attachment consists of two components: place dependence and place identity (Hutson et al., 2010; Kyle et al., 2003; Oh et al., 2012; Vaske & Kobrin, 2001).

Place dependence is a functional attachment an individual forms with a particular place. This attachment is based on the degree to which the individual perceives a certain place to provide amenities for desired activities (Kyle et al., 2003; Vaske & Kobrin, 2001). It is centered

on the physical characteristics of the location and the setting's value is based on how suitable the individual perceives the circumstances are for activities such as hiking, fishing, camping, birding, rock climbing, etc. (Kyle et al., 2003). Vaske and Kobrin (2001) explain that place dependence can increase when the resource is close enough to permit frequent visits. For example, a small local river may not provide a premium kayaking experience but an avid boater may choose to paddle the river to improve specific skills if the river is close enough to his/her home. Place dependence suggests a consistent relationship with a particular location (Vaske & Kobrin, 2001).

Place identity refers to an emotional connection an individual develops with a place. Place identity encompasses beliefs, memories, ideas, feelings (Oh et al., 2012), and reflects how an individual defines his or her sense of self in relation to his/her surroundings (Hutson et al., 2010). Place identity is based on an individual's symbolic dependence on a place, helping him/her make meaning of who they are (Manzo & Devine-Wright, 2014). This bond becomes an essential part of an individual's self (Kyle et al., 2003), or identity. Place identity is formed over time (Oh et al., 2012; Smaldone, 2006; Vaske & Kobrin, 2001) rather than the result of one experience. Repeat visitations to a site, due in part to place dependence, may lead to (Vaske & Kobrin, 2001) or strengthen (Kudryavtsev et al., 2012) place identity.

The amount of time spent and number of experiences had in a particular place are critical for a place to transition from just another pretty spot into a place of emotional significance (Smaldone, 2006). The "accumulation" of personal experiences over time allows an individual to weave bonds with a place (Benages-Albert, Di Masso, Procel, Pol, & Vall-Casas, 2015) that result in more meaningful emotional and social connections (Smaldone, 2006).

Place attachment is a powerful bond, emotional and functional, a person develops with a place (Oh et al., 2012) and is considered to be comprised of both place dependence and place identity. Place dependence refers to an attachment based on the functionality of a place, whether based on goodness-of-fit for outdoor activities or for outstanding scenery (Williams & Roggenbuck, 1989). Place identity refers to when a person feels that a specific place is fundamental to his/her self-worth and identity and accepts that place as a significant part of his/her world (Seamon, 2014). Place attachment makes a certain place more meaningful to an individual.

Pro-Environmental Behaviors

One of the goals of environmental education is "to create new patterns of behavior of individuals, groups and society as a whole toward the environment" (UNESCO, 1976, p. 15). Behaviors "toward the environment" may fall under several equivalent terms such as pro-ecological behavior, pro-environmental behavior, environmental problem-solving, environmental action, responsible environmental behaviors (Marcinkowski, 1998), and environmentally responsible behaviors. These behaviors are understood to encompass a variety of actions "aimed at" or "intended to" contribute to the solution of environmental problems (Marcinkowski, 1998) and include behaviors which advocate for the sustainable use of, or the reduced use of, natural resources (Vaske & Kobrin, 2001). For the purpose of this study, these problem-solving behaviors will be referred to as pro-environmental behaviors. Pro-environmental behaviors can range in degree from the ordinary, switching off unneeded lights, turning off the water while lathering in the shower, and recycling, to extraordinary, such as creating an alliance of environmental and social justice groups to press for better national and international environmental policies (Chawla, 1999).

While experiences in nature can and often do lead to environmental action, just having the experiences does not make action automatic (Russell, 1999; Sanger, 1997). Similarly, empirical data demonstrates that environmental knowledge gains (Hanna, 1995) and increased awareness of environmental issues (Vaske & Kobrin, 2001) do not always directly correlate to environmental attitude changes (Hanna, 1995) or stimulate environmentally responsible behavior (Marcinkowski, 1998; Vaske & Kobrin, 2001). Although place attachment is not the only way in which pro-environmental behaviors may be developed, it is one such proven avenue (Vaske & Kobrin, 2001). Vaske and Kobrin, (2001) describe the relationship as follows: as place attachment deepens, so does place identity; as place identity increases, so do pro-environmental behaviors. Place attachment based on natural aspects of place can also predict pro-environmental behaviors (Kudryavtsev et al., 2012; Scannell & Gifford, 2010b) and has a significant positive effect of responsible behavior (Vaske & Kobrin, 2001) toward the environment.

Place attachment may contribute to both behaviors that favor the environment and solutions of local environmental problems because people are inclined to take care of and protect the places that have meaning to them (Kudryavtsev et al., 2012) or are central to their identity (Stedman, 2002). Research indicates that attachment bonds (operationalized as place identity) with a place may be an important precursor to and strongly correlates to place-specific pro-environmental intentions (Halpenny, 2010), especially if the individual views the place as being less than optimal (i.e.: there is room for improvement) (Stedman, 2002). On the local level, place attachment may lead to acts such as volunteering in parks, donation of time and effort in nature refuges, community clean ups (Kudryavtsev et al., 2012), and engagement in less depreciative behaviors (Kyle et al., 2003). As individuals develop in-depth knowledge (Kyle et

al., 2003; Scannell & Gifford, 2010b) and an emotional connection with their local natural resources through place identity, they seem to act responsibly at that setting as well as in day to day activities (Vaske & Kobrin, 2001).

Pro-environmental behaviors in a natural resource setting have been found to encourage pro-environmental behavior in everyday life (Vaske & Kobrin, 2001). Halpenny (2010) found that individuals may transfer the importance they assign to a particular place to the more abstract concept of the environment in general. General pro-environmental behavior can include actions such as carpooling and supporting environmental organizations (Kudryavtsev et al., 2012). Place identity seemed to be the key factor in Halpenny's (2010) study explaining how one type of pro-environmental behavior inspires interest in an unrelated pro-environmental behavior. Demonstrating the links between place attachment and responsible behavior highlights one avenue for developing a more responsible citizenry - the ultimate goal of environmental education (Vaske & Kobrin, 2001).

Outdoor Adventure Activities

Outdoor adventure activities are those which include a close interaction with an outdoor setting and involve either real or perceived risk factors (Ewert & Sibthorp, 2014). Examples of outdoor adventure activities include hiking, backpacking, whitewater kayaking, and rock climbing. Research shows that more frequent (Palmberg & Kuru, 2000) and higher skilled adventure activities (Thomas, 2005) lead some participants to form a positive (Thomas, 2005) and strong empathetic relationship to nature (Palmberg & Kuru, 2000). Sanger (1997) suggests developing a connection with nature starts with experience in nature. In a two-year study that examined the human/nature relationships of university students involved in an outdoor education program, Martin (2004) found that positive experiences in nature tend to develop positive

attitudes toward nature. For Martin's (2004) students, outdoor adventure activities provide opportunities for contact with nature and allow for continued involvement (Thomas, 2005). Students who feel comfortable participating in higher skilled adventure activities often express increased willingness to participate in outdoor activities in the future (Palmberg & Kuru, 2000). A commitment to outdoor recreation activities that happen in a particular place can lead to greater place identity (Oh et al., 2012).

Skill-and-knowledge and commitment to a particular adventure activity are directly associated with place identity (Oh et al., 2012). Oh and associates (2012) examined the connections between anglers and place attachment and suggested an intimate linkage between anglers' skill level and emotional attachment to a recreation place. As anglers develop their skill level, knowledge level, and invest more time and resources in fishing (commitment), they develop a connection with specific fishing sites, express a higher degree of affective attachment to recreational sites, and become attached to these sites as significant places in their lives (Oh et al., 2012).

The students in Martin's (2004) study express parallel ideas. When asked about a recent outdoor adventure trip with an environmental focus, one student remarked, "Let me get the skills developed then I can move forward and start to work on the relationship with the place" (Martin, 2004, p. 6). Another student remarked, "Let's just go and climb our guts out and enjoy the climbing and the nature thing will just come, you know" (Martin, 2004, p. 7). These students are echoing the idea that skill acquisition is important to the ability to forming a relationship, or attachment with nature or a place.

As outdoor enthusiasts begin to be more competent in their activity of choice, their focus tends to shift from activity specific to the non-activity specific experience (Oh et al., 2012).

Over time, emotional or social connections to places seem to be more significant compared to the initial stages of an individual's connection to a place, when physical setting and features are often more important (Smaldone, 2006). The angler, for example, may shift his focus from catching the trophy fish to more social concepts, like teaching his grandchildren to enjoy fishing and sharing time with loved ones while on the water. The grandfather's satisfaction with activity-specific elements of the fishing experience makes it more likely for him to seek motivations that may not include catching a trophy fish, and ultimately, acquire a strong tie with a specific place (Oh et al., 2012). Similarly, hikers in a 2003 study (Kyle et al.) found that as the importance and pleasure from hiking increased, so did the hikers' emotional bond with a place. The relationship between satisfaction/enjoyment and a specific outdoor adventure activity suggests that as the former increases, so does the individual's dependence on a place (Kyle et al., 2003).

While not all experiences in nature lead to attachment, Martin (2004) warns that when students feel less comfortable in the environment or less comfortable with the skills needed, they tend to feel more separated from nature. Feeling safe and competent in nature is necessary for developing a positive relationship with nature (Martin, 2004). Maslow's (1943) Theory of Human Motivation suggests that peoples' physical/psychological needs must be met before they can experience love, happiness, or self-actualization. Maslow (1943) reveals that human needs are organized in a hierarchy and the appearance of one need rests on the fact that another, more basic (or potent) need has been satisfied. The highest level of human need is for self-actualization (Maslow, 1943). Self-actualization refers to the desire for self-fulfillment, realizing one's potential, and becoming the best one can be, or finding one's identity. Self-actualization is ultimate happiness (Maslow, 1943). The students in Martin's (2004) study who may have had

physical needs (hunger, extreme temperatures, etc.) or felt unsafe (due to low skill level) must satisfy these immediate physical needs before they are able to reflect, concentrate, or look introspectively at what is happening in the environment around them or form a positive relationship with nature. Likewise, place attachment through place identity, which should be considered a higher level need due to the connections of self-actualization, cannot be achieved if people have unfulfilled needs at a lower level.

Participants who engage in adventure activities and feel out of their comfort zone are not necessarily doomed to have negative experiences and relationships with nature. Martin and Priest's (1986) model of Adventure Experience Paradigm (AEP) requires that some amount of fear, whether perceived or actual, be present to create a "peak adventure" (Martin & Priest, 1986). A peak adventure, which is the goal of the AEP, is the space where a personal ability or skill matches the challenge or risk (Martin & Priest, 1986) and a state of euphoria is experienced (Jones, Hollenhorst, & Perna, 2003). The outdoor adventure experience, a complex interaction of risk, competence, social relations, and the outdoor environment, has the potential to engage the whole person and engage an individual's relationship with the physical environment (Loeffler, 2004). Social relations, competence, and a relationship with the outdoor environment are some of the same ingredients that contribute to place attachment. Due to these overlapping qualities, it would seem that the theories of both Maslow (1943) and the AEP (Martin & Priest, 1986) need to be satisfied before place attachment can occur.

Outdoor adventure activities can provide an opportunity for a strong relationship with nature (Palmberg & Kuru, 2000). Connections in the research suggest that individuals who have higher skill levels, commitment, and are comfortable with the risks inherent in their activity of choice, may exhibit qualities that support the development of place attachment.

Outdoor Professionals

While previous investigations imply that activity involvement is a precursor to place attachment (Kyle et al., 2003, Stedman, 2002), most of the research has focused on the outdoor recreational pursuits of participants (Hutson et al., 2010). There is a lack of research that examines the place attachment of outdoor professionals (Hutson et al., 2010) and the pro-environmental behaviors that may develop from place attachment. To the author's knowledge, less than three studies focus on how professionals within the outdoor recreation industry understand their own place meanings and therefore their connections to caring for the place.

Outdoor professionals are quite influential within the industry, as they are responsible for developing, communicating, and protecting environmental values (Hutson et al., 2010). Proper program design (Thomas & Thomas, 2000), sequencing (Martin, 2004), and facilitation (Preston, 2004) can greatly impact the potential for participants to realize environmental objectives (Thomas, 2005). Instructors are regarded as the most significant element of both program and process (Kalisch, 1999). Because instructors can have a significant influence (Ewert & McAvoy, 2000), the responsibility of the quality of the contribution adventure activities make to the goals of environmental education "lies firmly with the teachers and leaders" (Thomas & Thomas, 2000, p 53). Teachers and leaders set the mood for students (Brock, 2010) and are perceived as role models (Brock, 2010; Derr, 2006). In fact, interactions with adults in nature are more likely to lead to a caring attitude toward the environment than direct experiences in nature alone (Chawla, 1999; Derr, 2006). The values of adult leaders (teachers, parents, instructors) tend to be the attitudes children take with them (Brock, 2010).

Values can be transferred and adopted between members of a group and therefore collective beliefs may contribute to the place attachment (Benages-Albert et al., 2015) and

ultimately pro-environmental behaviors of the group (Scannell & Gifford, 2010b). Given the great influence instructors of outdoor adventure activities can have on their participants, there seems to be potential for the environmentally responsible behaviors developed by instructors through place attachment to positively influence participants. The lack of research concerning the potential links between facilitators of outdoor adventure activities with repeat exposure to an ecosystem (they have repeat access and involvement with a particular place), place attachment, and pro-environmental behavior calls for further investigation to see if these connections exist.

Places can inspire us and move us in countless ways (Manzo & Devine-Wright, 2014). Attachment to a place (place attachment) can affect the way an individual views his/her identity (Kyle et al., 2003) and may motivate a person to engage in pro-environmental behaviors (Marcinkowski, 1998). Positive experiences with outdoor adventure activities can add to the development of place attachment (Oh et al., 2012) and the influence of instructors of outdoor adventure activities may have the potential to impact the place attachment and ultimately the way a participant behaves toward the environment.

CHAPTER 3.

METHODS

Phenomenology

Since the purpose of this research was to learn about the process that may lead to the place attachment of outdoor educators who have repeat exposure to an ecosystem, a phenomenological method was used because it provides a description of the essence of the experience (Creswell, 2014). With its roots in psychology and philosophy (Creswell, 2014), phenomenology aims at understanding the lived experiences of individuals about a phenomenon as described by the participants (Creswell, 2014). Creswell (2014) further clarifies that the phenomenon of study is most often an everyday encounter and is something the individual has experienced firsthand, or *lived.* Phenomenology is more interested in how individuals make sense of the world or their experiences rather than the factual accuracy of the experience (Patton, 2015).

Phenomenology typically involves conducting interviews (Creswell, 2014; Englander, 2012; Patton, 2015) which allow for interviewees to describe their experiences. These interviews help a researcher 'borrow" other people's experiences to be able to better understand the deeper meaning of a specific aspect of the human experience (Van Manen, 2001). When analyzed, the essence of a phenomenon may be revealed, making the core meaning of the phenomenon general to others who have experienced the same or similar phenomenon (Englander, 2012).

Participants

Participants were selected through snowball sampling. This technique involved identifying key informants in the study population (Patton, 2015; Singh, Pandey, & Aggarwal,

2007) who then referred the researcher to another subject. Professors in the outdoor education departments of local universities in western North Carolina and the surrounding area served as "information-rich" informants. These professors were provided with a description and the purpose of the study (see Appendix A). The professors were then asked for the names and contact information of people who met the qualifications for participation in the study. Qualifications for participation included outdoor leaders who 1) lead or have led adventure activities repeatedly in the same ecosystem 2) have led for at least two seasons and 3) are believed to exhibit pro-environmental behaviors. Seventeen potential participants emerged from this step. I then contacted all seventeen potential participants for this study (Patton, 2015) and asked them to take two surveys. All participants were also asked to give consent and acknowledge that they were volunteers, not to be compensated for their time, but they were entered into a random drawing to win an REI gift card for completing the surveys.

Criteria for Participation

In a phenomenological study, such as this, it was "essential" that all participants have experienced the phenomenon (Creswell, 2013) of place attachment and demonstrated pro-environmental behaviors in order to give meaningful insight. Sometimes an individual is unaware that he/she is attached to a place (Kudryavtsev et al., 2012) because the emotional significance of a place typically runs beneath the lived surface of everyday life and is unnoticed most of the time (Seamon, 2014). Thus, the language regarding place attachment could be unfamiliar (Seamon, 2014).

Although phenomenology is not typically concerned with quantitative measures in participant selection, as researcher, I had the responsibility to select participants who had the experience I was looking for (Englander, 2012). While the process individuals undergo to

develop place attachment was the specific phenomenon of interest, it did not fully satisfy the purpose of this study. Due to the connections between place attachment and pro-environmental behaviors, the development of place attachment of outdoor educators who also engage in pro-environmental behaviors was central to this study.

Establishing participant criterion is useful for insuring the quality of participants (Marshall & Rossman, 2011) as potentially information-rich cases (Palinkas et al., 2015; Patton, 2015). To ensure that participants had experienced the phenomenon of place attachment and exhibited environmentally responsible behaviors, the 17 potential participants (those recommended by the key-informants) took two brief surveys as part of the criteria for further participation. As a criteria for the study, participants needed to score above 4.25 on the first survey, the place attachment survey, and above 3.25 on the second survey, the Pro-Environmental Behaviors Survey (PEBS) to be eligible for further participation in the study. Five individuals did not respond to any of the email invitations to participate in this study. Twelve individuals responded by completing both surveys. Some survey respondents scored below the established criteria on both surveys and thus were excluded from farther participation. A few individuals scored above the criteria on one but not both surveys and were also excluded from the interview process. Three individuals met the criteria as being attached to their place of work (as determined by place attachment survey score above 4.25) and exhibiting pro-environmental behaviors (as determined by a PEBS score above 3.25). These three individuals were then asked to participate in the semi-structured in-depth interviews.

Figure 1 Participants

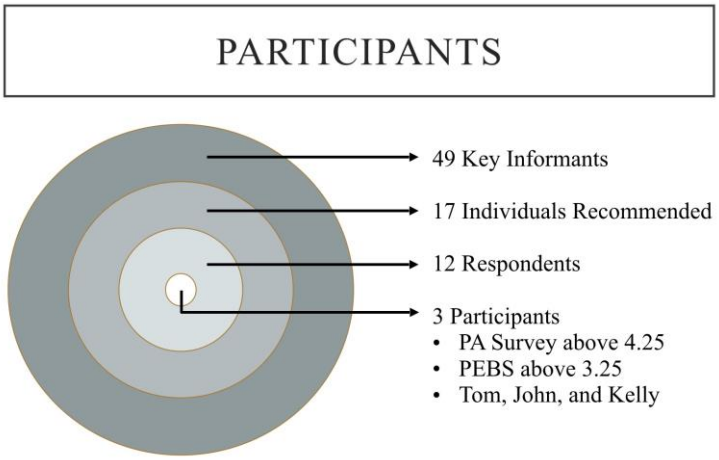

Figure 1. Collectively, 49 key informants recommended 17 individuals. Of those 17 individuals, 12 took both surveys, and 3 scored above the criteria making them eligible for phenomenological interviews.

Place attachment survey. The first survey was taken from Vaske and Kobrin's (2001) research and was based on Williams and Roggenbuck's (1989) place attachment questionnaire. This 5-point Likert scale asks participants to respond to statements about place dependence and place identity with *strongly agree* to *strongly disagree*. Statements include "I feel like this place is a part of me." There are eight questions on the place attachment survey. See Appendix B for the complete survey. This two-dimensional model of place attachment with the constructs of place identity and place dependence was chosen due to its popularity, reliability ($\alpha = .82$), and appropriateness for the type of place attachment this study desires to measure.

Pro-Environmental Behavior Scale (PEBS). The second survey used was the PEBS. Developed by Markle (2013), this 5-point Likert scale asks participants to respond to questions that address the types of consumer activities that are responsible for most environmental problems (transportation, food, and household operations). Participants were asked to select

from *never* to *always* to answer questions such as, "How often do you turn off the lights when leaving a room?" There are 19 questions in total on the PEBS. See Appendix C for the complete survey. The PEBS was chosen for its design, reliability, and ease of use.

Survey analysis. Each participant completed an eight-question place attachment survey with regard to the environment the individual leads/led adventure activities in and the 19 question PEBS. Because the place attachment survey utilizes more than four individual questions to define a single trait (place attachment), the survey was scored as a mean value, as research for Likert scales suggest (Boone & Boone, 2012; Sullivan & Artino, 2013). Results of studies in multiple countries indicate that the majority of people worldwide feel attached to their places of residence and score above the mean score (between a three and a four on a 5-point Likert scale) on place attachment surveys (Lewicka, 2014). This study was interested in the individuals who are above "average" and therefore participants who earned a mean score of 4.25 or higher were considered eligible for a phenomenologically-based interview.

Most questions on the PEBS required the participant to respond on a 5-point Likert scale. Although not all questions on the PEBS have the option for a numerical answer ('At which temperature do you wash your clothes?'), a numerical value was assigned to the response given by the participant ('hot [1], warm [3], cold [5]') as designed by Markle (2013). The PEBS was scored in the same manner as the place attachment survey for the same reasons. To date, there is no research to support an average score for the PEBS. An expert panel suggested an average PEBS score to be below 3.0. This study was interested in the individuals who are above average and therefore participants who earned a mean score of 3.25 or higher were considered to have pro-environmental behaviors and considered eligible for a phenomenological interview.

Participants who were not eligible for the interview process based on survey scores were notified and thanked for their time.

Phenomenological Interview Process

The number of participants in a phenomenological study is relatively small, typically ranging between three and five (Creswell, 2014). A large number of participants, as is typical in quantitative research, would cause a great time investment for a researcher due to in the in-depth nature of phenomenology. In addition, a large number of participants does not add to the generality of the results (Englander, 2012) in phenomenological studies. Therefore, the three individuals who meet the specified criteria of both surveys (4.25 for the place attachment survey and 3.25 on the PEBS) was the appropriate number of participants for the study and were asked to meet for semi-structured, in-depth, one-on-one interviews.

A phenomenological perspective through semi-structured, one-on-one interviews was employed. Semi-structured interviews allow flexibility while still maintaining some standardization between interviews (Green et al., 2015). Semi-structured interviews allow the interviewer the freedom to follow the organic flow of the conversation, asking questions as they occur naturally, and following up with questions as interviewees raise topics of special interest or importance (Berg, 2001; Green et al., 2015).

Interviews were face-to-face unless circumstances, such as distance, made this impractical. If distance was prohibitive, video conference interviews (i.e. Skype or Google Hangouts) were conducted. Interviews where both parties can see each other are rich in terms of nuances and depth (Englander, 2012). Therefore, face-to-face or video conferences were preferred over a telephone conversation because nonverbal communication is part of the interview process (Patton, 2015) and both verbal and nonverbal data may be valuable to the

study. Participants granted permission for interviews to be recorded by signing a waver and agreeing verbally before the interview began. I also took notes, as recommended by Creswell (2014) and Groenewald (2004), so the entirety of the data would not be lost if there was a technology failure. These notes included a reconstruction of the dialogue, accounts of events, reflective notes, feelings, or related matters (Creswell, 2014). Interviews took between 45 minutes and one hour.

Interview etiquette was followed to keep all one-on-one interviews within the same guidelines. Each interview opened with an introduction and a statement reminding the participant what to expect during the interview (general length of interview, purpose of the research, and that written notes will be taken, etc.- see Appendix D). An ice-breaker question followed, as suggested by Creswell (2014). Although the duration of the interviews and number of questions varied by participant (Groenewald, 2004) the same main question(s) were asked to all interviewees. Questions included: *a) Can you describe a time when you felt strongly attached to the environment in which you lead/led adventure activities? b) How do you think this attachment developed? c) What effect or impact has this attachment had on your life?* Several clarification questions were asked after the main questions but the focus of these questions was on the phenomenon rather than the participant, as described by Englander (2012). While, for the purpose of this study, the interview was the appropriate method suggested by the literature (Creswell, 2014; Van Manen, 2001), I was aware that accounts of lived experiences are never identical to the lived experience itself (Van Manen, 2001) and that not all people are equally articulate (Creswell, 2014) in describing the effect of the experience.

Phenomenological Reduction

While the phenomenon of study may be experienced uniquely by everyone, phenomenology assumes there are commonalities among these experiences. Generality of results can be achieved if a researcher is attentive to the commonalities in the data (Englander, 2012).

The goal of phenomenology is to reveal the inherent or essential nature of a phenomenon (Lin, 2013). The analysis of phenomenological data is a rigorous process (Patton, 2015) yet it is not rule-bound (Van Manen, 2016b). Epoché and reduction are twin methods of gaining access to the meaning of a phenomenon (Van Manen, 2016a). Epoché involves "opening up and freeing oneself from obstacles that would make it impossible to approach the phenomena" (Van Manen, 2016a, p. 228). Reduction means 'to lead back' rather than the potentially misleading term 'reduce' and is an abstraction process of going beyond traditional thoughts in order to reveal the core of the phenomenon (Lin, 2013). These two techniques, epoché and reduction, set other types of data analysis apart from phenomenology.

Epoché. *Epoché,* a Greek word meaning 'to stay away from', is often used in phenomenology to indicate a suspension of belief (Groenewald, 2004; Van Manen, 2016a). Some researchers use the term 'bracketing' in reference to brackets in a mathematical equation that keep its contents separate from the rest of the formula. Epoché is the process by which a researcher sets aside any assumptions, presuppositions, theories, frameworks, or interpretations that may stand in the way of seeing or accessing the phenomenon clearly (Lin, 2013; Van Manen, 2016a). It is a way of opening oneself to the world as it is lived through.

Like any investigator, I have biases and need to be aware of. With over 450 hours of experience leading outdoor adventure activities in the Indian River Lagoon on the east coast of

Florida, I brought to this study my own understanding of facilitating outdoor adventure activities in a certain ecosystem. Along with these experiences, I brought my own personal thoughts and feelings about leading outdoor adventure activities in the same ecosystem and how these experiences may have led to place attachment and pro-environmental behaviors in my own life. I was constantly aware of how these biases have shaped the way I understand the data collected and made every effort to remain objective (Creswell, 2014). I practiced bracketing not to forget my beliefs, but to confront them and hold them deliberately separate during this study, in order to avoid being led to a premature understanding of the phenomenon (Van Manen, 2016a).

Figure 2 Epoché

time, number of hours spent in place
exploration/discovery
action/physical activities (kayaking, hiking, etc.)
daily rhythms of nature in place
learning about the natural environment
positive social interactions

Figure 2. This list includes the ideas, assumptions, presuppositions, theories, frameworks, or interpretations that were set aside during this study.

Eidetic Reduction. The interviews were transcribed verbatim and the field notes were typed. I carefully read and reread the entirety of the data (Groenewald, 2004; Lin, 2013) looking for underlying themes and concepts that represent the essential structure of the phenomenon (Englander, 2012; Lin, 2013). Concepts that represented the universal meaning of the research phenomenon were identified within each interview (Groenewald, 2004). Concepts were

identified by segmenting the data line-by-line and into paragraphs, keeping in mind that a statement may contain several concepts (Lin, 2013). After careful examination, redundant concepts were eliminated and related concepts grouped into themes (Creswell, 2014; Groenewald, 2004).

Eidetic reduction and imaginative variation were used as two strategies to aid with the process of identifying core concepts of a phenomenon. Eidetic reduction is the process of removing any unnecessary components to reveal the core of the phenomenon (Lin, 2013: Van Manen, 2016a), leaving only what is invariable and absolutely necessary for the existence of the phenomenon. Patton (2015) gives an example of a chair. Several people may describe their office chair in many ways. If eidetic reduction is used to remove the texture, smell, amount of padding, sound, etc. (nonessential components) we find that an office chair is essentially a device to hold the body in an upright seated position. The nonessential components have been removed to reveal the meaning structure of the phenomenon; the *eidos*, or essence, has come in to view (Van Manen, 2016a).

Imaginative Variation. Imaginative variation compliments eidetic reduction (Lin, 2013). While eidetic reduction eliminates the irrelevant, imaginative variation is a mental exercise used to reveal possible hidden meanings (Lin, 2013). Imaginative variation varies different elements of the phenomenon to see if it changes the essence of the phenomenon. If an imagined variation leaves the phenomenon unchanged, the variation is not essential to the phenomenon.

After individual interviews were examined, I looked for themes. Themes describe an aspect of the structure of a phenomenon and help navigate lived experiences (Van Manen,

2016b). Themes point to aspects of the phenomenon rather than describe the phenomenon wholly (Van Manen, 2016b).

Trustworthiness

To maintain trustworthiness of the data, several steps were taken. First, interview transcripts were checked to ensure there are no obvious mistakes (Creswell, 2014). Participants then received a copy of the transcript, as suggested by Groenewald (2004), and validated that the text properly represents their perspective of the phenomenon. Second, insights were achieved through epoché and reduction, methods consistent with phenomenology (Van Manen, 2016a). Participant quotes and anecdotes were used to support themes with depth and rich descriptions. The use of multiple strategies enhanced the researcher's ability to assess the accuracy of the findings (Creswell, 2014).

Phenomenology does not produce absolutes or generalizations in the typical empirical sense (Van Manen, 2016a; Van Manen, 2016b). It is not concerned with factual accuracy (Van Manen, 2016a; Creswell, 2014) or conclude with each person's unique experience (Patton, 2015). Participant selection, careful interviews, epoché, and reduction must be consistent with the methodology of phenomenology. These tools enable a researcher to understand a possible lived human experience and find the meanings that may be hidden within them (Van Manen, 2016a).

CHAPTER 4.

FINDINGS

The purpose of this phenomenological study was to investigate the place attachment of outdoor educators with pro-environmental behaviors. Professors at local universities were identified as key informants and were asked to recommend people who 1) lead or have led adventure activities repeatedly in the same ecosystem 2) have led for at least two seasons and 3) were believed to exhibit pro-environmental behaviors. As part of a criterion selection process, participants demonstrated that they had both and attachment to a place and pro-environmental behaviors by taking two surveys. Out of 12 individuals who took both surveys, three people scored above 4.25 on the place attachment survey and scored above 3.25 on the pro-environmental behavior scale and became eligible for this study. Semi-structured interviews were conducted as conversations, with open ended questions. This interview style allowed participants to convey their experiences with rich detail (Van Manen, 2016a).

A total of three participants, two males and one female, were interviewed. Participants have been given pseudonyms; John, Tom, and Kelly. Each interview lasted between 45 minutes and one hour. Distance prevented Tom and Kelly from interviewing in person. Instead they were interviewed over video chat while John's interview was conducted face-to-face. All participants were at their place of work during the interviews. Participants have between seven and twenty-two years of experience working in the environment in which they are attached. At the time the interviews were conducted, all participants were currently still living in the area in which they worked. While each participant lives and works in a different area of the United States, separated by more than 2000 miles, there are several similarities in their work environments. All participants have some experience in the field (guiding, teaching, training,

etc.) and some office/administrative experience. All participants describe their current community as "small" and either isolated or transient. Though all participants considered themselves to have experienced a wide variety of places, each participant still considers the natural environment in which they are currently living to be beautiful and they feel fortunate to live there.

Participant's Description of Place

John lives and works in an outdoorsy community on National Forest land. A river, popular as a whitewater boating and fly fishing destination, is at the core of this place. Annually, whitewater and fishing competitions and clinics are held locally. John has lived and worked in this place over 20 years, though not with the same company. John, already an elite kayaker, moved to this place to see if he could become an even better kayaker.

Tom lives and works in a very small community in a National Historic Park. The town's population doubles in the summer to handle the roughly 1 million tourists that visit annually. Located along a popular cruise ship route, tourists come for the long and rich cultural history, recreation opportunities, and the incredible scenery. Internet reception is poor and highway access is limited.

Kelly lives and works in a National Forest Scenic Area adjacent to a National Park. Tourists frequent in the summer months to boat on the lake, fish in the streams, and visit unique geological features and nearby ghost towns. Skiing is popular in the winter. Geology is what originally attracted Kelly to the area.

In addition to the place attachment survey, it became clear that each participant was quite attached to their place. Tom and John express that they felt as though the place they live in surpasses all other places: "I can't imagine living anywhere else" and "This place trumps every

single one of those places [I have traveled to] and more." Kelly explains, "It feels like I'm a part of [the land] rather than just a separate entity looking *at* this ecosystem, this community of birds and mammals, and plants, and water systems." Their statements reflect place identity and place dependence, components of place attachment.

Further evidence of pro-environmental behaviors was evident in the interview process. What is striking about this is that two participants discussed their pro-environmental behaviors unprompted. In addition, the behaviors the participants reported are general pro-environmental behaviors rather than place specific. John comments that as a result of being a part of the National Forest, he and his wife "drive cars that have great fuel economy, live in a small house", and have chosen to do without certain appliances as an effort to be more energy conscious. Kelly feels that her attachment to place has "driven it home that sharing stewardship with others is really more important" than she once thought. She says her attachment to her place has "helped [her] want to be active to help other places" and Kelly is willing to have her "effort and energy put into their (other places) protection as well." Tom did not specifically discuss his pro-environmental behaviors but his survey scores were well above the study minimum.

The attachments these participants have to the places they work is complex. After reading the interview transcripts thoroughly in light of epoché and the use of the complimentary methods of eidetic reduction and imaginative variation, three themes emerged from the participants' responses concerning the process in which these outdoor educators with pro-environmental behaviors developed place attachment. The three themes that emerged were labeled: 1) intentional commitment, 2) experiences of depth, and 3) being known in the community. Each theme is described with more detail and with key examples from the participant interviews.

Intentional Commitment

From my analysis of the interviews, each outdoor educator in this study made an intentional commitment to work in the specific environment in which they currently call home. Each individual found it necessary to rearrange some elements of his/her life to enable him/her to be in a particular place. Each person described how they chose to act on an opportunity though the scale of actions required to rearrange their lives was different for each participant. John quit a job on a moment's notice and "burned a lot of bridges." Kelly skipped a college class. Tom moved into a tent even though he had little personal outdoor experience or equipment. There is also a sense of urgency in their actions. Each individual described how they saw an opportunity that would enable them to be in the place they loved and so they took advantage of it, regardless of whether the conditions of that opportunity were absolutely ideal. For John and Tom, this effort allowed them to remain in a place they were already working in. For Kelly, her efforts allowed her to return to a place that she had already been captivated by.

John was living in a place which he was passionate about and had just gotten a new job. He describes a moment when he realized he needed to intentionally craft his life in order to remain in the place that he described "pulled at [his] heart strings."

> I was living here [by the river] and this new job required a lot of travel. I realized I didn't want to travel often because I was super comfortable here. I just loved it so much. Every possible moment, whether working or recreating, was based around that river. I totally remember having this tug of war with my professional self. The job required me to travel but I wanted to be here so I had to figure out how to make that happen.

John made a conscious decision to manipulate aspects of his job in a way that would enable him to continue living in the place that he says had "gotten under [his] skin."

Kelly also described some experiences that led to an action that would put her in the place she felt connected to. She heard of an internship in an area she had visited and been fascinated with the year prior. She acted quickly to fill out the application. "I applied right then and there. I skipped a class to go write my resume because I had never had a resume before." She was hired for the internship and Kelly spent the next few summers working in the area, even taking jobs at the local market and the coffee shop just to be able to spend summers there. A point came in her life where she also had an internal struggle. She remembers saying to herself, "Ok, I either need to commit to this [place] full time or leave it behind." She finally decided she could not leave that place. Skipping class, working odd jobs, and seriously contemplating her dedication to the place she worked in are all examples of her intentional commitment. She structured aspects of her life with the intention of being in a place she loved.

As soon as school got out, Tom moved from his home state to be in an area he really cared about. He describes how he was able to manipulate aspects of his life in a way that allowed him to return the following summer, and which eventually led to his current full-time position.

> I was working in this absolutely horrible job not in the guiding industry. That was *not* why I had moved there. So, I just started going around and talking to the different tour companies. There are more tours here than you can imagine. I walked in and talked to the operations manager at the time and told him what I wanted to do. After a few trial tours he said to me, "Tom, you need to go get your Wilderness First Responder (WFR) certification." And I immediately said, "Yes, sir!"

Tom did two things. First, by going door-to-door speaking with guiding companies, Tom took a slightly unconventional way of ensuring he would have a job in that place the following summer.

Also, Tom did not seem to hesitate or consider the request of the manager burdensome even though the WFR training would cost time and money. Actively looking for a more satisfying job and eagerly agreeing to a potential employer's request were two actions Tom took to show commitment to his place.

These outdoor professionals each made an intentional decision to craft a life in a way which enabled them to remain in or return to a place that had special meaning for them. Whether it was finding a new job, odd jobs, obtaining new certifications, evading responsibilities, or having internal mental discussion, actions which demonstrated commitment seem to be essential to the process of place attachment. The choices these individuals made seem to suggest evidence of commitment to a place before they realized they were fully attached.

Experiences of Depth

All participants spoke of the depth of the place they were in. They described experiences that go beyond the typical actions that people might take in a place. Experiences of depth seem to occur when the individual is unhurried or doing leisure activities. Experiences of depth also seem to be a result of an accumulation of small, meaningful interactions, whether through play, exploration, repetition, recreation, or observation.

All three participants described enjoyment with free time in their place. Tom expressed the importance of recreational opportunities to his attachment. On the day of our follow-up interview, Tom spent the morning picking blueberries in the middle of the forest with a friend. "If I did not have these opportunities, I would not live here," he said. Kelly and John both also spent time playing in and exploring their place. Kelly developed a connection with the natural world by "going out and exploring on [her] own." Small surprises and discoveries, "going out to

look for a certain bird and finding something totally unexpected and unique instead", seemed to develop connections to place.

John said, "it was playing in the outdoors, it was playing on this river, trail running, mountain biking, and everything else we do" that led to his attachment. "Because I got to play in [the river] every single day, it keeps me here." He goes on to explain that if he was just coming there for the weekend the "timeline would have been a lot longer before I got attached."

John also explained why he believes exploration is an important element of developing place attachment. Connecting kids to the environment is a foundational philosophy in the organization John works for. John says kids "need to go down their own journey" to fall in love with a place. He recommends, "Get them in the outdoors. Let them experience it and find out what it is that makes them passionate about the outdoors and they'll fall in love with it, if you get it right… That's my experience." A few years back John's company hosted a competition where adolescents ages 15-20 came from around the world to compete and train in 10 days of whitewater kayaking events. One of the stated goals of the event was to get these participants passionate about the area. "I was just getting them outside, giving them access to go ziplining, giving them access to mountain bikes, to go explore trails, taking them to the lake to go swimming. Not just train, train, race, train, race." John sees value in play and exploration in promoting connections with the land for future generations.

Observations of the natural world can be experiences of depth. John explains, "My wife and I spent this morning sitting and drinking tea on the front deck of our house, you know, and there was a lot of activity going on with the wildlife. It was awesome. We're attuned to what's going on." Observational research has enabled Kelly to "get in touch" with her place. Often sitting for 30 minutes while watching birds, she uses all her senses: "paying attention [looking],

listening, smelling, touching, hearing." Experiencing the "changes in heat, changes in the wind, watching the clouds move, see[ing] what animals come and investigate" you are ways of experiencing the depth of a place.

Observing the *same* place repeatedly and watching minute changes can also create experiences of depth. Kelly describes with excitement a swimming hole she has visited regularly for nine years.

> I have this swim spot on the creek and every year it's slightly different because the creek digs it out a little deeper or fills in places with sediment. One year flowers will bloom on the edge of the stream in one spot but the next year the flowers will not be there. This year we have HUGE flows from all the snow melt and I can't go swimming there yet. I keep going back just to see how the swim spot is changing. It's probably going to totally change! The snow melts might score out a deep pool in a different spot or change the whole directions of the creek. I'm really looking forward to seeing what has changed.

Kelly has developed a deep attachment to this swim hole because of her regular and frequent visits. These visits go beyond the surface elements of the swim hole and toward a deeper, more profound understanding of her place.

Being Known

Two participants described the social aspects of their attachment as less important than the physical aspects of the environment in which they were in. The act of being known by the community still surfaced as an important element in the process of place attachment. For the purpose of this research, "being known" occurs when members of the community have personal connections to the participant. Through personal interactions, members of the community learn the individual's skills, needs, likes, or dislikes. Tom explains that members of his community

know the things he is good at and will recommend his skills to someone in need. "Being known" may also be the point that people of the community, who are considered locals or insiders, accept the individual as a local or insider themselves. When known, the 'newcomers' are viewed as a permanent fixture in a transient society. They are called by their name and recognized in day-to-day activities such as grocery shopping, getting coffee, or walking to work. Tom describes an interaction with a town 'native' after returning for his fourth summer:

> I needed to go to the grocery store before it closed. I walk into the grocery store and this guy is checking out and he looks up at me. His name is Matt. He says, "Tom, it is really good to see you and I am happy that you are back."

This is the point where Tom first acknowledges that he is attached to the place.

Kelly describes the many small interactions with people in her community as part of what kept here there. "You're inevitably going to see at least three people who are like, 'Hey! How's your day going?" Tom also enjoys the many quick interactions with his community. "I like walking out of my house every day because I'm probably going to see seven people that I can give high-fives to."

On the day of our interview John arrived early and had already "shaken hands with a bunch of paddlers" and already "talked boats" well before the interview was scheduled to start, indicating he was known by and comfortable in the community. These seemingly inconsequential social interactions with people in his community make coming to the office "fun." The anonymity is lost but traded for a place of recognition in the community.

The process of place attachment for these outdoor educators with pro-environmental behaviors seemed to involve three things: an intentional commitment, experiences of depth, and being known in a community. These may not be the only components of the process of place

attachment but they are essential to the process as experienced and described by John, Tom, and Kelly.

Additional Findings

The findings of this study indicate agreement between participants' experiences of place attachment as represented in the previously described three themes. However, individual participants did seem to experience the process of place attachment in differing ways as well. Some individuality in the process of place attachment may be anticipated due to the personal nature of place attachment in general.

Natural world vs. Social environment. "Huge, huge, huge," says Kelly when asked what kind of role the natural environment plays in her attachment. John and Tom both agree that the natural world and recreational activities provided by the environment are a big part of their attachment as well but they seem to disagree slightly on the order of importance of the social factor. John says, "People are important but not as important as the environment and the activities" to his attachment. When asked about the role of recreational opportunities in his place attachment, Tom replies, "If I didn't have these [recreational] opportunities, I wouldn't live here," but he goes on to clarify, "the recreation…I would never say it outweighs the people, but it is a huge reason I'm here." It seems that both the natural world and social environment play a significant role in the process of place attachment but different individuals rank them differently.

Senses. Kelly seemed to be very aware of her senses and mentioned often how they played a role in her day to day interactions with her place. She says, "I think that paying attention, listening, smelling, touching, hearing…using all your senses" can really help someone engage with their space as a way to get in touch with their environment. If an individual wants to develop a connection or attachment with their place she recommends getting to know a place

by “sit[ing] there for a whole day.” Getting bitten by bugs, feeling the changes in the day, “the changes in the wind, the clouds moving, and seeing what animals come by” is one of the beginning steps to get connected, she says. She also commented how the “smell of the sagebrush” played a role in her feelings of attachment to the high desert environment. In addition, when recounting the moment she decided to commit to her community, she describes a sunset in vivid color.

> The clouds were orange, or peachy, and they were bouncing light down onto the lake and it made it this incredible color. I can’t even describe it. I’ve never seen it since, but it was like an aqua marine, turquoise, but also a little bit more green…It was amazing.

Amazing sights, refreshing smells, and even uncomfortable bug bites are things that appear to connect Kelly to her place. Kelly’s use of senses seemed significant in the process of place attachment for her.

Intentional commitment, experiences of depth, and being known in a community were determined to be essential in the process of place attachment. These may not be the only components of the process of place attachment. Participants also mentioned the importance of using one’s senses and ranked the value of the natural world differently.

CHAPTER 5.

DISCUSSION

The purpose of this study was to investigate the process of place attachment for outdoor educators with pro-environmental behaviors. Connections between the findings of this study, existing place attachment theories, and environmental education literature will be made where appropriate. Limitations and suggestions for practice will be examined. Lastly, suggestions for further research will be discussed.

Place attachment is defined as "the strength and nature of the emotional bonds people form to their surroundings" (Hutson et al., 2010, p. 419). The participants in this study expressed their emotional bonds with their places in several ways, confirming their attachment to place and the definition presented by Hutson et al. (2010). Tom discusses things that might make him leave his place: "I think short term, grad school. Long term? Nothing." Literature says that place attachment is made up of two constructs, place identity and place dependence (Hutson et al., 2010; Kyle et al., 2003; Oh et al., 2012; Vaske & Kobrin, 2001). Kelly seems to confirm her place identity. "I feel like I am a part of the [land] rather than a separate entity looking at this ecosystem." John appears to demonstrate place dependence. He moved to his place because it was the "Mecca" for kayaking. The physical characteristics of the place met his recreational needs and as a result of "a lot of time on the water," he found that the place had "very much gotten under [his] skin." The individual lived experiences of the participants seem to be in line with the definitions of place attachment provided in the literature.

Vaske and Kobrin (2001) define pro-environmental behaviors as "actions of an individual or group that advocate for the sustainable or diminished use of natural resources" (p. 1). By driving fuel efficient cars, doing without certain appliances, picking up pieces of micro trash, and

sharing stories of stewardship with others, participants in this study acted in ways that reduces natural resources. The participants' lived experiences seem to be in line the literature's definitions.

All the participants in this study made an intentional commitment to their place. This commitment seems to be manifested in action, different for each participant. Commitment to place was demonstrated in the internal struggle all three participants discussed. Wrestling with a choice may be considered an action and so by deliberately deciding to stay in a place, these participants revealed their attachment to place. In addition, all participants showed commitment with concern to their occupation. These occupational commitments are interesting because they do not necessarily seem to have been made for financial security. In fact, once in their 'place', two participants left the office jobs they already had and selected new jobs which aligned more closely with their outdoor recreation activities of choice. This concept of intentional commitment is in line with a study examining links between recreation specialization (operationalized as skill-and knowledge and commitment) and place attachment. Oh et al. (2012) found that commitment to outdoor recreation activities is directly associated with place identity, and thus place attachment. Recreationalists with high commitment tend to develop identities to the places they recreate in (Oh et al., 2012). John echoes this as he explains why he came to live and work near the river. "The primary reason was recreation and business but it has become more than that…I don't think I can draw a line and say this is my personal life and this is my business life. It's a blur. They're one in the same, in many respects." John's identity seems to be inseparable from his place and sport. These findings support Oh et al.'s (2012) research suggesting that commitment to outdoor recreation activities can lead to place attachment.

For the participants in this study, actions that demonstrate commitment happen fairly early in the process of place attachment. Scannell and Gifford (2010a) present a model of place attachment where behavioral evidence of place attachment is demonstrated in 'proximity-maintaining' behaviors. Efforts to return or remain in a place are evidence of proximity-maintaining behaviors (Scannell & Gifford, 2010a). Changing jobs, missing class, and earning a new certification are examples of commitment and are behaviors that led the individuals in this study to maintain a proximity to their place. The above examples of commitment to place occurred before the individuals report their initial awareness of attachment. If proximity-maintaining behaviors are used as evidence of place attachment, it appears that the participants in this study may have been attached to their place before they were aware of their attachments.

Time spent in a place is a well know predictor of place attachment (Kudryavtsev et al., 2012; Lewicka, 2011; Smaldone, 2006; Vaske & Kobrin, 2001; Williams & Vaske, 2003). Several studies show that length of residence (Lewicka, 2010; Smaldone, 2006; Raymond, Brown, & Weber, 2010) and frequency of use (Halpenny, 2010; Kyle et al., 2003; Lewicka, 2010; Moore & Graefe, 1994; Williams et al., 1992) can increase feelings of attachment to a place. However, Williams et al. (1992) found that length of stay for wilderness users was unrelated to place attachment and Oh et al. (2012) found that actual number of days fishing did not significantly predict place attachment for anglers. Perhaps the reason for these inconsistencies is that quality of time spent in an area is not easily measured.

Participants in this study acknowledged the role time played in their attachment, but it was not simply the number of hours in a day spent in a certain location. Participants suggested that time spent in a place should have a sort of meaningful quality. Time as it runs under the surface of consciousness. John says falling in love with a place is like falling in love with a

person. He recognized that love and attachment take time but it is more than simple hours in the day. His place attachment "needed to percolate. It needed to brew." Kelly endorses engaging with a place in a "slow, kind of meditative way." These participants' place attachment could not be forced into a certain timeframe or achieved in a specific number of hours.

Time with experiences of depth was important in the process of developing place attachment for these participants. Merriam-Webster (n.d.) describes depth as the degree of intensity or the "quality of being profound or full." In their discussion of time as it relates to place attachment, Smaldone (2006) and Halpenny (2010) both express that *experiences* over time are important for place attachment. Experiences with depth are those that go beyond the surface qualities of a place. As participants play in, observe, and explore their place, they experience depth over time. The findings of this study help to extend literature concerning time and place attachment and may begin to offer a bridge between conflicting studies.

Quinn and Halfacre (2014) and Morgan (2009) both investigated attachment theory as an explanation of the process by which place attachment develops. Both studies found exploration to be a key element in the development of person-place relationships. Exploration (as a component of experiences of depth) was evident in this study as well, supporting previous research.

Positive social interactions are important in the development of place attachment (Brocato, Baker, & Voorhees, 2015). Being known in their community was significant to the participants in this study. People willing to stop and chat, casual discussions of produce at the market, and the cheerful greeting at the recognition of one's face seemed to elevate the individual's status to a place of acceptance. Using someone's name or engaging them in a personal conversation sends a nonverbal message that that individual is part of the community

(Willemsen, 1995). Being known by the community was identified by participants as a meaningful part of what keeps them in the place they are attached.

Beckley (2003) presented a theory that proposes that factors that lead to place attachment may be either anchors or magnets. Anchors are aspects which prevent people from moving from a place and magnets are the factors that draw someone to a place. Lewicka (2011) proposes that social factors can become anchors. Over time, social and emotional connections become more prominent (Smaldone, 2006). Being known by and involved in the community did not happen immediately for the participants in this study. It is sometime later in the process of place attachment that participants feel known by their community, anchoring them to their place and making it difficult to leave.

The purpose of this study was to investigate the series of events that lead to place attachment for outdoor educators who demonstrate pro-environmental behaviors. The process of place attachment as described by participants through phenomenological interviews supports much of the existing place attachment literature. This study also begins to clarify some of the discrepancies in how time contributes to place attachment, suggesting that quality of time (depth) is important in addition to length of time. Place attachment appears to begin with an intentional commitment and includes experiences of depth and being known by the community. The process of place attachment may be non-linear. It is likely that some events may happen more than once or in a cyclic fashion. For example, experiences of depth are expected to reoccur throughout the attachment process. As an attachment grows and an individual accumulates more experiences a deeper connection to place is anticipated. The in-depth nature of this study has helped clarify and expand the understanding of the process of place attachment.

Limitations

There were some apparent limitations to this study. First, the ecosystem each individual called home is greatly different but the similarities in the towns the participants live in is surprisingly similar. This study did not investigate the role the size of the community might play in the process of place attachment, if any. Is it merely a coincidence that all participants report attachment to a small community? Second, the distant location of two of the participants presented an interesting challenge. Video chats where the most practical solution to communicating with participants who lived thousands of miles away, but there was a slight awkwardness in online introductions. In addition, a spotty internet connection hindered one video chat, forcing a telephone call after a few minutes of poor sound quality and a fair amount of repetition. Lastly, the participant recruitment process relied on key-informants' accuracy of contact information for participants and may have excluded some eligible participants such as expeditionary instructors who are in the field for long periods of time or move often.

Recommendations for Practice

A variety of people-place relationship terms (place attachment, sense of place, rootedness, etc.) exist in different fields of study and are often viewed as "different pieces of a broken jigsaw puzzle" (Lewicka, 2011, p. 208). Place attachment is often associated with the field of psychology or sociology where sense of place is often used in relation to environmental education (Lewicka, 2011). In fact, place attachment and sense of place have many things in common. Sanger (1997) defines sense of place as "an experientially based intimacy with the natural process, community, and history of one's place" (p.1). Both place attachment and sense of place are associated with an emotional bond between a person and a place (Williams, Patterson, Roggenbuck, & Watson, 1992; Hutson et al., 2010) and is thought to be created

through personal experiences with physical surroundings (Kudryavtsev et al., 2012). In addition, the findings of this study seem to confirm the similarities of the two topics: the importance of experiences of depth (intimacy) and being know (community) may be essential to the process of both place attachment and sense of place. Therefore, is may be possible for sense of place practices to extend or dovetail with the place attachment literature rather than compete with it.

In his latest book, *Vitamin N*, Louv (2016) presents a practical guidebook for families and communities to build strong relationships with nature. Opportunities for exploration, observation, play, and discovery abound in this book. Louv (2016) also offers tips for ways nature can build community. Similar books, curriculum, workshops, etc. geared toward environmental education could double as resources for encouraging place attachment, adding depth to experiences.

Outdoor adventure activities can provide an opportunity for strong relationship with the natural world (Palmberg & Kuru, 2000) and allow for continued involvement (experiences) in the natural world (Thomas, 2005). Teachers, summer camp leaders, parents, and guardians should remember that if they provide students with outdoor activities as a vehicle for place attachment, they should remember to allow room for play, exploration, or observations (depth).

Teachers and leaders have the ability to help creature the culture of a group of students or participants. Leaders who engage with students or participants and encourage others to do the same may facilitate a community who knows its members. Teachers and leaders who take a genuine interest in and are willing to learn students or participants' names, interests, and talents may be encouraging place attachment and ultimately pro-environmental behaviors.

This study assumes pro-environmental behaviors are an outcome of place attachment as supported by the literature (Halpenny, 2010; Scannell & Gifford, 2010b; Vaske & Kobrin, 2001).

If pro-environmental behaviors are the goal of environmental education, encouraging the commitment, depth, and being known in a community may be one way to inspire more individuals who care for and protect the environment through place attachment.

The leisure service industry depends on significant numbers of seasonal employees (McCole, Jacobs, Lindley, & McAvoy, 2012). Retaining employees from year to year has been identified as a crucial issue and could significantly reduce the cost associated with training and recruiting staff members, allowing managers to spend more time in program development or other areas of importance (McCole et al., 2012). While employees who exhibit pro-environmental behaviors may not be the primary goal of a summer camp or eco-tourism company, many organizations with seasonal workers could benefit from employees with place attachment. Directors and managers could design staff trainings with opportunities for experiences of depth. Allowing and encouraging time for exploration and observation of the natural world (whether through adventure activities or other means) during staff training and throughout the length of the employment contract could encourage the process of place attachment and an emotional connection to the place. Evidence of place attachment in the form proximity-maintaining behaviors may be one factor that can increase the rate of returning employees from year to year. In addition, the participants in this study all expressed an infectious desire to share their love of place with their clients. By promoting a love of place among their clients, managers are essentially building future donors and repeat customers. Encouraging place attachment among employees may have a potential to save businesses, camps, universities, and other organizations with high turnover rates money by reducing the yearly costs of staff training but also get “free” advertising of sorts from employees who want others to experience to the same love of place.

Recommendations for Further Research

Research which investigates the process of place attachment is still limited. The process of place attachment should be investigated for outdoor leaders of different sized communities to investigate if community size plays a role in being known by the community. This study could be replicated with individuals from larger communities or cities.

Also, the findings of this study indicate that there are elements of place attachment that may not be uniformly important to all who experience the phenomenon. While all participants acknowledged the large role the environment and recreational opportunities played in their attachment, one participant suggested social interactions were more important. This aspect could be investigated further.

A longitudinal study which follows participants through the process of place attachment, maybe over several years, should be completed in order to further investigate the findings of this research. Do varying degrees of intentional commitment, depth, or being know affect the strength of place attachment? For example, do more experiences of depth in a place lead to stronger place attachment? Future studies could investigate the strength of the relation of intentional commitment, depth, and being known to place attachment.

Personal Connection

Reflecting on my own experiences, I have experienced intentional commitment, depth, and being known through the process of place attachment. My commitment to place was in the form of part-time kayak guiding job. The owner of the company had grown up near the Indian River Lagoon where I was guiding and would eventually become attached to. As we shuttled boats and worked together, he told me stories of what things were like growing up in the community there and introducing me to other people who had similar stories and knowledge. I

got to know some very interesting ‘natives’ that way. What I remember most vividly about that time were the experiences of depth though. The hours spent examining, catching, and watching wildlife, exploring every nook and cranny of the lagoon, pouring over areal maps, and trying to predict the micro weather patterns. These experiences of depth would likely not have happened without a commitment to stay and may have not meant as much without a community to share them with. My own experiences seem to confirm that commitment, depth, and being known are essential to the process of place attachment.

Conclusion

This study has confirmed the findings of other studies and as revealed new insights in to the process of place attachment. The process of place attachment, as described by outdoor educators with pro-environmental behaviors appears to begin with an intentional commitment and includes experiences of depth and being known by the community. For the participants in this study, intentional commitment was demonstrated with actions, whether a job change, internal struggle, or other proximity-maintaining behavior. Experiences of depth included exploration, observation, or other interactions that went beyond the surface of the place. Being known by the community suggests that the participant no longer felt like an outsider and often came later in the process of place attachment. Two participants expressed how their attachment led them to act in ways that are more responsible toward the environment, which seems to support the assumption that increased place attachment leads to increase pro-environmental behaviors, the ultimate goal of environmental education.

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APPENDIX A

LETTER TO GATEKEEPERS

April 20, 2017

(Name)
(Address)
(City, State, Zip)

An Investigation of Place Attachment of Outdoor Educators with Pro-Environmental Behaviors

Dear (insert name):

My name is Melissa Watkins and I am a graduate student working under the supervision of Dr. Dottie Shuman and Dr. Andrew Bobilya in the Masters of Science and Environmental Education program at Montreat College. I am contacting you to ask for help locating the appropriate participant for a research study.

Educators and advocates for the environment have long sought to motivate people to care for outdoor places. Studies show that environmental knowledge alone is not enough to motivate people to action (Vaske & Kobrin, 2001). Natural experiences, (hiking, canoeing, fishing, gardening, etc.) can anchor an attitude of enthusiasm and commitment toward the natural world that ultimately leads to conservation behavior (Sobel, 2008). People care about certain places because a place is more than a collection of physical attributes, places symbolize a sense of belonging and purpose to life. The bonding that occurs between individuals and their meaningful environments is called place attachment (Scannell & Gifford, 2010). These bonds form over time, through repeat interactions with a place (Oh, Lyu, & Hammitt, 2012), and inform our sense of identity, give meaning to our lives, build community, and influence action (Manzo & Devine-Wright, 2014). Place attachment is linked to pro-environmental behaviors (Scannell & Gifford, 2010).

Outdoor educators spend a large amount of time in one particular natural environment, often leading trips day after day in the same locations and may develop an attachment to that place. The purpose of this study is to investigate how outdoor educators, who have repeat exposure to an ecosystem, develop place attachment. A deeper understanding of place attachment may lead to a deeper understanding of pro-environmental behaviors.

The study requires each participant to complete two brief surveys (a place attachment survey and a pro-environmental behavior survey) with the potential for an in-depth 1:1 interview. The surveys will typically take less than 15 minutes total and the potential in-depth interview may take between 60-90 minutes. Participants will be entered into a random drawing for an REI gift card.

As a leader in the outdoor education community, I am asking you for the names and contact information of five to six individuals who meet **all** the criteria below and may be interested in participating in this study.

Qualifications for participation include outdoor leaders who:

a) lead or have led adventure activities repeatedly in the same ecosystem **and**
b) have led for at least two seasons **and**
c) are believed to exhibit pro-environmental behaviors.

If you have any questions or would like additional information about this study, please contact me at mwatkins@montreat.edu or 321-431-6085 or the committee chair, Dr. Dottie Shuman, at dshuman@montreat.edu or 828-669-8012 ex.3405, or Andrew Bobilya at ajbobilya@email.wcu.edu.

Thank you for your time and interest in this study.

Sincerely,

Melissa Watkins

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APPENDIX B

PLACE ATTACHMENT SURVEY

Please read the following statements with regard to the place where you lead or have led outdoor adventure activities in and indicate to which extent you agree or disagree.

	Strongly Disagree				Strongly Agree
This area is the best place for what I like to do.	1	2	3	4	5
I get more satisfaction out of visiting this place than any other.	1	2	3	4	5
I would not substitute any other area for doing the types of things I do here.	1	2	3	4	5
No other place can compare to this place.	1	2	3	4	5
I often think about coming here.	1	2	3	4	5
I am very attached to this place.	1	2	3	4	5
I identify strongly with this place.	1	2	3	4	5
I feel like this place is a part of me.	1	2	3	4	5

APPENDIX C

PRO-ENVIRONMENTAL BEHAVIOR SURVEY (PEBS)

Please select the answer that best fits your current circumstances.

How often do you turn off the lights when leaving a room?	(Not Often) 1	2	3	4	(Very Often) 5
How often do you switch off standby modes of appliances or electronic devices?	(Not Often) 1	2	3	4	(Very Often) 5
How often do you cut down on heating or air conditioning to limit energy use?	(Not Often) 1	2	3	4	(Very Often) 5
How often do you turn off the TV when leaving a room?	(Not Often) 1	2	3	4	(Very Often) 5
How often do you limit your time in the shower in order to conserve water?	(Not Often) 1	2	3	4	(Very Often) 5
How often do you wait until you have a full load to use the washing machine or dishwasher?	(Not Often) 1	2	3	4	(Very Often) 5
At which temperature do you wash your clothes?	Hot		Warm		Cold

Are you currently a member of any environmental, conservation, or wildlife protection group?	No				Yes
During the past year have you contributed money to an environmental, conservation, or wildlife protection group?	No				Yes
During the past year have you increased the amount of organically grown fruits and vegetables you consume?	No				Yes
How frequently do you watch television programs, movies, or internet videos about environmental issues?	(Not Often) 1	2	3	4	(Very Often) 5
How often do you talk to others about their environmental behavior?	(Not Often) 1	2	3	4	(Very Often) 5
Based on the vehicle you drive most often, approximately how many miles per gallon does the vehicle get?	Less than 24	25-29	30-34	35-39	40 or more

During the past year have you decreased the amount of beef you consume?	No	Yes
During the past year have you decreased the amount of pork you consume?	No	Yes
During the past year have you decreased the amount of poultry you consume?	No	Yes

During the past year how often have you car-pooled?	Never	Occasionally	Frequently
During the past year how often have you used public transportation?	Never	Occasionally	Frequently
During the past year how often have you walked or cycled instead of driving?	Never	Occasionally	Frequently

APPENDIX D

INTERVIEW PROTOCOL

Interview Protocol

Date:

Place:

Interviewer: Melissa Watkins

Interviewee:

AN INVESTIGATION OF PLACE ATTACHMENT FOR OUTDOOR EDUCATORS WITH PRO-ENVIRONMENTAL BEHAVIORS

Intro: Thank you for taking the time to talk with me today! I will be sure to keep all your information confidential. The records for this study will be kept in a locked file; I will be the only one to have access to the recorded information. Identifying qualities such as your name or job location, or company you work for will not be reported in the results.

I just want to remind you that this type of interview typically takes between an hour and an hour and 30 minutes. The interview will be recorded and I will also take notes. Will this still work for you? (If the interviewee does not agree, thank them for their time and stop the interview.) If at any time you feel the need to stop the interview, you are free to do so without consequences.

Purpose: This research project seeks to investigate outdoor educators, like you, who scored highly on the Pro-Environmental Behavior Scale (PEBS). The scores of your place attachment survey and pro-environmental behavior survey indicate that you act responsibly toward the environment. Would you say this is true? This study does not aim to evaluate your experiences or behaviors, only to hear your stories. I believe your perspective may give insight into some of the processes that may lead outdoor educators to develop pro-environmental behaviors.

Ice Breaker: You have been identified as someone who has led adventure activities in the same ecosystem for multiple seasons. Can you tell me briefly about the nature of your job, the location, and for how long you have worked there?

Main Questions:

Can you describe a time when you felt strongly attached to the environment (place mentioned in previous question) in which you lead/led adventure activities? Please note, I simply want to hear your story. There are no right or wrong answers.

(follow up questions may include: Are there any situations that have required you to defend or protect your place? What did you do? How did that feel?)

How do you think the attachment to this place developed? Remember, there are no right or wrong answers.

(*follow up may include: Can you provide an example/more detail about _____?)*

What effect or impact has the attachment to this place had on your life? Again, there are no right or wrong answers.
(follow up may include: Can you tell me more about _____?)

Conclusion: Is there anything else you would like to share regarding this this place or your feelings? If in the coming days, you would like to contact me, please feel free. The results of this study will be published as a master's thesis through ProQuest. Again, your responses will be kept confidential. Your name will not be associated with your answers. Thank you for taking the time to answer my questions.