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Women in the Outdoors: Navigating Fear and Creating Space for Spiritual Inspiration

by

Morgan Costello

A Thesis

Submitted in Partial Fulfillment of the Requirements For the Master of Science in Recreation

Department of Recreation, Parks, and Leisure Studies STATE UNIVERSITY OF NEW YORK AT CORTLAND

May 2021

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# Women in the Outdoors: Navigating Fear and Creating Space for Spiritual Inspiration

# Morgan Costello

## State University of New York at Cortland

# 2021

The purpose of this study was to examine the relationship between fear and spiritual inspiration for women in the outdoors. Specifically, this study looked at participants from SUNY Cortland's Outdoor Education Practicum, a core course in the Recreation, Parks, and Leisure Studies Department that culminates with a two-week outdoor experience, with the goals of teaching outdoor skills and building community. This was a mixed-method study, with quantitative data collected according to pre(mid)post design and qualitative data coming from journal entries over a 5-day period. Testing was conducted using the Outdoor Situational Fear Inventory to measure fear, and the Nature Relatedness Scale to measure spiritual inspiration, and qualitative data from participants journals were analyzed for themes of fear, spirituality, and gender. A total of 85 male and female participants completed testing over two years of the course, in 2018 and 2019. It was concluded that the relationship between level of fear and spiritual inspiration for women in the outdoors, while not always significant, is meaningful. While female participants started out at significantly higher levels of fear than males, by the end of the course, the difference in fear level between genders was eliminated.

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# Chapter 1

# INTRODUCTION

The outdoors is beneficial to one's health in many ways, positively impacting one's physical, mental, social, and emotional wellbeing. Extensive research backs the many benefits of the outdoors. Exposure to green spaces and time spent outdoors reduces stress, improves mental restoration, positively impacts self-esteem (Gladwell, Brown, Wood, Sandercock & Barton, 2013), reduces symptoms of mental illness (Beyer, Kaltenbach, Szabo, Bogar & Malecki, 2014), and overall is positive for people's health (Twohig-Bennett & Jones, 2018). Spending time outdoors can make people feel happier and healthier.

One specific benefit of the outdoors is spiritual health, which is associated with wellbeing and is a component of human happiness (Ciarrocchi & Deneke, 2005). Naturebased recreation and spirituality are positively linked. From gardening to park visits to wilderness excursions, time outdoors has been found to be conducive to spirituality (Heintzman, 2010). Models that analyze the relationship between the outdoors and spirituality cite that increased awareness of community and the relationships between all living things may be the reason why this connection exists (Heintzman).

Nature's many benefits can be limited for various populations, as not all have equal access or face the same barriers to the outdoors (Shwarts & Corkery, 2011). Focusing specifically on gender, women are a population that must overcome impediments to access the outdoors. Gender norms, self-esteem, socialization, and stereotypes impact a woman's opportunity to access the benefits of nature (Shwarts & Corkery; Khajavei, 2017). Fear is another significant aspect of women's barriers to the outdoors. The geography of fear, a phrase explored by scholars for decades (Schepple, 1983; Valentine, 1989), is used to describe how women navigate through spaces due to the fear associated with being a woman. Fear manifests in multiple ways for women recreating outdoors. Fear of violence, sexual assault or harassment, physical safety, negative reputation, the unknown, and varying from social expectations and norms all limit the spaces in which women can comfortably and safely recreate (Schwarts & Corkery; Wesley & Gaarder, 2004, Dorwart, Smith & Patterson, 2019). It is important to note that among women, fear and other constraints to the outdoors may be more or less prevalent depending on other factors as well. For example, ethnic minorities, older people, and rural populations perceive more constraints to the outdoors than young, white, urban people (Ghimire, Green, Poudyal, & Cordell, 2014).

Studies show that women employ several methods to reduce fear in the outdoors while increasing opportunities for spiritual inspiration. While recreating alone can be peaceful and powerful, recreating within a group mitigates fear, and a sense of community can function to increase space for spiritual inspiration (Wesley & Gaarder, 2004). Other methods for reducing fear are choosing areas that are deemed safe, such as well lit, during daytime hours and populated, or choosing to carry a cell phone or mace (Sur, 2014). Some women simply do not recreate in areas that incite fear, or they recreate where they please and refuse to acknowledge fear at all (Sur). Creating space for spiritual inspiration can be done by being in remote or wilderness settings, overcoming obstacles with a group, and experiencing the sense of fellowship that comes with that (Fredrickson & Anderson, 1999). When women can be in all-women spaces and explore their connection to the earth, the opportunity for spiritual inspiration increases (Fredrickson & Anderson).

The concept of community as a means of increasing spiritual inspiration requires further exploration, as it may be a confounding variable that impacts the results of this study. As an aspect of spirituality is a feeling of connectedness to the whole (Henderson, 1996), some studies have cited a sense of community as a method for increasing spirituality (Fredrickson & Anderson, 1999, Wesley & Gaarder, 2004). Dimensions of community development are strongly influenced by spiritual values such as holism and equilibrium (Chile & Simpson, 2004). This study aimed to observe potential gendered differences resulting from fear affecting spirituality, which may have been affected by an increased sense of community.

A mix of qualitative and quantitative data was used to measure the variables. The Outdoor Situational Fear Inventory (OSFI) was the instrument used to measure participants' fear. Spirituality was measured through both content analysis of participants' journals, as well as by two questions from the Nature Relatedness Scale (N-6). The Nature Relatedness Scale (NR-6) is used to gauge an individual's level of connection to nature. Two prompts of the six that specifically refer to and measure self-identification with the outdoors and reference connection and spirituality will be used as an instrument to evaluate spirituality (Nisbet & Zelenski).

As fear limits women's outdoor participation and therefore affects their ability to experience spiritual inspiration, there are implications for women's health and happiness that give reason for this issue to be explored. With half of the world's population facing unequal access to the many benefits of the outdoors, the implications for global health may be significant. This study aimed to assess the relationship between fear as a barrier and spiritual inspiration as a benefit for women outdoors.

#### Statement of the Problem

The purpose of this study was to examine the relationship between fear and spiritual inspiration for women in the outdoors. Specifically, this study looked at participants from SUNY Cortland's Outdoor Education Practicum, a core course in the Recreation, Parks and Leisure Studies Department that culminates with a two-week field experience in the Adirondacks. Half of the experience takes place at a 400-acre outdoor center. For the other half, the context is wilderness canoe tripping in small groups.

# **Hypotheses**

- The level of fear in all participants will decrease over the Outdoor Education Practicum.
- (2) Fear will differ between females and males.
- (3) Level of spiritual inspiration in all participants will increase over the duration of the Outdoor Education Practicum experience.
- (4) Level of spiritual inspiration will differ between genders.
- (5) Fear and spiritual inspiration will be negatively correlated.
- (6) The correlation between fear and spiritual inspiration over the duration of the Outdoor Education Practicum experience will differ between female and male participants.

# **Delimitations**

The scope of this study is delimited to the females and males who participated in the Outdoor Education Practicum experience in 2018 and 2019. The instrument is delimited to the Outdoor Situational Fears Inventory (OSFI) instrument and the Nature Relatedness Scale (NR-6) instrument, which includes two items relating to spirituality. Additionally, measurement of spirituality is delimited to content analysis of journal entries.

## Limitations

There are various constraints of the study which may influence how the results can be understood and applied to other circumstances. Lack of generalizability, the complexity of spirituality, and the confines of the gender binary are limitations of this study.

- Lack of generalizability: This study was limited because it only looks at two years of data of a single wilderness experience, with participants who were studying recreation at the undergraduate level. This constrained its generalizability as it is limited by demographic similarities.
- 2. Complexity of Spirituality: The concept of spirituality is complex, broad, and can be interpreted in many ways, making it difficult to study something so vast and personal. Content analysis was used to find themes of spirituality in participants' journals. This provided an opportunity to include diverse concepts of spirituality but may have proved to be a limitation due to open interpretation being biased by the investigator's concept of spirituality.
- 3. Gender Binary: Gender is a limitation as this study examined gender within the binary, which is not inclusive or encompassing of all people. This is due to the fact that nearly all participants self-identified as either male or female. One participant was gender nonconforming, but was analyzed as a male as they identified with he/him pronouns and as not to be singled out in the study.

# Assumptions

This study assumes honesty and truthfulness in the answers and journal entries completed by participants. It is assumed that the results of this study can be generalized to future participants of the Outdoor Education Practicum course at SUNY Cortland.

#### **Positionality Statement**

It is important to note my positionality as the researcher, as it may have affected the interpretation and understanding of this study. I am a cis-gender, white female completing this study as required for my graduate degree in the Recreation, Parks and Leisure Studies department at SUNY Cortland. I have not participated in the Outdoor Education Practicum myself, which limits my understanding and also my bias of the program. I was raised Roman Catholic and still identify with the Church, which affects how I view spirituality. This may have been a factor in the qualitative analysis of the journals, as I am predisposed to think about spirituality in a certain way and may have overlooked other factors of spirituality with which I am unfamiliar. I am a democratic socialist, and awareness of injustice and inequalities is a lens through which I view the world. In the case of this study, I am attuned to the ways in which sexism plays out in western society and was hyper-aware of that during the data analysis. These facets of the researcher's identity may impact the analysis of the data as she is within the gender binary, values a spiritual connection, and believes that inequality between genders exists and is unjust.

#### **Definitions of Terms**

(1) Outdoors: The outdoors are defined as a space in or near nature in varying degrees, from city parks to remote wilderness (Outdoors, n.d.). The majority of the literature focused on outdoor settings that are most pertinent to the study, which is primitive and semi-primitive non-motorized land and water, according to the National Forest Recreation Opportunity Spectrum (Clark & Stankey, 1979). Some literature included refers to the outdoors in the context of the urban outdoors, such as South Mountain Park in the middle of Phoenix, Arizona (Wesley & Gaarder, 2004) or outdoor spaces in the city of Kolkata, India (Sur, 2017). The diversity of types of outdoor spaces cited emphasizes how experiencing fear in outdoor spaces transcends the specific facets of outdoor areas.

(2) Women: Previous studies have neglected to define the term women. In this review, the term women includes transgender women, women of color, women of any and all economic class, religion, creed, place, privilege, or other differentiators. This is an important definition to point out as diverse populations of women will face inconsistent levels of barriers (Shwarts & Corkery, 2011). It is important to note that working within the gender binary is inherently limiting for two reasons. First, there are more than two

genders, yet this study only observes male and female. Second, other identities such as socioeconomic status and race interact with gender, affecting constraints to outdoor recreation. (Shores, Scott & Floyd, 2007). As Warren wrote, "Studying gender in the outdoors in isolation from other social identities belies the complexity of the lived experiences of participants" (2016, p. 365). This study will not subdivide the population by any variables other than gender.

(3) Fear: While the dictionary defines fear as an intensive emotion caused by anticipation of awareness of danger (Fear, n.d.), often fear for women also specifically pertains to the potential for harm, in particular sexual violence, more so than the fear of actual violence itself (Sur, 2014). Dorwart, Smith, and Paterson categorize fear as internal or external, with internal fears being lack of confidence in personal ability or skills, and external fears being fear for personal safety (2019). In this study, fear was measured by the Outdoor Situational Fear Inventory, which measured both physical and social fears. Participants mark their level of fear on a 100-millimeter scale that ranges from not at all anxious to very anxious.

(4) Spiritual Inspiration: Spiritual inspiration is defined loosely and broadly as to incorporate many individuals' personal definitions of spirituality but maintain the concepts of sacredness, transcendence, mystery, and connectedness to the whole (Koenig 2012; Henderson 1996). In this study, spirituality was measured by grouping themes that represent those values together in order to encompass many individuals' personal

connections to the sacred. Two questions from the Nature Relatedness Scale (NR-6) were used to measure spirituality. Participants marked on a 5-point scale from 1 (disagree strongly) to 5 (agree strongly) how they feel about the following prompts, "My connection to nature and the environment is a part of my spirituality" and "I feel very connected to all living things and the earth" (Nisbet & Zelenski, 2013). Through this study, spiritual inspiration and spirituality were used interchangeably. Chapter 2

# **REVIEW OF THE LITERATURE**

This chapter reviews literature related to the relationship between the role of fear and spiritual inspiration for women in the outdoors. The benefits of spiritual inspiration and being outdoors, fear, and how these components relate to women outdoors are examined. The following sections are included: (1) introduction; (2) fear; defined, as a barrier, and methods for mitigating; (3) spiritual inspiration; defined, methods for optimizing; and (4) summary.

## Introduction

Science is in agreement that the outdoors is beneficial to humans in a plethora of ways. Time spent outdoors has been shown to impact health in a multitude of ways positively. Spending time outside can improve psychological well-being by reducing stress levels (Thompson, Roe, Aspinall, Mitchell, Clow & Miller, 2012), decreasing symptoms of depression and anxiety (Beyer, Kaltenbach, Szabo, Bogar & Malecki,

2014), mental restoration (White, Pahl, Ashbulby, Herbert & Depledge, 2013) aiding in attention deficits (Kuo & Taylor, 2004), positively impacts self-esteem (Gladwell, Brown, Wood, Sandercock & Barton, 2013), and more. Exercising outdoors (green exercise) can improve physical health by decreasing perceived exertion, increasing enjoyment of activity, and improving mood (Gladwell et al., 2013). Time spent outdoors is overall positive for health (Twohig-Bennett & Jones, 2018).

While the benefits of the outdoors are vast, not all people have equal access to the outdoors and therefore are prevented from experiencing its benefits. This review of the literature will look at the barriers for women in the outdoors. While the use of outdoor areas is nearly equal between men at 54% and women and 46% (Outdoor Foundation, 2018), the male-dominated nature of the outdoor field persists despite advances by women and girls in outdoor participation (Warren, 2016, p. 360). Benefits of the outdoors are harder to attain for women due to gender norms, absence of craftsmanship skills from youth, self-esteem, and fear (Khajavei, 2017). The purpose of this study was to examine specifically the role of fear for women in the outdoors as a barrier, as well as the attainment of spiritual inspiration as a benefit. This information will serve to aid women in mitigating fear in the outdoors and optimize opportunities for spiritual inspiration. Specifically, this study will provide insight into SUNY Cortland Outdoor Education Practicum experience and how gender-specific fear may impact the program and its participants.

#### Fear

# Fear Defined

The Outdoor Situational Fears Inventory instrument categorizes fear into physical fear and social fear. Dorwart, Smith, and Paterson classify fear as internal or external, with internal fears being lack of confidence in personal ability or skills and external fears being fear for personal safety (2019). For women, fear often includes fear of physical harm and sexual violence (Wesley & Gaarder, 2004). In a study done in the urban outdoors in Kolkata, fear is noted to be the fear of the potential for harm, particularly sexual violence, more so than the fear of actual violence itself (Sur, 2014). While women tend to fear violence in the outdoors, it is more likely that violence against women will occur within the home. (Sur, 2017).

The instrumentation used to measure fear was the Outdoor Situational Fears Inventory (OSFI). Developed in 1986 and revised in 1992, the OSFI has overall reliability of .94 as measured by Cronbach's alpha. This instrument has been used for research during Outward Bound courses and college outdoor programs and is administered three times throughout OEP (Young, Ewert, Todd, Steele, & Quinn, 1995). Originally, social-based fears were ranked higher than physical-based fears (Ewert & Young, 1992), but over the last few decades, that has changed with participants being more fearful of physical dangers than social ones (Todd, Kovatchitch & Young, 2019). In past and present studies, women have consistently had higher levels of fear than men, although this gap is reduced by the end of the outdoor experience (Ewert & Young, 1992). Analysis of participants' journals will be studied for themes of fear as well.

# Fear as a barrier

Fear is one of the barriers for women in the outdoors. Fear can be categorized in multiple ways; broken down into social and physical fears and internal and external fears. Specific to gender, women's fear is often fear of physical and sexual violence, more so than fear of the outdoors (Wesley & Gaarder, 2004). The fear of physical and sexual harm can be further understood by looking at the statistics for violence against women. One in 5 women in the United States will be raped in her lifetime; nearly 50% of women of color and Native women will experience some form of sexual violence in their life (National Sexual Violence Resource Center, n.d.). According to the Department of Justice, women are twice as likely as men to be killed by their partners, and intimate partner homicide makes up over 14% of homicides in the United States (Catalano, Smith, Snyder, & Rand, 2009). Black women are four times more likely to be killed by their partner than white women and have experienced domestic violence at higher rates than white women (Catalano, Smith, Snyder, & Rand). Violence against women is a major public health problem (World Health Organization, 2017).

While women are more likely to experience violence behind closed doors (Wesley & Gaarder), violence against women extends outside of the home as well and into the outdoors. In Wesley and Gaarder's (2014) study, 40% had been harassed while recreating outdoors, and over 2% had been physically assaulted. While it is inconclusive what the rates of sexual assault or violence of women in the outdoors are specifically, informal studies by Outside Magazine, Runners World, and Huffington Post have all shared the stories and surveys of women in the outdoors facing sexual harassment and sexual assault. According to a 2018 study conducted by Safe Outside, nearly half of female climbers have experienced sexual assault or sexual harassment while climbing (Lieu & Rennison, 2018). With these statistics, it is obvious why women experience fear in the outdoors.

Societal standards and media have not taught women to be comfortable in the outdoors. McNiel, Harris, & Fondre (2012) looked at the representation of women in recreation advertising. They found that women in recreation advertising are rarely displayed alone, are often depicted in vacation destinations and clothing advertisements, and are depicted as followers, not leaders, and as having low levels of engagement with the wilderness (2012). What the media portrays as accurate is both a reflection of societal norms and also a reinforcer of that. When women are not portrayed in wilderness settings as involved and competent leaders, the idea that the wilderness is not for women is reinforced and adds an element of the unknown and fear. Women are raised and taught to fear nature, starting from a young age with stories such as Goldilocks and Little Red Riding Hood, stories where the wolf, bear, or wild things are to be feared and avoided. As women age, fears become more prevalent as well as physical and violent in nature.

Wesley and Gaarder (2004) looked at women recreating in an urban park in Phoenix, Arizona. They found that the women felt less comfortable, less safe, and less in control when recreating outdoors alone versus with others. They also reported feeling more concerned and afraid. Sur's (2014) study of women in urban Kolkata found that

women not only feared for their safety while outside but also for their reputation and that it may be diminished. Concerns about physical safety are one of the main barriers for women in the outdoors. These concerns create a geography of fear which limits the spaces and places that women can safely and comfortably occupy (McNiel, Harris & Fondre, 2012). Women report feeling significantly less safe than male respondents (Mcneil, Harris, & Fondre, 2012). Dowart, Smith, and Patterson noted fear as one reason for African American women's low participation in outdoor recreation (2019). Fear functions as a genuine and legitimate barrier for women in the outdoors.

Fear has been studied in the context of environmental education programs, utilizing the Outdoor Situational Fears Inventory (OSFI) instrument. In collegiate outdoor programs, gender has been found to affect the perception of fear (Ward & Hobbs, 2006). In addition, the higher an individual's level of experience and comfort in the outdoors is associated with a lower level of fear (Ward & Hobbs, 2006). Fear is a complex emotion and often can be helpful in teaching people about themselves and the empowerment that comes with overcoming fears (Ewert, 1986). Fear can also be debilitating and function as a nearly impossible hurdle to overcome when perceived and experienced at too high a level for the individual (Ewert, 1986).

#### Means for Mitigating Fear

Studies have discussed how fear is mitigated or reduced for women in the outdoors. Recreating with other humans or with a dog, staying in well-traveled and welllit areas, carrying a cell phone or mace, and simply not recreating in spaces that incite fear are some ways that women negotiate fear while outdoors (Wesley & Gaarder, 2004). Changing and being aware of their location, clothing, and time of day were cited by Sur (2014). Other tactics for reducing fear were avoidance, knowing one's limits, and planning outings and recreation with others so as not to be alone. Some women simply refuse to acknowledge fear, which in itself is a method for negotiating fear. Living within socialized safety rules, such as ways women are expected to behave in public and controlling emotions to interrupt fear, were also tactics used (Sur). Women would avoid certain spaces that generally are empty after dark, such as vacant roads, office spaces, parks, or hubs of public transportation. Women tend to avoid potentially dangerous places rather than risk a bad situation occurring. The attire of the women was very particular to preventing sexual assault or harassment. These methods of negotiating fear were found to limit access to leisure profoundly. Their leisure required more planning and finding companions (Sur, 2014). Other women have commented on how they felt safer while with others, but it also detracted from the quiet and peace of being outside. Whyte and Shaw list three modifications for altering leisure experiences to mitigate fear. The first is reducing participation at night, the second is participating with other people, and the third is modifying where participation occurs. These three modifications in participation resulted in a lower level of enjoyment during recreation and leisure activities (1994).

Fear can inhibit learning and performance but also can have tremendous value in outdoor programming. Specifically, in outdoor education programs, some level of fear and anxiety is anticipated. Fear can be managed by the careful balance of three factors; the amount of time available, the complexity of the task, and the consequences of failure.

Withholding of information can also affect an individual's level of fear through the perception of loss of control. In an outdoor education setting, fear can be managed when outdoor leaders provide adequate information to participants (Ewert, 1986). Outdoor leaders can also utilize techniques such as systematic desensitization, which involves gradual exposure to a fearful situation, flooding, which involves prolonged exposure to fear under careful monitoring, and modeling, which is the teaching of coping methods for managing fear through role modeling and rehearsal (Ewert, 1986).

# **Spiritual Inspiration**

# Spiritual Inspiration Defined

Spirituality is a complex and, in many ways, vague concept to define. Researchers tend to allow participants to define spirituality themselves (Heintzman, 2003). Definitions from various studies have been reviewed to create a broad picture of what spirituality is. Spirituality has been defined as the connection to what is sacred, the transcendent, something outside of yet also within the self (Koenig, 2012). Spirituality is often linked to religion but differs in the way that religion may have negative undertones of rules, expectations, and conflict, while spirituality bears none of that. Spirituality is unique to the individual but generally involves a feeling of meaning and purpose (Koenig). As an aspect of spirituality is a feeling of connectedness to the whole (Henderson, 1996), some studies have cited a sense of community as a method for increasing spirituality (Fredrickson & Anderson, 1999, Wesley & Gaarder, 2004). Aspects of community

development are strongly influenced by spirituality beliefs such as holism and equilibrium (Chile & Simpson, 2004). Heitzman and Mannell (2003) cite a definition of spirituality that includes a compilation of faith, hope, and commitment in relation to a worldview and provides a sense of purpose and an ethical path. Spirituality has also been defined as a way of being and experiencing that comes about through awareness of a transcendent dimension, and that is characterized by certain identifiable values in regard to self, others, nature, life, and whatever one considers to be Ultimate (Elkins, Hughes, Saunders, Leaf, & Hedstrom, 1988, p. 10). Henderson's (1996) personal definition of spirituality is particularly relevant to this review of the literature as her writing in this instance pertains specifically to women and spirituality:

> For me, spirituality is manifested in relationships with a higher being or beings, with one another, with nature, and within ourselves. A quest for self-knowledge and meaning in life results in feelings of inclusion. Through spirituality I recognize a power greater than myself and connectedness to others. I often find proof of a power greater than me through the awesome majesty of nature. This spirituality involves a sense of mystery about the world that exceeds my analysis or understanding. Spirituality is like the wind or one's breathing- you can't see it but you can feel it and be moved by it. No one single viewpoint about spirituality exists, but the door is open for many ways to experience spirituality as linked to women's involvement in the outdoors. (1996, p.194)

For this study, spirituality will be defined loosely and broadly to incorporate many personal definitions of spirituality but maintain the concepts of sacredness, transcendence, mystery, and connectedness to the whole.

Spiritual inspiration will be measured using the Nature Relatedness Scale

(NR-6). The Nature Relatedness Scale (NR-6) gauges an individual's level of connection

to nature. The original Nature Relatedness Scale consists of twenty-one prompts; the abbreviated 6-prompt version is internally consistent and correlated highly with the original scale (Nisbet & Zelenski, 2013). The NR-6 has a reliability of .83 as measured by Cronbach's alpha. Two prompts of the six that specifically refer to and measure selfidentification with the outdoors and reference connection and spirituality will be used as an instrument to evaluate spirituality (Nisbet & Zelenski). The prompts are: My connection to nature and the environment is a part of my spirituality and I feel very connected to all living things on Earth (Nisbet & Zelenski). Participants' journals will be analyzed for themes of spiritual inspiration as well.

# Spiritual Inspiration in the Outdoors

Spirituality is an important aspect of health, yet it is often missed in discussions of wellness despite being linked to positive health outcomes (Miller & Thoresen, 1999). Spirituality has been associated with many positive health effects, such as decreased rates of depression, lower blood pressure, increased sense of belonging, and positive self-esteem. (Musgrave, Allen & Allen, 2002). These encouraging benefits are particularly important for women, who are twice as likely to experience depression than men (Mayo Clinic, 2019). Spirituality is also specifically linked with positive health outcomes for women, from improved perception of health status and increased rates of mammography to the ability to withstand poverty or the diagnosis of HIV (Musgrave, Allen, & Allen). Fostering spirituality is important for the health of women.

Schmidt and Little found that one of the primary triggers for experiencing spirituality during leisure is nature (1992). Nature-based leisure brings forth feelings of awe, wonder, gratitude, and peace, resulting in awareness of the world around and one's place in it (Stringer & Little). Heitzman and Mannell (2003) looked at the spiritual functions of leisure, finding that leisure well spent can increase in spiritual well-being. While one can infer that spirituality and leisure are linked and beneficial, spiritual outcomes are impacted by antecedent conditions that are personal to each individual (Heintzman, 2010). Depending on personal history, current circumstances, attitude and motivation, socio-demographic characteristics, and spiritual tradition, spiritual outcomes will vary for each person (Heintzman). Antecedent conditions in combination with the setting and the recreational activity will result in various spiritual outcomes (Heintzman).

Fredrickson and Anderson (1999) looked at spiritual inspiration from two all-women wilderness trips and found that having or creating a sense of place and place attachment is vital to the experience of spiritual inspiration. They also found that the strong connection and community formed between participants was an important aspect of the spiritual experience. It was a mix of the biophysical and social factors that formulated intense feelings of spiritual inspiration for the participants. The social dynamics added to the spiritual inspiration found in nature, and the landscape added to the spiritual connections felt between the group; both affected the other. Two major themes pulled from the study participants included that it was an all-women's trip and that it took place in *bona fide* wilderness.

Henderson (1996) wrote about the connection that women have with the outdoors. She touched on the wild woman archetype, which has been written about extensively by

Dr. Clarissa Pinkola Estes. She suggests that women have a different spiritual connection to the outdoors than men, being more attuned to the voices of nature and moments of mystical union, which suggests women are closer to nature (Henderson). Spirituality has been more associated with women than men, and also women are more descriptive in recounting their spiritual experiences (Heintzman, 2012). One could argue that because of this, women have more to gain from the outdoors than men, and that is further reason that barriers such as fear need to be addressed.

# **Optimizing Opportunity for Spiritual Inspiration**

Studies have shown various ways to optimize opportunities for spiritual inspiration. Being out in the natural environment is important to the spiritual experience, particularly the factor of being removed from the modern world and everyday tasks and lifestyle (Fredrickson & Anderson, 1999) and in a new setting that allows for both routine as well as challenges (Schmidt & Little, 2007). Triggers for spiritual leisure experiences are nature, newness and difference, challenge, and ritual and tradition (Schmidt & Little, 2007); participating in outdoor recreation can hit each of the triggers and therefore increase opportunity for spiritual inspiration. Being a part of a community and the fellowship of overcoming and in some ways suffering through a difficult physical challenge has also played a part in optimizing spiritual wellbeing (Fredrickson & Anderson). In Fredrickson and Anderson's study, being a part of an all-female group may have aided in the meaningfulness of the experience. Finding empowerment through experiences in the outdoors by having the opportunity to articulate, share, and explore the connection that women have with nature can lead to more spiritual inspiration

(Henderson, 1996). Outdoor activity and spirituality framework show that antecedent conditions in part with setting and recreation play into spiritual outcomes (Heinzman, 2016).

#### **Summary**

The review of the literature in regards to women, fear, and spirituality have implications for the real world, both in the context of this specific study as well as health globally. Women disproportionately face fear in their daily lives and in outdoor recreation, and much of that fear is a gender-specific fear of physical or sexual violence (Wesley & Gaarder, 2004). When that fear is a barrier to the outdoors, women face limited access to the many benefits of the outdoors, specifically spiritual inspiration. Spirituality is important for women's health, specifically women of color (Musgrave, Allen, & Allen, 2002). The purpose of this review of the literature was to gain a better understanding of how fear affects women's ability to experience spiritual inspiration in the outdoors; specifically, female participants at SUNY Cortland's Outdoor Education Practicum. This literature review may aid in allowing women to understand and overcome the gendered fear in the outdoors and create space for spiritual inspiration. This will lead to more fulfilled and healthy women, and overall a more accepting and diverse outdoor culture. In summary, it is necessary to explore the relationship between women in the outdoors, fear, and their ability to access and optimize spiritual inspiration.

# Chapter 3

# **METHODS**

The purpose of this study was to examine the changes and relationships between fear and spiritual inspiration for women in the outdoors. Specifically, this study looked at female participants from SUNY Cortland's Outdoor Education Practicum. This chapter explains the study design, the participants and how they were selected, the instrumentation used, the program, how the data were collected, and data analysis.

# Study Design

This is a mixed-method study, with quantitative data collected according to pretest(midtest)-posttest design and qualitative data coming from journal entries over a 5-day period. The study design is pre-experimental and quasi-experimental.  $H_1 - H_5$  are pre-experimental, using a variation of the one group pretest, midtest, posttest design.  $H_6$  is quasi-experimental, using the nonequivalent control group design (Campbell & Stanley, 1963). Both study designs have threats to internal validity that the design does not inherently control. Each threat will be addressed.

The pre-experimental variation of the one-group pretest, midtest, posttest design's internal validity is threatened by history, maturation, testing, instrumentation, the interactions of these threats, and potentially regressions (Campbell & Stanley, 1963). The quasi-experimental nonequivalent control group design's internal validity is potentially threatened by regression and is threatened by the interactions between the other threats to validity. While history or the inference of outside events is not inherently controlled for, it is not a concern because all participants participate in the same activities and training between tests and are isolated from the rest of the world throughout the experience. They do not have access to phones, television, internet, or any time away from the treatment. In addition, if the 2018 and 2019 data are examined separately and display similar patterns, that is further evidence of no extraneous events affecting the dependent variables. Maturation is not a concern as the experiment lasts for only two weeks, and one would not expect significant changes in spirituality or fear to occur simply through the passage of such a short time. Instrumentation as a threat to internal validity is not a concern as the instruments are fixed printed tests. Statistical regression is an unlikely threat unless high numbers of participants exhibit extreme scores in the pretest. Interactions between the threats to validity are unlikely. The course is required by all recreation majors, which perhaps predisposes them to enjoy the outdoors or want to overcome fears of it, yet because students of all department majors (therapeutic, management, outdoor, and general recreation) are required to participate, the group is unlikely to be uniformly predisposed that way. Testing is not a concern for internal validity since all participants take the test, but is somewhat of a concern to the external validity, as participants will take the same test twice (NR-6) or three times (OSFI) during the duration of OEP and

may be familiarized with the test. The initial testing can be a factor shaping their thinking, which could give results that show the effect of the test and not the effect of the treatment. Since there is not a control group that does not get the treatment, this is a threat to external validity not control for by this design. The need for a control group will be discussed in more detail in Chapter 5 as a weakness of the study and a suggestion for further research.

This study used both quantitative and qualitative data. The two instruments used to collect quantitative data were the Outdoor Situational Fears Inventory (OFSI) and the Nature Relatedness Scale (NR-6). Qualitative data were collected from content analysis of participants' journal entries. The Outdoor Situational Fears Inventory was used to measure participants' social and physical fears. The Nature Relatedness Scale was used to measure spirituality. Analysis of participants' journals also was used to observe themes of fear and spirituality. The results of fear and spirituality measurements were considered through the lens of gender from female and male participants.

# **Participants and Participant Selection**

Eligible participants of this study were undergraduate and graduate college students from the State University of New York College at Cortland. Participants were those who enrolled in a 14-day Outdoor Education Practicum course as part of their degree requirement in the Recreation, Parks, and Leisure Studies Department (Todd, Breunig, O'Connell, Anderson, Hutson, DiRenzo & Young, 2018). All participants were pursuing their bachelor's degree in Recreation, Parks and Leisure Studies, or a minor in Environmental and Outdoor Education. Those pursuing their major in Recreation, Parks, and Leisure Studies were participating in the course across all tracks (outdoor recreation, recreation management, therapeutic recreation, and general recreation.) The course is a requirement for undergraduate students and is optional for graduate students; no graduate students participated in this study. Students minoring in environmental and outdoor education also are required to take the course. The Outdoor Education Practicum course is held annually at SUNY Cortland's Outdoor Education Center in the Adirondacks. The subjects for this study were participants from the 2018 and 2019 Outdoor Education Practicum.

While the Outdoor Education Practicum course was required, participation in the study was voluntary. All 85 students (100%) consented to participation. The 2018 Outdoor Education Practicum had enrolled 46 students, and the 2019 Outdoor Education Practicum had enrolled 39 students. See appendix A for the informed consent form.

# **Instrumentation**

The instrumentation used to measure fear was the Outdoor Situational Fears Inventory (OSFI). Developed in 1986 and revised in 1992, the OSFI has overall reliability of .94 as measured by Cronbach's alpha. This instrument has been used for research during Outward Bound courses and college outdoor programs and is administered three times throughout the OEP (Young, Ewert, Todd, Steele, & Quinn,

1995). The instrument consists of 41 total fears, both physical and social. The instrument was adapted for this study. Additional items were included to reflect relevant situations, such as having no access to wifi/cellphone, etc. Participants make a slash on a 10-centimeter line from very anxious to not at all anxious to mark their response to the item. There are 19 social fears, which include items such as letting others down, confrontation with others, and being with people I don't like. There are 22 physical fears, examples of which are poisonous snakes, bad weather, and darkness. A list of the breakdown of social and physical fears is below.

Social-based Fears	Physical-based fears
Unable to control social environment	Being hurt or injured
Exposure to unexpected situations	Unable to control physical environment
Making wrong decisions	Not having enough physical strength
Letting myself down	Falling/slipping
Letting others down	Not enough training
Tasks too demanding	Bad weather
Getting a bad grade	Poisonous plants
Confrontation with others	Poisonous snakes
Going unrecognized in the group	Darkness
Not performing up to group expectations	Dangerous animals
Not performing up to leader expectations	Bothered by insects
Being sexually harassed	Becoming sick
Course not meeting my expectations	Fast or deep water
Not getting my money's worth	Becoming lost
Being with people I don't like	Getting dirty
Being isolated from my friends and family	Inadequate clothing
Sleeping in the same tent with peers	Insufficient food
Having no access to Wi-Fi/cell phone	Hot/cold temperatures
Who my staff trip leaders are	Not being able to maintain personal hygiene
	Being in the wilderness
	Having inadequate gear/equipment
	Not having enough personal ability

# Table 1Outdoor Situational Fears Inventory Items

See Appendix B for the complete Outdoor Situational Fears Inventory Instrument.

The Nature Relatedness Scale (NR-6) was be used to measure participants' level of spiritual inspiration. The Nature Relatedness Scale (NR-6) is used to gauge an individual's level of connection to nature. This original Nature Relatedness Scale consists of 21 prompts; the abbreviated 6-prompt version is internally consistent and correlated highly with the original scale (Nisbet & Zelenski, 2013). Of the 6-prompt version used at the Outdoor Education Practicum, the data from two questions were analyzed to measure spiritual inspiration. The two statements used by this study were: "My connection to nature and the environment is a part of my spirituality" and "I feel very connected to all living things on Earth" (Nisbet & Zelenski). Participants marked on a Likert scale from 1 (strongly disagree) to 5 (strongly agree) the extent to which they agreed with the given statement. See Appendix C for the complete Nature Relatedness Scale (NR-6).

Participants completed journals during the wilderness canoe trip portion of OEP--which included days six through eleven. Content analysis of the journals was used to study participants' fear and spiritual inspiration. Journals were semi-structured, with various prompts and guiding questions. The inside cover of the journal had multiple types of instructions, requesting that participants journal for at least ten minutes daily and describing different types of journal entries (personal reflection, group dynamics, sense of place and connection to the land, etc.). Bloom's Taxonomy of Cognitive Thinking was listed, and the word "reflect" was written in large letters. Each day's journal page included the following prompts: "What did you do today?... What is something noteworthy that happened to you?... Is there anything you saw or learned today that affected the way you felt about yourself, others, the Adirondacks, or the natural world? ...." Along the bottom of the page, there was a line of phrases to help guide those journaling, with words like "acronyms, songs, dialogue and quotes, maps, poems, free writes, billboards, glossary, last-minute entries, visual entries, letters to yourself...your friends...your dog." All names utilized in this study are pseudonyms to protect the identity of the participants. See appendix D for sample journal pages.

#### Treatment

The treatment was the Outdoor Education Practicum course. The course focused on teaching outdoor living skills and building community (Todd, Young, Anderson, O'Connell, & Breunig, 2008). The course was split into two distinct sections: participants spent the first half emulating a centralized-camp (i.e., clustered quarters, preset schedule, small-group and total-group activities) experience and the second half canoe tripping in small groups in the backcountry of the six million acre Adirondack Park. For the first five days of the course, participants stayed at a 400-acre outdoor center, learning and practicing outdoor skills. Participants slept in cabins with running water and electricity and ate meals prepared for them at the dining hall. Days were structured with lessons on knot tying, paddling, setting up tents, lighting stoves, using map and compass, and other outdoor skills. Participants learned about Leave No Trace ethics and engaged daily rituals such as flag raising and lowering, sharing inspirational reflections, and evening programs, and Taps. The next six days were spent utilizing those skills on a backcountry canoe tripwhere each student served as "Leader-of-the-Day" and kept a journal, Participants are assigned to their trip groups through the balancing of factors including gender, skill level,

certifications (Wilderness First Responder, Lifeguard, etc.), and personality (introvert or extrovert). Groups were intentionally created to be made up of students who could consider themselves acquaintances, as friends were separated. There were two group leaders; a student staff who had previously taken the course and a senior staff. Many of the senior staff had been involved with the course for over a decade and were very familiar with course objectives and their roles (Todd, et al., 2008). Groups returned from their canoe trip for one last night of the OEP, where a moving evening program took place; participants were able to express gratitude for each other and lessons learned over the last two weeks.

#### Data Collection

The data were collected during the Outdoor Education Practicum experience during the summers of 2018 and 2019. The Outdoor Situational Fears Inventory was administered three times-- on the first day of the course (pre), at the end of the in-camp portion (mid), and after the canoe trip and final program, on the final morning of the OEP (post). The Nature Relatedness Scale was administered twice-- on the third day of OEP, right after participants are assigned their canoe trip groups (pre), and on the eleventh day, when they return to camp after the canoe trip (post). Each time an instrument was administered, participants were read scripted instructions and reminded that participation

was voluntary and that all responses were anonymous. (See Appendix E for script). The instruments were completed with paper and pen, and upon completion, placed in a sealed envelope for safekeeping.

Participants kept a daily journal from day six through day eleven of the OEP while out on the canoe trip. Participants were told that while the journal was required as a graded portion of the course (accounting for 4% of their total grade), the use of the journal for the study was voluntary. Participants also had the option of labeling in the margins sections that they wished not to be read or included in the data. At the end of the OEP experience, all journals and instruments were collected by the director of the OEP.

#### Data Analysis

For this mixed-methods study, data from the Outdoor Situational Fears Inventory and Nature Relatedness Scale were analyzed using the Statistical Package for the Social Science (version 26), and content analysis was used on the qualitative data in the journals. The specific procedures were chosen according to the hypothesis as described below.

H<sub>1</sub> states that participants' fear will decrease over time, and H<sub>2</sub> states that the levels of fear will differ between females and males. This was tested using a 2x3 mixeddesign ANOVA, as well as an ANCOVA to account for pre-course differences. H<sub>3</sub> states that spiritual inspiration for all participants will increase over the OEP experience. This was tested with a dependent t-test. H<sub>4</sub> states that that levels of spiritual inspiration will

differ between females and males. This was tested using an independent t-test.  $H_5$  states that fear and spiritual inspiration will be negatively correlated. This was tested with the Pearson product-moment correlation.  $H_6$  states that the correlation between fear and spiritual inspiration over the duration of the OEP experience will differ between male and female participants. This was assessed simply by comparing the correlations.

For the qualitative data from students' journals, content analysis was conducted to find themes of fear and spirituality by organizing, deductive coding, and analysis. Journals were prepared for analysis. The journals were typed and compiled into a 214page document, in no order and without regard for the year the data were collected, gender, etc. The document was then divided into nine sections of approximately 20 pages each to aid the researcher's organization. The journals were read multiple times, with varying levels of coding completed each time (Bingham & Witkowsky, 2021). Each section was read initially without making notes or markings. The researcher then read through the journals a second time, using a deductive approach (Bingham & Witkowsky, 2021). Codes were loosely predetermined based on the literature and hypotheses into physical and social fear, spirituality, and gender. The researcher made note of emergent themes as well, being sure to mark anything that was of interest. The third time the researcher read through the journals, they utilized the deductive codes and emergent themes and organized the data in a spreadsheet. The spreadsheet had columns labeled as follows: participants ID number, general fear, physical fear, social fear, general spirituality, spirituality relating to nature, spirituality relating to community, methods for increasing spirituality, methods for mitigating fear, gender, and other. While coding, pseudonyms were used to protect the identity of participants. Once the codebook was

complete, the researcher sorted the codebook by the gender associated with each participant ID. With the codebook sorted, mention of themes by either gender were more obvious to see. The researcher read through each theme by gender and took notes of the number of times each theme was mentioned and what type of content was specifically includedy. The codebook was thoroughly analyzed and reviewed to observe patterns within the codes.

Trustworthiness in qualitative research refers to the credibility of the researcher, the believability of the findings, and the application of research methods (Rose & Johnson, 2020). It is necessary to discuss trustworthiness so that the reader is confident in the quality of the study. There were a few methods employed to ensure a high level of trustworthiness in the data analysis. Triangulation, or the use of multiple data sources (qualitative and quantitative), strengthened the study because there are multiple means to analyze the data and compare for consistency. Repeated readings of the data allowed the opportunity for the researcher to notice mistakes or oversight. Articulation of the researcher's reflexivity and subjectivity in the positionality statement also improves validity aspects of their identity that affect how they may view the data were identified. The researcher practiced peer debriefing with a faculty member in the Recreation, Parks and Leisure Studies Department at SUNY Cortland, which provided insight and perspective in the process. (Rose & Johnson, 2020)

### **Chapter 4**

#### RESULTS

The purpose of this study was to examine the relationship between fear and spiritual inspiration for females and males in the outdoors. Specifically, this study looked at participants from SUNY Cortland's Outdoor Education Practicum, a core course in the Recreation, Parks, and Leisure Studies Department that culminates with a two-week experience where participants spend the first week learning skills at an outdoor center and the second week on a backcountry canoe trip.

### **Profile of Participants**

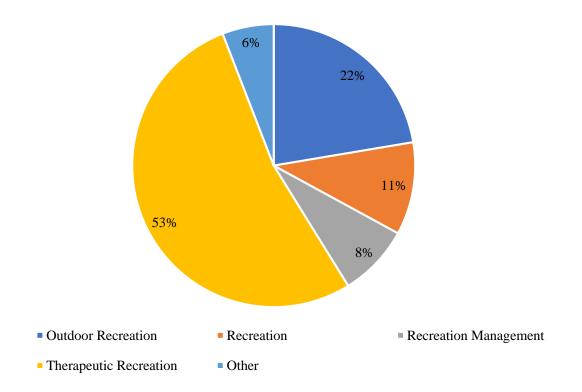
This study's participants were 85 undergraduate students at SUNY Cortland. Eighty participants (94%) were in one of the Recreation, Parks and Leisure Studies Department major. The remaining 5 students (6%) from other departments came to the OEP as part of the requirements for the Environmental and Outdoor Education minor. For all students, participation in the Outdoor Education Practicum course was a fulfillment of degree requirements. The majority of participants majored in Therapeutic Recreation. In total, about 65% of participants were female, and 35% male. The ages ranged from 19 to 31,

and the mean age was 20.9 years old. The majority of students were sophomores and juniors.

ticipants by G	ender an	nd Age				
Program Year	Ν	Males	Females	Mean Age	Age Range	SD
2018	46	15 (32.6%)	31 (67.4%)	21.16	19-31	2.36
2019	39	14 (35.9%)	25 (64.1%)	20.62	19-26	1.48
Combined	85	29 (34.1%)	56 (65.9%)	20.90	19-31	2.01

# Table 2

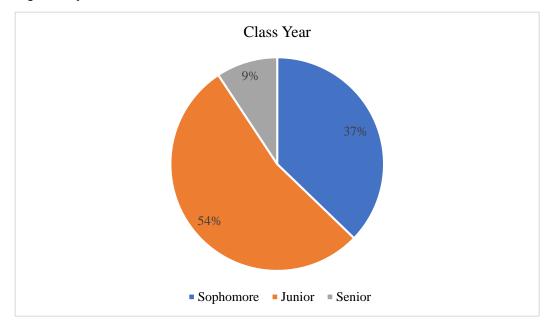
# Figure 1 Participants Majors



Academic Major	Ν
Therapeutic Recreation	45
Outdoor Recreation	19
<b>Recreation Management</b>	7
Recreation (Generalist)	9
Physical Education	1
Physical Education Health Education	1 1
5	1 1 1
Health Education	1 1 1 1
Health Education History	1 1 1 1 1
	Therapeutic Recreation Outdoor Recreation Recreation Management

# Table 3 Participants' Maio

Figure 2 Participants by Class Year



Participants b	by Cl	ass Ye	ar
Class Year	Ν	%	
Sophomore	32	38	
Junior	45	53	
Senior	8	9	

85

100

Table 4

Total

**Overview** of Variables

The dependent variables in this study are fear and spiritual inspiration; the independent variables are the Outdoor Education Practicum and gender. Fear was measured using the Outdoor Situational Fear Inventory; participants marked on a 10-centimeter line their level of fear from "very anxious" to "not at all anxious." Their mark on the line was measured and recorded as a score out of 100. This was done for 41 specific fears, which are generally divided into social fears (e.g., "letting others down") and physical fears (e.g., "darkness"). The pre, mid, and posttest results in Table 5 and Figure 3 show the means for social fears, physical fears, and all fears. All means declined between the pre, mid, and posttests. The means were nearly halved between the pre and posttests. The standard deviation also decreased.

Figure 3 Changes in Level of Fear During the OEP

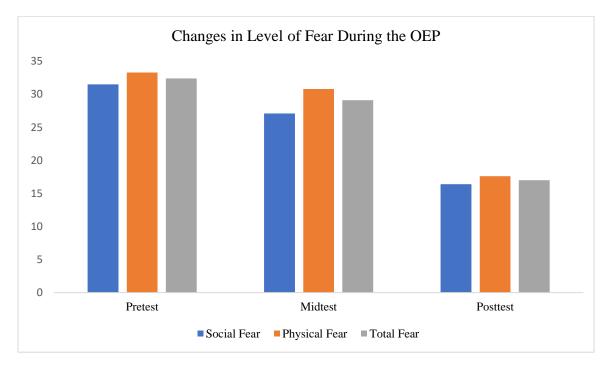


Table 5Changes in Levels of Fear During the OEP

		Pretest		Midtest		Posttest	
Expressed Fear	Ν	Mean	SD	Mean	SD	Mean	SD
Social	85	31.5	21.5	27.1	20.1	16.4	15.2
Physical	85	33.3	22.9	30.8	23.9	17.6	16.7
Total	85	32.4	21.6	29.1	21.3	17.0	15.4

For most fears, the means declined between the pre, mid, and posttests. All fears were reduced between the pre and posttests. Of the 19 social fears, 11 were reduced by approximately 50% or more between pre and posttests. Of the 22 physical fears, 14 were reduced by approximately 50% or more between the pre and posttests. As seen in Table 6, the social fears with the highest means (over 40.0) during the pretest were the fear of *making wrong decisions, letting others down, not performing up to leader expectations* and *getting a bad grade*. By the posttest, the highest-scoring social fears (scoring over 20.0) were the *exposure to unexpected situations, making wrong decisions, letting myself and others down, not performing up to group and leader expectations*, and *being isolated from family and friends*. Of the physical fears (Table 7), the highest-scoring pretest means (over 40.0) were *bad weather, being bothered by insects,* and *becoming sick*. By the posttest, the highest scoring physical fears (over 20.0) were *being unable to control the physical environment, bad weather, being bothered by insects,* and *getting sick*.

		Pretest	t		Midtes	t	Posttest			
Fear	Ν	Mean	SD	Ν	Mean	SD	Ν	Mean	SD	
Unable to control social environment	84	34.3	27.9	85	28.2	27.3	84	19.1	22.0	
Exposure to unexpected situations	85	37.7	29.7	85	33.9	29.9	84	20.8	24.5	
Making wrong decisions	85	43.1	27.8	85	39.4	29.4	84	22.1	23.7	
Letting myself down	85	31.4	25.7	85	34.4	28.7	84	21.7	21.9	
Letting others down	85	42.7	29.1	85	45.5	31.2	84	27.4	26.1	
Tasks too demanding	85	33.4	27.5	85	36.8	31.5	84	16.9	19.9	
Confrontation with others	85	24.0	25.1	84	21.9	23.9	84	16.9	21.3	
Going unrecognized in the group	85	28.6	28.3	85	24.8	27.4	83	13.6	17.0	
Not performing up to group expectations	85	38.0	28.7	85	39.3	31.3	84	22.6	25.0	
Not performing up to leader expectations	85	41.3	29.6	84	40.2	30.4	84	23.6	26.4	
Being sexually harassed	85	14.6	23.5	85	9.0	15.1	84	6.1	12.9	
Course not meeting my expectations	84	21.5	24.7	85	19.9	24.3	84	12.4	19.8	
Not getting my money's worth	85	23.2	28.6	85	18.6	23.7	84	10.7	18.3	
Being with people I don't like	85	30.2	30.8	85	18.6	25.0	84	13.6	19.7	
Being isolated from my family and friends	85	35.8	35.3	85	31.5	32.8	84	21.0	26.8	
Sleeping in the same tent with peers	85	20.9	25.3	84	16.0	22.7	84	7.7	11.3	
Having no access to Wifi/cell phone	85	24.5	29.1	85	15.7	22.3	84	9.9	19.8	
Who my staff trip leaders are	85	27.9	29.3	85	8.9	13.7	84	7.6	13.0	
Getting a bad grade	85	42.7	34.5	85	31.5	34.1	84	19.5	24.5	

Table 6Changes in Level of Social Fear by Specific Fear

Changes in Level of Physical Fear by Specific Fear

Pretest Midtest Posttest										
Fear	Ν	Mean	SD	Ν	Mean	SD	Ν	Mean	SD	
Being hurt or injured	83	34.2	29.2	85	32.6	29.5	84	15.9	18.6	
Unable to control physical	85	34.2	26.7	85	3407	28.6	84	20.6	25.3	
environment Not having										
enough physical strength	85	37.2	30.4	85	38.1	33.2	84	18.9	22.7	
Falling/slipping	85	30.0	27.9	85	30.1	29.6	84	18.6	22.6	
Not enough training	85	31.8	27.8	85	25.6	26.7	84	15.7	21.8	
Bad weather	85	43.2	30.4	84	40.4	33.4	84	20.1	24.9	
Poisonous plants	85	31.8	31.1	85	26.9	28.6	84	15.0	21.4	
Poisonous snakes	84	33.8	34.4	85	27.9	33.0	84	16.1	25.0	
Darkness	85	24.2	25.7	85	25.2	32.2	84	15.3	19.1	
Dangerous animals	85	32.1	31.8	85	27.4	28.7	84	14.8	20.0	
Bothered by insects	85	46.2	32.4	84	49.0	34.4	84	37.0	31.2	
Becoming sick	85	42.7	31.9	84	37.7	32.3	84	20.0	21.4	
Fast or deep water	84	30.3	29.9	85	27.0	31.6	84	18.5	24.2	
Becoming lost	83	37.29	32.1	85	33.1	33.5	84	18.2	23.3	
Getting dirty	85	17.9	22.8	85	19.4	25.3	84	11.4	18.3	
Inadequate food	85	38.3	32.0	85	31.4	29.6	84	14.9	20.0	
Hot/cold temperatures	85	37.0	31.6	85	34.2	30.6	84	17.4	21.9	
Not being able to										
maintain personal hygiene	85	37.2	33.5	85	34.2	32.1	84	18.6	25.7	
Being in the wilderness Having	85	22.7	27.7	84	21.9	26.5	84	11.8	18.0	
inadequate gear/equipment	85	29.5	28.6	84	19.6	25.0	84	12.1	18.1	
Not having										
enough personal ability	85	28.3	23.5	85	29.75	28.8	84	17.9	22.3	
Inadequate clothing	85	34.0	28.7	85	30.1	27.2	84	17.2	21.7	

Level of spiritual inspiration was measured using two questions from the Nature Relatedness Scale (NR-6). Participants select on a Likert scale if they strongly disagree (1) or strongly agree (5) with the statement provided. The means increase between the pre and posttests.

# Table 8Changes in Level of Spirituality During the OEP

Post Mean	test SD
Mean	SD
	50
4.09	1.16
4.29	0.93

Spiritual 1: "My connection to nature and the environment is a part of my spirituality." Spiritual 2: "I feel very connected to all living things and the earth."

### Quantitative Analysis and Hypothesis Testing

The results of the data analysis will be shared in order of, and relation to, each

hypothesis.

### Hypothesis 1 and 2

H<sub>1</sub> states that the level of fear in all participants will decrease over time, and H<sub>2</sub> states that the level of fear will differ between females and males.

The results in Table 9 and Figure 4 show that fear did decrease for females, males, and both genders combined. Among all participants, the mean total fear declined from pretest ( $\bar{x} = 32.40$ ) to to midtest ( $\bar{x} = 29.10$ ) to posttest ( $\bar{x} = 17.03$ ). For females, there were significant differences between the pre ( $\bar{x} = 37.7$ ), mid ( $\bar{x} = 32.7$ ), and posttest ( $\bar{x} = 18.5$ ) means for males, there were significant differences between the mid ( $\bar{x} =$ 22.63) and posttests ( $\bar{x} = 14.38$ ), but not the pre ( $\bar{x} = 22.93$ ) and mid tests ( $\bar{x} = 22.63$ ). Supporting H<sub>1</sub> and H<sub>2</sub>, the mixed 2x3 ANOVA showed significant effect or differences for time (the OEP) (*F*(2,82)= 52.19, p=.000) and gender (*F*(2,82)=6.80, p=.001). The differences column highlights the result of dependent t-tests run to determine where the effect did and did not occur.

While the hypothesis regarding gender differences in fear was supported, the differences in fear levels between females and males narrowed dramatically by the end of the OEP (Figure 4), raising the question of whether male/female differences remained. Both t-tests and analysis of covariance (ANCOVA) were used to compare the posttest means of females (x = 18.5) and males (x = 14.38). ANCOVA is the preferred approach as it accounts for pretest differences between the groups and adjusts the posttest means accordingly. Both approaches showed no significant difference between the fear of women and men, and, as seen in Table 10, ANCOVA provided adjusted posttest means showing the level of fear higher in men than women though the difference was not significant.

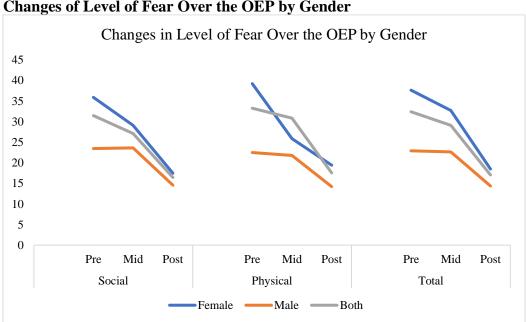


Figure 4 Changes of Level of Fear Over the OEP by Gender

Expressed Fear	Gender	Ν	Pre	Mid	Post	F	р	Difference*
Social								
	Female	56	35.90	29.08	17.46	53.577	.000	pre-mid-post
	Male	29	23.45	23.62	14.56	7.772	.001	pre/mid-post
	Both	85	31.45	27.13	16.43	41.99	.000	pre-mid-post
Physical								
	Female	56	39.22	35.87	19.4	62.284	.000	pre-mid-post
	Male	29	22.49	21.78	14.22	8.548	.001	pre/mid-post
	Both	85	33.25	30.84	17.55	49.860	.000	pre/mid-post
Total								
	Female	56	37.66	32.69	18.50	67.884	.000	pre-mid-post
	Male	29	22.93	22.63	14.38	8.560	.001	pre/mid-post
	Both	85	32.40	29.10	17.03	52.191	.000	pre-mid-post

# Table 9Changes in Mean Level of Fear Between Genders

\*The difference column expressed where a significant difference in scores occurred. A slash expressed no significant difference, while a dash symbolized a significant difference.

			Unadjusted Mean	Adjusted Mean
Gender	Ν	Mean Pretest Fear	Posttest Fear	Posttest Fear
Female	54	37.66	18.50	15.64
Male	30	22.93	14.38	19.52
All	84	32.40	17.03	17.58

Table 10Mean Posttest Fear Levels by Gender

#### Table 11

Analysis of Covariance: Posttest Level of Fear with Pretest Fear as Covariate

	Sum of		Mean			Partial Eta
Source	Squares	df	Square	F	Sig	Squared
AllFearA (Pretest)	10381.77	1	10381.77	94.35	.000	.538
RGender	259.402	1	259.402	2.36	.129	.028
Error	8913.044	81	11.38			
Total	43975.272	84				
Corrected Total	19622.597	83				

The data presented in Tables 12-14 shows sphericity assumed numbers from a mixed design ANOVA. The differences were all significant, and the partial eta squared reported the effect size, which also registered medium to very large impact. When comparing the relationship between level of fear, gender, and the OEP, time (OEP) reported a very large effect size (.389) while time\*gender reported a medium effect size (.077). Similarly, this occurred when comparing specifically social fears, where time (the OEP) had a very large effect size (.339) and gender had a medium effect size (.058) as well as specifically physical fears, where time (the OEP) had a very large effect size

(.378) and gender a medium effect size (.088). We can conclude that time (the OEP) has more of an effect on level of fear than gender does, although gender still does influence level of fear.

Deiween I	r ear, Genaer, an	a ine OEP				
N	Sum of	df	Mean	F	п	Partial Eta
14	Squares	ui	Square	1	P	Squared
85	8357.4	2	4178.7	52.19	.000	.389
85	1089.0	2	544.51	6.80	.001	.077
85	13130.7	164	80.07			
	N 85 85	N         Sum of Squares           85         8357.4           85         1089.0	N         Squares         df           85         8357.4         2           85         1089.0         2	N         Sum of Squares         Mean Square           85         8357.4         2         4178.7           85         1089.0         2         544.51	N         Sum of Squares         df         Mean Square         F           85         8357.4         2         4178.7         52.19           85         1089.0         2         544.51         6.80	N         Sum of Squares         Mean Square         F         p           85         8357.4         2         4178.7         52.19         .000           85         1089.0         2         544.51         6.80         .001

# Table 12Interaction Between Fear, Gender, and the OEP

# Table 13Interaction Between Social Fear, Gender, and the OEP

	Ν	Sum of Squares	df	Mean Square	F	р	Partial Eta Squared
Time	85	7824.61	2	3912.31	41.99	.000	.339
Time * Gender	85	941.27	2	470.64	5.05	.007	.058
Error (Time)	85	15279.52	164	93.17			

### Table 14

Interaction Between Physical Fear, Gender, and the OEP

	N	Sum of Squares	df	Mean Square	F	р	Partial Eta Squared
Time	85	8894.23	2	4447.11	49.86	.000	.378
Time * Gender	85	1410.80	2	705.40	7.909	.001	.088
Error (Time)	85	14626.21	164	89.18			

#### Hypothesis 3 and 4

 $H_3$  states that spiritual inspiration for all participants will increase over the OEP experience, and  $H_4$  states that levels of spiritual inspiration will differ between females and males. As seen in Table 15, the two measured dimensions of spiritual inspiration did increase, but the differences were not significant as determined by dependent t-tests, although females approached significance (p=.068). There were no significant differences between levels of spiritual inspiration and gender, as seen in Table 16.

of of spining		0					
	Gender	Ν	Pre	Post	t	p	Difference
Spiritual 1							
	Female	56	3.80	4.02	1.861	.068	none
	Male	29	4.23	4.30	.348	.730	none
	Both	85	3.92	4.09	1.663	.100	none
Spiritual 2							
	Female	56	4.19	4.24	.535	.595	none
	Male	29	4.13	4.37	1.424	.165	none
	Both	85	4.17	4.29	1.343	.183	none

# Table 15Level of Spiritual Inspiration During OEP

Spiritual 1: "My connection to nature and the environment is a part of my spirituality."

Spiritual 2: "I feel very connected to all living things and the earth."

		4	df	Sig.	Mean	Std. Error
		l	ai	(2-tailed)	Difference	Difference
Pretest	Spiritual 1	-1.80	83	.075	488	.270
	Spiritual 2	-0.03	83	.975	006	.202
Posttest	Spiritual 1	-1.21	83	.229	318	.263
	Spiritual 2	595	82	.553	126	.212

Table 16 Spiritual Inspiration Means Compared Between Genders

## Hypothesis 5

H<sub>5</sub> states that fear and spirituality will be negatively correlated. The data were analyzed by running the Pearson product-moment correlation on posttest fear and posttest spirituality on both genders combined. As seen in Table 17, fear and spirituality were negatively correlated, but results are not significant.

Econ (nost)	Spiritual Insp	Ν	Pearson	Significance
Fear (post)	(post)	IN	Correlation	(2-tailed)
Social Fear				
	Spirituality 1	85	091	.411
	Spirituality 2	85	127	.251
	Combined	85	096	.388
Physical Fear				
	Spirituality 1	85	151	.172
	Spirituality 2	85	110	.324
	Combined	85	121	.276
All Fear				
	Spirituality 1	85	128	.244
	Spirituality 2	85	123	.268
	Combined	85	114	.303

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Table 17

Spiritual 1: "My connection to nature and the environment is a part of my spirituality."

Spiritual 2: "I feel very connected to all living things and the earth."

#### Hypothesis 6

H<sub>6</sub> states that the correlation between fear and spirituality will differ between female and male participants. All of the correlations were negligible except for pretest scores of fear and spiritual inspiration for females. This means that the higher someone's spiritual inspiration, the lower their level of fear for females prior to the treatment. While all other correlations were negligible, the correlations were negative for females, and for men, correlations were positive. The results were determined by the Pearson productmoment correlation on pre and posttest fear and spiritual inspiration and presented by gender in tables 18-21.

#### Table 18

Correlation	of Fear and	d Spiritual	Inspiration	for Females	(Posttest)

0	-		, ,	
Fear (post)	Spirituality	Ν	Pearson	Significance (2-
Teal (post)	(post)	19	Correlation	tailed)
Social Fear	Spirituality 1	56	173	.211
	Spirituality 2	56	202	.146
	Combined	56	182	.193
Physical Fear	Spirituality 1	56	209	.129
-	Spirituality 2	56	169	.227
	Combined	56	185	.184
All Fear	Spirituality 1	56	200	.147
	Spirituality 2	56	191	.170
	Combined	56	191	.171

Spiritual 1: "My connection to nature and the environment is a part of my spirituality."

Spiritual 2: "I feel very connected to all living things and the earth."

### Table 19

Correlation of Fear and Spiritual Inspiration for Females (Pretest)

	Spirituality	- · ·	Pearson	Significance (2-
Fear (pre)	(pre)	Ν	Correlation	tailed)
Social Fear	Spirituality 1	56	283	.036
	Spirituality 2	56	286	.034
	Combined	56	304	.024
Physical Fear	Spirituality 1	56	418	.001
-	Spirituality 2	56	396	.003
	Combined	56	437	.001
All Fear	Spirituality 1	56	368	.006
	Spirituality 2	56	357	.008
	Combined	56	388	.003

Spiritual 1: "My connection to nature and the environment is a part of my spirituality."

Spiritual 2: "I feel very connected to all living things and the earth."

### Table 20

Correlation of Fear and Spiritual Inspiration for Males (Posttest)

Fear (post)	Spirituality	Ν	Pearson	Significance (2-
r cur (post)	(post)	11	Correlation	tailed)
Social Fear	Spirituality 1	29	.186	.325
	Spirituality 2	29	.102	.593
	Combined	29	.158	.406
Physical Fear	Spirituality 1	29	.127	.505
-	Spirituality 2	29	.125	.510
	Combined	29	.133	.482
All Fear	Spirituality 1	29	.162	.392
	Spirituality 2	29	.118	.534
	Combined	29	.151	.425
		1.1 1		· · · · · · · · · ·

Spiritual 1: "My connection to nature and the environment is a part of my spirituality."

Spiritual 2: "I feel very connected to all living things and the earth."

Correlation of Pear and Spiritual Inspiration for Mates (Pretest)					
Spirituality	N	Pearson	Significance (2-		
(pre)	IN	Correlation	tailed)		
Spirituality 1	29	234	.213		
Spirituality 2	29	177	.349		
Combined	29	228	.226		
Spirituality 1	29	290	.120		
Spirituality 2	29	253	.178		
Combined	29	299	.109		
Spirituality 1	29	272	.146		
Spirituality 2	29	222	.238		
Combined	29	273	.145		
	Spirituality (pre) Spirituality 1 Spirituality 2 Combined Spirituality 1 Spirituality 2 Combined Spirituality 1 Spirituality 1 Spirituality 2	Spirituality (pre)NSpirituality 129Spirituality 229Combined29Spirituality 129Spirituality 229Combined29Spirituality 129Spirituality 229Combined29Spirituality 129Spirituality 129Spirituality 229Spirituality 129Spirituality 229	Spirituality (pre)NPearson CorrelationSpirituality 129234Spirituality 229177Combined29228Spirituality 129290Spirituality 229290Spirituality 229290Spirituality 129290Spirituality 229290Spirituality 129299Spirituality 129272Spirituality 229222		

Correlation of Fear and Spiritual Inspiration for Males (Pretest)

Table 21

Spiritual 1: "My connection to nature and the environment is a part of my spirituality." Spiritual 2: "I feel very connected to all living things and the earth."

#### **Relationships between Variables (Qualitative Data)**

Participants kept daily journals during the 5-day wilderness excursion portion of the OEP. Although journals included broad prompts and guiding questions such as "What did you do today?" and "Is there anything you saw or learned today that affected the way you feel about yourself, others, the Adirondacks, or the natural world?", participants were able to write or draw whatever they found fitting. The researcher analyzed the journals for themes of fear, spiritual inspiration, and gender-related content.

The journal codes were further subdivided. Fear was broken down into overall fear, physical fear, and spiritual fear. Overall fear included comments about fear that were not specific to physical or social fears. Spirituality was broken down into spirituality

relating to community, spirituality relating to nature, as well as overall spirituality in which comments regarding spirituality without mention of community or nature were included. Emergent themes of gender, methods for mitigating fear, and methods for increasing spiritual inspiration were also included.

The rows for fear overall and spiritual inspiration overall in Table 23 include the total number of participants who mentioned fear or spirituality at all. In essence, only those who did not have any content regarding any general or specific type of fear were not included. These data provide an overview of the number of comments regarding fear and spirituality. The strength and specifics of their words are discussed below, and exemplary quotes are provided.

Overall, female participants journaled more about fear than male participants, by margins of 10%-31%, as seen in Table 23. Female participants journaled more about spiritual inspiration in relation to community and nature by a smaller margin of 6%-11%, although males journaled about spiritual inspiration overall more than females by 3%. These data support the quantitative findings presented previously, which show that females experienced significantly higher levels of fear than males and that there were little to no significant differences in level of spiritual inspiration between males and females.

# Table 22Total Journals

	Female	Male	Total	
Journals	54	29	83*	

\*The total number of OEP participants is 85, and the total number of OEP journals is 83.

One journal was missing, and one journal had discrepancies with the ID number and the gender of the author could not be determined.

Fear and Spiritual Inspiration in Journals						
Dependent Variables	Female	Male	Difference*			
	Participants	Participants				
Fear (total)	45 (83%)	15 (52%)	31%			
Physical Fears	22 (41%)	9 (31%)	10%			
Social Fears	33 (61%)	11 (38%)	23%			
Spiritual Inspiration (total)	51 (94%)	28 (97%)	3%			
Spirituality in relation to	34 (63%)	15 (52%)	11%			
Community						
Spirituality in relation to	48 (89%)	24 (83%)	6%			
Nature						

# Table 23Fear and Spiritual Inspiration in Journals

\*The difference column in green signifies the difference was in favor of female

participants, and in orange signifies a difference in favor of male participants.

#### Fear

#### **Physical Fear**

Males wrote about physical fear 10% less than females did (see Table 22). Across genders, the sources of physical fear were diverse: fear of the dark, of paddling in rough water, of bugs, of the challenge of portaging, hiking, and paddling, and others. Participants also expressed physical fear for their group members, including for someone who had a close call with hypothermia, for a sick group member, and for others' safety. Looking at the data, it appears that while sources of fear were similar across genders, females more often expressed fear regarding their physical ability, such as not being able

to complete a difficult task. At the same time, males were more likely to express physical fear of something outside of themselves, such as bugs and spiders.

Female: "Really nervous for the rest of the trip physically" "I am afraid that I won't be able to portage tomorrow"

Male: (Writing about hearing and seeing a loon) "At first I thought it was a wolf and got super scared."

#### Social Fear

Females wrote about social fear 23% more than males. Female participants more often wrote that they felt social fear about being the slowest, holding others back, or not having the skills to complete tasks and therefore letting others down. A subtheme of this was the social fear of feeling patronized, looked down upon, or babied. Males' sources of fear were broad, from fear of how they would be perceived as the leader of the day to feeling left out from the group. Both genders expressed a fear of not making friends or apprehension about their groupmates. The data show that females experienced more social fear surrounding group dynamics and fitting in, while males experienced more social fears of being in leadership roles.

Female: "I was the slowest and held the group back. I bent over and almost vomited after finally finishing and having everyone tell me good job felt like I was being babied"

Female: "I was really struggling on the hike up and I felt so bad for the rest of the people in my group. I felt bad that I made them stop for me when I had to catch my breath."

Male: "I got picked to be navigator of the day tomorrow...my mind has been racing since...I just hope I can do my job well enough tomorrow, the last thing I want to do is let the group down"

#### Fear Overall

Overall, 83% of females mentioned general fear, physical fear, or social fear, while 53% of males mentioned fears in their journals. This 31% difference in fear supports the quantitative data, which shows that females experience higher levels of fear than males. The qualitative data serve as insight into the quantitative data, providing real words to support the fear that participants felt, and reasons why females' fears were significantly higher than males at the start of the OEP.

### **Spiritual Inspiration**

#### Spiritual Inspiration in Relation to Community

Over half of participants wrote about spiritual inspiration in relation to community: 63% of females and 52% of males. Content was similar across genders, with entries referring to the group as family, bonding together over collective struggles, sitting together in silence, and feeling very connected. Participants also mentioned deep talks, vulnerability, and letting down their walls with others, which led to greater connection and appreciation for their group. Females more commonly wrote about this vulnerability more explicitly than males. A major aspect of community and spiritual inspiration was humor and laughter.

Female: "It's nights like tonight that I think are so important in a group because you are comfortable and have that sense of protection a group can either come with or gain as they bond"

Female: "Couldn't help but feel blessed for the group of people I've experienced this journey with"

Male: "Although I struggled, I had support- this made all the difference in the world" Male: "Spirits are high and all we do is laugh all day...I am truly blessed to have these people out here with me"

Male: "People are surprising. People are amazing. People are brave. People are caring. This group of people continue me learning not to judge to be kind and patient and caring"

#### Spiritual Inspiration in Relation to Nature

Spirituality in relation to nature was the theme that was most prevalent in the journals, with 89% of females and 83% of males writing about it in their journals. Participants mentioned various aspects of nature- from wildlife and sunsets to bodies of water and mountains- and their appreciation of or connectedness to the outdoors. There were not any major differences in how males and females wrote about the outdoors. It was common for both genders to express extreme gratitude, take note of specific details, and feel a strong connection to themselves and the earth.

Female: "I love camping because I find it so centering...connect with myself and nature"

Female: "I felt pure freedom, relaxation, and fun...how calming nature is, views of nature and the outdoor air can open up a new window of freedom and opportunity within my own mind..."

Female: "Ever have the feeling that everything happens for a reason? That feeling of this is where you're supposed to be? Here I am. I am here."

Male: "I'm lying under the stars listening to the water flow down Raquette River...Thinking about how I got here...Campsite is beautiful.

Male: "Me and John looking out on the water and right there I felt different. I felt changed somehow. Something clicked for me telling me that this place was special. Something that will forever stay etched in my mind."

### Spirituality Overall

Males wrote more about spirituality overall by a difference of 3%, with 94% of female participants and 97% of male participants mentioning spirituality overall, in relation to community, or in relation to nature. This negligible difference supports the quantitative result, which found no significant difference in level of spirituality between males and females. It also supports the qualitative data that shows levels of spiritual inspiration being relatively high, with means between 3.8-4.4 (out of 5) for males and females across the OEP experience.

#### Gender

Throughout the journals, obvious mention of gender and gender-specific aspects was noted. There were comments referring to gender norms, such as female participants or female leaders getting dubbed "camp mom" "OEP mom" or as "motherly figures" and men killing bugs "because it was scaring the girls." In addition, multiple males wrote in their journals about how they were impressed with how the "girls" pushed through or performed on portages. The persistence of gender norms during the Outdoor Education Practicum experience is not surprising but is something of which to be aware. Both females and males mentioned these norms.

Female: "The group calls me OEP mom because I'm always taking care of others and helping make food and clean dishes"

Female: "I'm not a girly girl but living in the wilderness like this is really hard for me"

Male: "The girls portaged and did very well"

Male: "Jane\* is a great leader and kept her motherly eye out for us the entire time" Male: "The ladies got a chance to portage, and I was impressed with how they pushed through"

\*Pseudonyms have been used to protect the identity of participants.

Female participants mentioned developing female friendships specifically, increasing confidence and self-esteem, and appreciating not having mirrors or make-up in the backcountry. These were a strong theme for female participants, with many examples beyond the exemplary quotes below.

Female: "I've never felt so accomplished...I am stronger than I thought I was"

Female: "Haven't looked in a mirror all week...not thoughts on how we look, just how we function- refreshing"

Female: "I feel very confident as an outdoorswoman"

Female: "I have learned to love myself without hiding behind makeup or being someone I'm not"

Female: "I have never felt more able to be myself...I never felt nervous, looked down on, uncomfortable, or bad about myself...which was new and refreshing"

Female: "I can't see myself in the mirror and I forgot I like doing that...honestly, I don't miss it"

Female: (OEP) "has made me love myself a lot more"

Overall, the difference between females and males journaling about fear was relatively wide, and the difference between females and males narrowed when journaling about spiritual inspiration. The qualitative data adds depth and richness to the points that the quanitative data previously made. Themes of gender norms from both genders, and for females, increased self-confidence emerged through the analysis of the journals.

### **Chapter 5**

### SUMMARY AND CONCLUSIONS

The purpose of this study was to examine the relationship between fear and spiritual inspiration for women in the outdoors. Specifically, this study looked at participants from SUNY Cortland's Outdoor Education Practicum, a core course in the Recreation, Parks and Leisure Studies Department that culminates with a two-week outdoor experience; the first week spent learning skills at a 400-acre outdoor center, and the second week on a backcountry canoe trip. The following sections are included: summary of procedures, summary of findings, conclusion, discussion and implications, and recommendations.

#### Summary of Procedures

Subjects of this study were undergraduate college students from the State University of New York College at Cortland who enrolled in a 14-day Outdoor Education Practicum course as part of their degree requirement in the Recreation, Parks and Leisure Studies Department. The treatment was the Outdoor Education Practicum course, which

focuses on teaching outdoor living skills and building community. Participants spend the first six days in a centralized camp experience and the second half in small groups on backcountry wilderness excursions, canoeing in the Adirondacks. The instrumentation used to measure fear was the Outdoor Situational Fears Inventory (OSFI), and the Nature Relatedness Scale (NR-6) was used to measure spiritual inspiration. In addition, participant journals from the wilderness excursion portion of the trip were analyzed for themes of fear and spirituality. This study uses the quantitative data from the instruments and the qualitative data from the journals to gain a thorough understanding of how fear and spiritual inspiration in women and men are affected during the Outdoor Education Practicum.

### Summary of Findings

# **Profile of Participants**

This study's participants were the 85 undergraduate students who participated in the Outdoor Education Practicum in 2018 and 2019. Of the total population, a third were male, and two-thirds were female. The OEP course is required for all recreation majors (therapeutic, management, outdoor recreation, and general recreation), which accounts for 95% of the participants. The other 5% were minoring in Environmental and Outdoor Education and taking the course to fulfill their minor's degree requirements. The mean age for participants was 20.9 years old, with ages ranging from 19-31. Most participants were in their sophomore or junior year of college, with some seniors.

# **Overview of Variables**

The dependent variables in this study were fear and spiritual inspiration; the independent variables were the Outdoor Education Practicum and gender.

### Fear

The level of fear for participants decreased over the OEP. Total fear, social fear, and physical fear all were reduced between the pretest and posttest, with pretests means in the low thirties and posttest means at approximetly half. Levels of fear decreased some between the pretest and midtest, and reduced most between the midtest and posttest. Participants journals were coded for themes of fear.

# Spiritual Inspiration

There were minor changes in level of spiritual inspiration over the OEP. Spirituality was measured using two questions from the Nature Relatedness Scale (NR-6). One question referred to having a connection with the environment as an aspect of one's spirituality, and the other about connection with the earth. Spirituality increased between the pre- and posttests for both genders by small amounts of .05-.24. Level of spirituality was relatively similar in pre and posttests between genders, with scores ranging from 4.02 to 4.37.

# Gender

The breakdown of gender in the OEP stayed consistently around one-third male and two-thirds female over the two years studied. In 2018, there were 15 male

participants (33%) and 31 female participants (67%). In 2019, there were 14 male participants (36%) and 25 female participants (64%). In total between both years, there were 29 male participants (34%) and 56 female participants (66%).

#### **Relationships Between Variables**

# Hypothesis 1

H<sub>1</sub> states that the level of fear in all participants will decrease over the OEP (time). The findings supported this hypothesis. The level of fear decreasedover time for all participants. There was a significant decrease in social fear at the .000 level between the pre, mid, and posttests. There was a significant decrease at the .000 level in physical fear between the mid and posttests, but not the pre and mid tests. For total fear, there was a significant decrease at the .000 level between the pre, mid, and posttests.

# Hypothesis 2

H<sub>2</sub> states that fear will differ between females and males. The findings supported this hypothesis. The differences between level of fear for social fear, physical fear, and total fear between genders were all significant at the .01 level. The effect sizes were medium to very large. The OEP (time) hada very large effect size with partial eta squared values of .339 for social fear, .378 for physical fear, and .389 for total fear. This signifies that the OEP (time) had a very large effect on the change in level of fear. Gender reported a medium effect size, with partial eta squared values of .058 for social fears, .088 for

physical fears, and .077 for total fears. This signifies that gender had a medium impact on the change in level of fear. While gender did impact the level of fear, the OEP (time) greatly impacted the reduced the level of fear, eradicating the significance of differences between genders by the end of the course. The journals also support the acceptance of this hypothesis, as females wrote more about social, physical, and overall fears than males.

# Hypothesis 3

H<sub>3</sub> states that spiritual inspiration for all participants will increase over the OEP experience. The findings did not support the acceptance of this hypothesis. The changes in level of spiritual inspiration variables for all participants were not significant. Participants' level of spiritual inspiration increased 1% to 4% between pre- and posttests. The journals show that 94% of females and 97% of males wrote about spiritual inspiration in relation to community, or nature, or both. While the level of spiritual inspiration for participants was high in both quantitative and qualitative data, there was no significant change in level of spiritual inspiration during the OEP.

# Hypothesis 4

H<sub>4</sub> stated that levels of spiritual inspiration will differ between females and males. The findings did not support this hypothesis. The changes in level of spiritual inspiration for males and females were not significant. Females' and males' level of spiritual inspiration increased by 1% to 4% from the pre- to posttest. The qualitative data from the journals

supports this conclusion, as the differences in number of participants who wrote about spirituality were relatively small, between 3% and 11%.

### Hypothesis 5

 $H_5$  stated that fear and spirituality will be negatively correlated. The findings partially supported this hypothesis. The pretest correlation between fear and spiritual inspiration for female participants was negative and significant, supporting the hypothesis. This means that at the beginning of the OEP, females with higher levels of fear experienced lower levels of spirituality. The posttest correlations for females, as well as male pretest and posttest correlations between fear and spiritual inspiration, were not significant at the .05 level.

### Hypothesis 6

 $H_6$  stated that the correlation between fear and spirituality will differ between female and male participants. The findings partially support hypothesis. The correlation between fear and spiritual inspiration during the pretest was significant for females but not for males. The correlations for males and females, between all variables of fear and spiritual inspiration, for the posttests were not found to be significant.

# **Conclusions**

The purpose of this study was to examine the relationship between fear and spiritual inspiration for women in the outdoors by looking specifically at participants from SUNY

Cortland's Outdoor Education Practicum course. Based upon the findings and within the limitations of this study, it is concluded that there is no significant relationship between level of fear and spiritual inspiration for women in the outdoors. This means that for females who participate in the OEP, their level of spiritual inspiration is not significantly impacted by the level of fear they experience, although the level of fear that females begin the course with was higher than males. By the end of the course, there is no significant difference in level of fear between genders. This must mean that the methods for mitigating fear that females practice or that the OEP includes work well to reduce fear without impacting their abilities to experience spiritual inspiration.

# **Discussion and Implications**

The key findings of this study focus on the differences in level of fear and changes in that level of fear between genders, as well as the apparent lack of relationship between spiritual inspiration and fear.

The level of fear for females begins significantly higher than males, and throughout the OEP, that gap is bridged. The posttest levels of fear, with or without adjustments for pretest differences, show no significant difference between female and male level of fear; in fact, females' adjusted posttest mean score is lower than males' mean score. While it is significant that by the end of the experience, fear is reduced, one must wonder why females' fear begins so high, what females do to reduce their fear so significantly during the OEP, and why male participants' fear decreases less in comparison to females'. Females and males had many shared fears but some subtle differences that are worth discussing. We can draw upon previous studies to explain why females' level of fear is much higher than males at the beginning of the OEP.

Women navigate the world through the "geography of fear" which encompasses the plethora of reasons women have to be more fearful than men (Schepple, 1983; Valentine, 1989). Previous research as well as the content of the OEP journals offer insight into the methods women practice to mitigate fear. A theme that arose from the journals was the increase in female's self-confidence after being in the wilderness and developing outdoor skills. Those findings support the literature that states that one of the barriers for women in the outdoors, in addition to fear, is the absence of craftsmanship skills from youth (Khajavei, 2017). In that way, the OEP has built in a method for decreasing female participants' fear that seems to work well. The results of this study must also be analyzed through the lens of implications for males. Due to the greater reduction in fear for women and lesser reduction in fear for men, is OEP more impactful for females than males? Between the pre- and posttests, fear decreases by 19.2% and 8.5% for women and men, respectively. While men start at a much lower level and therefore have less room to decrease, perhaps this reflects the (inaccurate and untrue) societal norm that men must reject sensitivity and emotions, therefore reducing their reporting of fear as it may be considered a "weak" emotion and one that is not acceptable for men to vocalize.

Males and females shared diverse sources of fears, but some differences persisted. Males tended to fear leadership roles such as being leader or navigator of the day, while women tended to have more fears about fitting in and group dynamics. Males were more

often fearful of something outside of themselves, such as a spider, whereas women felt more fear that was intrapersonal and about their ability to complete challenging tasks. These differences in sources of fear may be the result of underlying gender norms and expectations.

The persistence of gender norms during the Outdoor Education Practicum is worth bearing in mind. While not surprising, as gender norms and bias infiltrate all places and spaces where people are, it is important to consider so the program, its participants, and leaders can actively address it. The qualitative data offer strong support that through skill development and being in the backcountry, female participants' self-confidence increases and that strong female friendships are made. Comments that perpetuated gender norms were made by both male and female participants in the journals. The prevalence of gender norms seems to be a covert standard rather than an obvious or intentional one. Conversations about the role of the "fun uncle" versus "camp mom" in male/female trip leader dynamics, the ways in which rapport is built, and how underlying biases impact a group would be helpful. While gender norms are prevalent, the OEP also combats barriers for women by teaching outdoors skills and reducing fear. Overall, making gender norms an open and discussed topic would increase awareness and function to further object to the seemingly unintentional effects of these preconceptions.

While the quantitative data did not find a strong or consistent relationship between level of fear and spiritual inspiration, the data and the journals do suggest that there may be more to the story. It is important to note that spiritual inspiration is vague, broad, and deeply personal. It is a difficult variable to measure. While the quantitative data do not show a significant increase in level of spiritual inspiration over the OEP, the

data show that in some cases, the p-value is near significance at the .05 level. More research may clarify if these changes are stronger or weaker than they appear. Community is an aspect of spirituality, and community is a goal of the OEP, while spiritual inspiration is not. A significant increase sense of community may support an increase in level of spiritual inspiration, or vice versa. It also is worth observing the data from a more reasonable day-to-day standard than the scientifically accepted p-value of .05. In this study, the differences between pre and posttests for the variables "spiritual 1" and "spiritual 2" both had p-values under .20, meaning that there's less than a 20% chance the results are random. Other factors that should be considered in the analysis of data regarding spiritual inspiration is that levels of spirituality started off quite high initially, so there was little room for growth and may have had a ceiling effect. Participants were rather homogeneous and, due to their selected area of study, may be more inclined to feel connected with nature. Perhaps with more variation in the population, differing levels of impact may have been uncovered. When all six prompts from the Nature Relatedness Scale were considered, there was a significant increase in participants' connection with nature. These results indicate that the increase is not due to the spiritual items. As spiritual inspiration is such an important aspect of one's health and was written about in the journals by nearly 100% of participants, it is worth noting and further exploring.

### **Recommendations**

Further studies should be conducted to learn more about the relationship between fear, women, and their ability to experience spiritual inspiration. Research on the methods that females utilize to minimize their level of fear would be interesting to understand the level of effort and energy that women utilize to navigate the geography of fear. Using data that expands over more years would provide more robust insight into these topics. Future research would benefit from a control group with which to compare results with and mitigate the threat to external validity. Studies that analyze journal content would also be helpful as they would build upon the content analysis already performed in this study. It would be helpful to have more researchers analyze the journal contents to provide a more thorough understanding of the potential findings.

Practitioners of this program should look to integrate an identity-based workshop during the first week of the OEP, in addition to all of the skills lessons. This work should be inclusive of many factors of identity, as not to create a divide specific to gender while also being inclusive and aware of other factors that impact individuals. This workshop should bring awareness to the ways that identity impacts how people show up in the outdoors and begin a dialogue about barriers. Practitioners should continue to teach and emphasize skills lessons, as increased craftsmanship is shown to increase self-confidence in the outdoors.

# REFERENCES

- Beyer, K. M., Kaltenbach, A., Szabo, A., Bogar, S., & Malecki, K. M. (2014). Exposure to neighborhood green space and mental health: Evidence from the survey of the health of Wisconsin. *International Journal of Environmental Research and Public Health*, (11)3. 3453-3472. doi: 10.3390/ijerph110303453
- Bingham, A.J. & Witkowsky, P. (2021). Deductive and inductive approaches to qualitative data analysis. In Vanover, C, Mihas, P & Saldana J. (Eds). Analyzing and Interpreting Qualitative Data Research: After the Interview. (133-147). SAGE Publications.
- Campbell, D.T. & Stanley, J.C. (1963). *Experimental and Quasi-Experimental Design for Research*. McNally.
- Catalano, S., Smith, E., Snyder, H., & Rand, M. (2009). Female victims of violence. *Bureau of Justice Statistics Selected Findings*. U.S. Department of Justice. Retrieved from https://www.bjs.gov/content/pub/pdf/fvv.pdf
- Chile, L.M., & Simpson, G. (2004). Spirituality and community development: Exploring the link between the individual and the collective. *Community Development Journal*, *39*(4), 318-331. doi: 10.1093/cdj/bsh029
- Ciarrocchi, J.W., & Deneke, E. (2005). Happiness and the varieties of religious experience: Religious support, practices, and spirituality as predictors of well-being. *Research in the Social Scientific Study of Religion, 15,* 209-234.
- Clark, R.N & Stankey, G.H. (1979). The recreation opportunity spectrum: A framework for planning, management, and research. *General Technical Report*. U.S.D.A. Forest Service.
- Dowart, C.E., Smith, S., Patterson, A.F. (2019). Just more comfortable in the gym: An exploration of the constraints that contribute to adult african american females' lack of participation in outdoor recreation activities. *Journal of Outdoor Recreation, Education, and Leadership.* (11)3, 171-190.

- Elkins, D.N., Hedstrom, J., Hughes, L.L., Leaf, A.J.. & Saunders, C. (1988). Toward a humanistic-phenomenological spirituality: Definition, description, and measurement. *Journal of Humanistic Psychology*. (28)4. 5-18. https://doi.org/10.1177/0022167888284002
- Ewert, A. (1986). Fear and anxiety in environmental education programs. *The Journal of Environmental Education* (18)1. 33-39. DOI: 10.1080/00958964.1986.9942729
- Ewert, A. & Young, A. (1992). Fear in the outdoor environment: Description and modification through recreation programs. In Gail A Vander Stoep (ed), *Proceedings of the 1991 Northeastern Recreation Research Symposium* (pp. 51-54). United States Department of Agriculture, Forest Service.
- Fear. (n.d.). In *Merriam-Webster Dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/fear
- Fredrickson, L. M., & Anderson, D. H. (1999). A qualitative exploration of the wilderness experience as a source of spiritual inspiration. *Journal of Environmental Psychology*, (19)1, 21-39. doi: 10.1006/jevp.1998.0110
- Ghimire, R., Green, G.T., Poudyal, N.C., & Cordell, H.K. (2014). An analysis of perceived constraints to outdoor recreation. *Journal of Park and Recreation Administration*. (32)4. 52-76.
- Gladwell, V.F., Brown, D.K., Wood, C., Sandercock, G.R., & Barton, J.L. (2013) The great outdoors: How a green exercise environment can benefit all. *Extreme Physiology and Medicine*, (2)3. https://doi.org/10.1186/2046-7648-2-3
- Heintzman, P. (2003). The wilderness experience and spirituality: What the research tells us. *Leisure Today*. (74)6. 27-32. https://doi.org/10.1080/07303084.2003.10609216
- Heintzman, P. (2010). Nature based recreation and spirituality: A complex relationship. *Leisure Sciences*, *32*, 72-89. doi: 10.1080/01490400903430897
- Heintzman, P. (2012). The spiritual dimension of campers' park experience: Management implications. *Managing Leisure*, (17)4, 291-310, doi: 10.1080/13606719.2012.711601
- Heintzman, P. (2016). Spirituality and the outdoors. B., Price, H., & Henderson, K. (Eds.), *Routledge International Handbook of Outdoor Studies*. (p. 388-397). Routlege.
- Heitzman, P., Mannell, R. C. (2003). Spiritual functions of leisure and spiritual well-being: coping with time pressure. *Leisure Sciences* (25). 207-230 doi: 10.1080/01490400390211835
- Henderson, K. A. (1996). Women and the outdoors: Towards spiritual empowerment. *Women's Voices in Experiential Education*. Dubuque, Iowa. Kendell/Hunt Publishing Company

- Henderson, K.A., Bialeschki, M.D. & Browne, L.P. (2017). *Evaluating Recreation Services: Making Enlightened Decisions. 4th Edition.* Sagamore Venture.
- Khajavei, N. (2017). Women and the wilderness: A review of barriers to participation, current coping strategies, and guidance for future programs. Retrieved from PDXScholar. doi: 10.15760/honors.459
- Koenig, H. G. (2012). Religion, spirituality and health: the research and clinical implications. *International Scholarly Research Notices*, 2012, 278730. doi:10.5402/2012/278730
- Kuo, F. E., & Taylor, A. F. (2004) A potential natural treatment for attention deficit/hyperactivity disorder: evidence from a natural study. *American Journal of Public Health* (94)9. 1580-1586. doi: 102105/ajph.94.9.1580
- Lieu, C., & Rennison, C. M. (2018). Sexual harassement and sexual assault in the climbing community. Retrievedfrom https://static1.squarespace.com/static/55830fd9e4b0ec758c892f81/t/5b86c f0f4fa51a716daf2ed6/1535561498267/SafeOutside-SHSA-Report+%281%29.pdf
- Mayo Clinic. (2019). Depression in women: Understanding the gender gap. Retrieved from https://www.mayoclinic.org/diseases-conditions/depression/in-depth/depression/art-20047725?p=1
- McNiel, J. N., Harris, D. A., & Fondre, K. M. (2012). Women and the wild: gender socialization in wilderness recreation advertising. *Gender Issues* (29). 39-55. doi: 10.1007/s12147-012-9111-1
- Miller, W. R., & Thoresen, C. E. (1999). *Spirituality and health.* In W. R. Miller (Ed.), *Integrating spirituality into treatment: Resources for practitioners* (p. 3–18). American Psychological Association. https://doi.org/10.1037/10327-001
- Musgrave, C.F., Allen, C.E., & Allen, G.J. (2002). Spirituality and health for women of color. *American Journal of Public Health*. (92)4. 557-560.
- National Sexual Violence Resource Center (n.d.). Sexual Assault Statistics in the United States. Retrieved from https://www.nsvrc.org/node/4737
- Nisbet, E.K., & Zelenski, J.M. (2013). The NR-6: A new brief measure of nature relatedness. *Frontiers in Psychology*. (4)813. doi: 10.3389/fpsyg.2013.00813
- Outdoors. (n.d.). In *Marriam-Webster Dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/outdoors

- Outdoor Foundation. (2018). [Outdoor participants demographics]. 2018 Outdoor Recreation Participation Report. Retrieved from https://outdoorindustry.org/resource/2018-outdoorparticipation-report/
- Rose, J., & Johnson, C. W. (2020). Contextualizing reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, *51*(4), 432-451.
- Schmidt, L. A., & McAvoy, L. H. (1992). The need for something different: Spirituality and the wilderness adventure. The Journal of Experiential Education, 75(1), 13-21.
- Shores, K.A., Scott, D., & Floyd, M.F. (2007). Constraints to outdoor recreation: A multiple hierarchy stratification perspective. *Leisure Sciences* (29)3. 227-246. doi: 10.1080/01490400701257948
- Shwarts, A., & Corkery, M.R. (2011). Barriers to participation among underrepresented populations in outdoor programs. *Recreation Sports Journal*, (35)2, 130-144. https://doi.org/10.1123/rsj.35.2.130
- Sur, P. (2014). Safety in the urban outdoors: Women negotiating fear of crime in the city of Kolkata. *Journal of International Women's Studies*, (15)2, 212-226. Retrieved from: https://pdfs.semanticscholar.org/8a7d/9a046166eb36827ab1ac2cdd4baa5c7b4e1d.pdf
- Thompson, C. W., Roe, J., Aspinall, P., Mitchell, R., Clow, A., & Miller, D. (2012). More green space is linked to less stress in deprived communities: evidence from salivary cortisol patterns. *Landscape and Urban Planning* (105)3. 221-229. Retrieved from: https://doi.org/10.1016/j.landurbplan.2011.12.015
- Todd, S., Breunig M., O'Connell T., Anderson, L., Hutson G., DiRenzo, A. & Young, A. (2018). Gains in outdoor pursuits program outcomes of sense of community, sense of place, nature relatedness, well-being and resilience by level of development. SUNY Cortland & SUNY Brockport.
- Todd, S., Kovatchitch, E. & Young, A. (2019). Reducing physical and social fears of the outdoor environment through education and practice. 2019 National Environment & Recreation Research Symposium Abstract Submission. SUNY Cortland.
- Todd, S., Young, A., Anderson, L.,O'Connell, T.S., & Breunig, M. (2008). Sense of place in outdoor pursuits trip groups. Northeastern Recreation Research Symposium.
- Twohig- Bennett, C., & Jones, A. (2018) The health benefits of the great outdoors: A systematic review and meta-analysis of greenspace exposure and health outcomes. *Environmental Research*, 166, 628-637. https://doi.org/10.1016/j.envres.2018.06.030

- Unruh, A. & Hutchinson, S. (2011). Embedded spirituality: Gardening in daily life and stressful life experiences. *Caring Sciences*, (25)3, 567-574. https://doi.org/10.1111/j.1471-6712.2010.00865.x
- Ward, W. & Hobbs, W. (2006). Changes in perceptions of fear in a short-term, college outdoor adventure program. *Journal of Experiential Education* (28)3. 274-278.
- Warren, K. (2016) Gender in Outdoor Studies. In Humberstone, B., Price, H., & Henderson, K. (Eds.), Routledge International Handbook of Outdoor Studies. (p. 360-368). Routlege.
- Wesely, J. K., & Gaarder, E. (2004). The gendered "nature" of the urban outdoors. *Gender and Society*, (18)5, 645-663. doi: 10.1177/0891243204268127
- White, M. P., Pahl. S., Ashbulby, K., Herbert, S., & Depledge M. H. (2013). Feelings of restoration from recent nature visits. *Journal of Environmental Psychology*, *35*. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0272494413000224
- Whyte, L.B. & Shaw, S.M. (1994). Women's leisure: An exploratory study of fear of violence as a leisure constraint. *Journal of Applied Recreation Research*. (19)1. 5-21.
- World Health Organization. (2017). Violence Against Women. Retrieved from https://www.who.int/news-room/fact-sheets/detail/violence-against-women.
- Young, A., Ewert, A., Todd, S., Steele, T., & Quinn, T. (1995). The outdoor situational fear inventory: A newer measure of an older instrument. United States Department of Agriculture. Forest Service. Retrieved on March 25, 2020, from https://www.nrs.fs.fed.us/pubs/gtr/gtr\_ne198/gtr\_ne198\_177.pdf
- Zullig, K. J., Ward, R. M. & Horn, T. (2006). The association between perceived spirituality, religiosity, and life satisfaction: the mediating role of self-rated health. *Social Indicators Research* (79). doi.org/10.1007/s11205-005-4127-5

# APPENDICES

#### **Appendix A: Content Form**

#### Dear REC 370 Student,

We are conducting a research study to understand changes in sense of community, nature relatedness, sense of place, well-being, resilience, leadership style, and situational fear in outdoor pursuits recreationists and trip groups. We would like to ask you to participate in the study in a number of ways.

First, we will ask you to complete a set of questionnaires. The only identifying information on the questionnaires is your ID number, which you will assign yourself. This number is simply used to match the prequestionnaires to middle- and post-questionnaires, which you will complete at separate times (approximately 10 to 15 minutes each time). Your ID number will not allow us to know your identity. None of the instructors or trip leaders at Raquette Lake will see your individual responses. Thus, your anonymity is assured. Completing these questionnaires is voluntary. You may decline or discontinue the questionnaires at any time with no consequences. Upon completing the questionnaires, please place them in the attached envelopes and seal them prior to returning them to your trip group staff member.

Second, as part of the course, you will be keeping a journal to record events as well as share thoughts, observations, and feelings. As previously explained this evening, this journal will be collected and graded as part of the course (4% of your total grade), and you may clearly mark in the margins anything you do not want to be read (refer to the example in the front cover of the journal). Although you will record your name on your journal, this is for the sole purpose of being graded as an assignment for the course (and so it can be returned to you after the course is completed.) With your permission, data from the journals will also be analyzed for this study after the course is over to identify emerging themes as they relate to sense of community, nature relatedness, sense of place, well-being, resilience, and/or situational fear. For purposes of this study, you will be asked to record the same ID on your journals that you assigned yourself on the surveys, so your journal data can be matched to your survey data. Note that your name will never have your name associated with your entries. If any reports are published from this study, be assured that your privacy will be maintained by concealing your identity: all names, events, places, and times that you write about will be changed to protect everyone's identity. In sum, at no time will individuals be identified in this analysis, thus assuring your confidentiality.

Please note that the instructor of the course will not review these consent forms until after all grades have been submitted. Because she will have no knowledge of your decision to participate (or not participate) in any portion of the study, be assured that there are no consequences for participating or not participating in the study.

As a student studying to be a professional in the recreation, parks and leisure studies/environmental education field, a benefit of this study is that you are helping to develop more fully the body of knowledge by your participation. If you have any questions about the study, you can call or talk to any of the seven researchers. If you have questions about research in general at SUNY Cortland, you can call Thomas Frank of the Institutional Review Board at (607) 753-2511. We thank you for your participation!

Lynn Anderson Mary B	reunig Garrett Hutson	Tim O'Connell	Amy DiRenzo	Sharon Todd	Anderson Young
SUNY Cortland Brock U	niversity Brock University	/ Brock Universit	ty SUNY Cortland	SUNY Cortland	SUNY Cortland
(607) 753-4942 (905) 6 ×5387	38-5550 (905) 688-5550 x4784	(905) 688-5550 x5014	(607) 753-4263	(607) 753-4941	(607) 753-4951

\_\_\_\_\_have read the description of the project for which this consent is requested, (print name) understand my rights, and I hereby consent to participate in this study.

Signature

2019

# **Appendix B: Outdoor Situational Fears Inventory (OSFI)**

Fear-A	Age:	Gender:	1 Female	ID #
1st Monday 18			2 Male	(please use the last 4 digits of your C00 number
			3 Gender non-conforming	plus the first initial of your mother's maiden name)

#### SITUATIONAL FEAR INVENTORY

All of us experience different types of anxieties in the outdoor environment. As you consider your Outdoor Education Practicum, place a slash ( $\underline{/}$ ) on each line at the point that best represents your level of concern for each item. There are no right or wrong answers.

Consider the following example:

	VERY		NOT AT ALL
	ANXIOUS		ANXIOUS
Lightning		/	
Lightning			

Indicate how concerned you feel about the following statements:

Being hurt or injured	VERY ANXIOUS	NOT AT ALL ANXIOUS
Unable to control physical environment	VERY ANXIOUS	NOT AT ALL ANXIOUS
	VERY ANXIOUS	NOT AT ALL ANXIOUS
Unable to control social environment	VERY ANXIOUS	NOT AT ALL ANXIOUS
Exposure to unexpected situations	VERY ANXIOUS	NOT AT ALL ANXIOUS
Making wrong decisions	VERY ANXIOUS	NOT AT ALL
Letting myself down	VERY	NOT AT ALL
Letting others down	ANXIOUS	ANXIOUS
Tasks too demanding	ANXIOUS	ANXIOUS
Not having enough physical strength	VERY ANXIOUS	NOT AT ALL ANXIOUS

Not having enough personal ability	VERY ANXIOUS	NOT AT ALL ANXIOUS
Falling/slipping	VERY ANXIOUS	NOT AT ALL ANXIOUS
Confrontation with others	VERY ANXIOUS	NOT AT ALL ANXIOUS
Going unrecognized in the group	VERY ANXIOUS	NOT AT ALL ANXIOUS
Not performing up to group expectations	VERY ANXIOUS	NOT AT ALL ANXIOUS
Not performing up to leader expectations	VERY ANXIOUS	NOT AT ALL ANXIOUS
Being sexually harassed	VERY ANXIOUS	NOT AT ALL ANXIOUS
Bad weather	VERY ANXIOUS	NOT AT ALL ANXIOUS
Poisonous plants	VERY ANXIOUS	NOT AT ALL ANXIOUS

- over -

Poisonous snakes	VERY ANXIOUS	NOT AT ALL ANXIOUS
Darkness	VERY ANXIOUS	NOT AT ALL ANXIOUS
Dangerous animals	VERY ANXIOUS	NOT AT ALL ANXIOUS
Bothered by insects	VERY ANXIOUS	NOT AT ALL ANXIOUS
Becoming sick	VERY ANXIOUS	NOT AT ALL ANXIOUS
Fast or deep water	i VERY ANXIOUS	NOT AT ALL ANXIOUS
Becoming lost	very Anxious	NOT AT ALL ANXIOUS
Getting dirty.	very Anxious	NOT AT ALL ANXIOUS
Inadequate clothing	i VERY ANXIOUS	NOT AT ALL ANXIOUS
Not enough training	very Anxious	NOT AT ALL ANXIOUS
Insufficient food	VERY ANXIOUS	NOT AT ALL ANXIOUS
	i VERY ANXIOUS	NOT AT ALL ANXIOUS
Course not meeting my expectations	VERY ANXIOUS	NOT AT ALL ANXIOUS
Not getting my money's worth	VERY ANXIOUS	NOT AT ALL ANXIOUS
Hot/cold temperatures		

Being with people I don't like	VERY ANXIOUS	NUI AI ALL ANXIOUS
Being isolated from my family/friends	VERY ANXIOUS	NOT AT ALL ANXIOUS
Not being able to maintain adequate personal hygiene	very Anxious	NOT AT ALL ANXIOUS
Sleeping in the same tent with peers	VERY ANXIOUS	NOT AT ALL ANXIOUS
Having no access to WiEi/cell phone	VERY ANXIOUS	NOT AT ALL ANXIOUS
Being in the wilderness	VERY ANXIOUS	NOT AT ALL ANXIOUS
Who my trip staff leaders are	very Anxious	NOT AT ALL ANXIOUS
Having inadequate gear/equipment	very Anxious	NOT AT ALL ANXIOUS
	VERY ANXIOUS	NOT AT ALL ANXIOUS
Getting a bad grade		

# Appendix C: Nature Relatedness Scale (NR-6)

#### NATURE RELATEDNESS SCALE

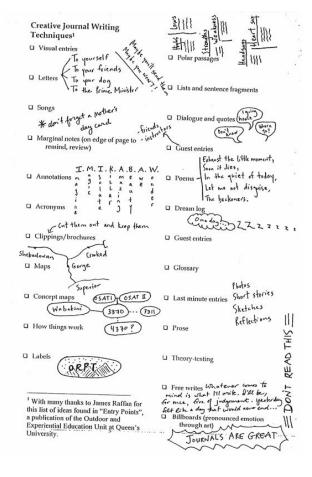
 For each of the following, please rate the extent to which you agree with each statement <u>at this point in time</u>, using the scale from 1 to 5 as shown below. Please respond as you really feel, rather than how you think "most people" feel. (Circle one number for each.)

Statement	Disagree strongly	Disagree a little	Neither agree or disagree	Agree a little	Agree Strongly
1. My ideal vacation spot would be a remote, wilderness area.	1	2	3	4	5
2. I always think about how my actions affect the environment.	1	2	3	4	5
<ol><li>My connection to nature and the environment is a part of my spirituality.</li></ol>	1	2	3	4	5
4. I take notice of wildlife wherever I am.	1	2	3	4	5
5. My relationship to nature is an important part of who I am.	1	2	3	4	5
6. I feel very connected to all living things and the earth.	1	2	3	4	5

# **Appendix D: Sample Journal Pages**

19/ What did you do today?... What is something noteworthy that happened to you?...

Is there anything you saw or learned today that affected the way you felt about yourself, others, the Adirondacks, or the natural world?....



#### Types of entries

- Personal reflection and selfdiscovery
- Group dynamics (inter and
- intrapersonal relationships)
- Professional development
- Sense of place and connection to
- the land
- Summary of lessons/skills Transfer of academic theory to
- field course experience
- Transfer of field course experience to academic theory
- Factual information
  - ~ weather ~ location
    - ~ duration of travel ~ length of travel

    - ~ flora ~ fauna
    - ~ cultural history
    - ~ group members (may be a single entry at beginning of
  - journal)
- Don't forget you've got lots of materials!!!
- Supplies in nature (They're everywhere!)

# Questions to keep in mind: What did you do today?

What is something noteworthy that happened to you? (Please describe, as fully as possible, something you did, saw, heard, felt, found, tasted, or in some way experienced that was special to you in some way. You may describe as many items as you like each day.) Is there anything you learned today that affected the way you felt about yourself, others, or the natural world?

- Bloom's Taxonomy of Cognitive Thinking
- i) Knowledge (identify, name, order, recall, list, memorize)

Please make an effort to write

riesse mare an error or ware

- ii) Comprehension (classify, illustrate, explain, translate)
- iii) Application (solve, apply, predict, demonstrate)
- iv) Analysis (compare, contrast, discover, cause and effect)
- v) Synthesis (construct, compose, predict, design)
- vi) Evaluation (argue, assess, judge, select, appraise)

Reflect

Personal reflection and self-discovery... ek en the in

20

1 /	Date: <u>S</u> at.	Compared to yesterday, today   would rate our
/	trip group's sense of comm	unity as having undergone a (circle one number):

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	
Hug	e Larg	Medera	s Saal	Slight	No	Slight	Small	Moderate	Large	Huge	
	Neg	atíve	chang	e	change		Posít	íve c	hange	<u>a</u>	
1 we	would say this change (or lack of change) was primarily due to										

(for example, the weather, difficulty/ease of daily activity, "leader of the day" success or challenge, trip leader influence, peer interactions, etc.)

On a scale of 1 to 10, with 1=the worst/most difficult conditions you've ever experienced and 10= the best/essist conditions you've ever experienced, how would you rate the following indices **for today**? Circle one number for each applicable index

	-				-	-					
INDEX		DIFF	The WORST/MOST AVERAGE The BEST/EL DIFFICULT conditions conditions conditions ever exp			conditio	ons I've				
Bugs		Ι	2	3	4	5	6	7	8	9	10
Weather		Ι	2	3	4	5	6	7	8	9	10
Wind		Ι	2	3	4	5	6	7	8	9	10
Water route	NA	Ι	2	3	4	5	6	7	8	9	10
Hiking route	NA	Ι	2	3	4	5	6	7	8	9	10
Portage(s)	NA	Ι	2	3	4	5	6	7	8	9	10
Campsite cond	itions	Ι	2 3 4 5 6 7		7	8	9	10			
Outhouse(s)	NA	I	2	3	4	5	6	7	8	9	10

How would you describe your <u>senior staff</u> trip group leader's style *today?* (Circle one number for each item.)

Leadership Style	My leader <u>rarely</u> used this style.	My leader sometimes used this style.	My leader <u>often</u> used this style.	My leader <u>almost</u> <u>always</u> used this style.
<ol> <li>TELLING - paid a lot of attention to tasks and not as much to relationships.</li> </ol>	1	2	3	4
<ol> <li>SELLING – paid a lot of attention to relationships and to tasks.</li> </ol>	1	2	3	4
<ol> <li>PARTICIPATING – paid a lot of attention to relationships and not as much to tasks.</li> </ol>	1	2	3	4
<ol> <li>DELEGATING – left it to the group to attend to their relationships and tasks.</li> </ol>	1	2	3	4

18 What did you do today?....

What is something noteworthy that happened to you?....

Is there anything you saw or learned today that affected the way you felt about yourself, others, the Adirondacks, or the natural world?.....

Summary of lessons/skills *Flora, fauna, cultural history.* Look on the inside front cover for more ideas on types of entries and creative journal writing techniques.

#### Appendix E: Scripts with Survey

1. Read aloud with your group at the end of tonight's meeting (should take 10 minutes or so).

2. Collect these forms separately from surveys and place them in the marked envelope and seal it.

3. Collect surveys in individual white envelopes.

#### Dear REC 370 Student,

We are conducting a research study to understand changes in sense of community, nature relatedness, sense of place, well-being, resilience, leadership style, and situational fear in outdoor pursuits recreationists and trip groups. We would like to ask you to participate in the study in a number of ways.

First, we will ask you to complete a set of questionnaires. The only identifying information on the questionnaires is your ID number, which you will assign yourself. This number is simply used to match the prequestionnaires to middle- and post-questionnaires, which you will complete at separate times (approximately 10 to 15 minutes each time). Your ID number will not allow us to know your identity. None of the instructors or trip leaders at Raquette Lake will see your individual responses. Thus, your anonymity is assured. Completing these questionnaires is voluntary. You may decline or discontinue the questionnaires at any time with no consequences. Upon completing the questionnaires, please place them in the attached envelopes and seal them prior to returning them to your trip group staff member.

Second, as part of the course, you will be keeping a journal to record events as well as share thoughts, observations, and feelings. As previously explained this evening, this journal will be collected and graded as part of the course (4% of your total grade), and you may clearly mark in the margins anything you do not want to be read (refer to the example in the front cover of the journal). Although you will record your name on your journal, this is for the sole purpose of being graded as an assignment for the course (and so it can be returned to you after the course is completed.) With your permission, data from the journals will also be analyzed for this study after the course is over to identify emerging themes as they relate to sense of community, nature relatedness, sense of place, well-being, resilience, and/or situational fear. For purposes of this study, you will be asked to record the same ID on your journals that you assigned yourself on the surveys, so your journal data can be matched to your survey data. Note that you rame will never be recorded or associated with your entries. If any reports are published from this study, be assured that your privacy will be maintained by concealing your identity: all names, events, places, and times that you write about will be changed to protect everyone's identity. In sum, at no time will individuals be identified in this analysis, thus assuring your confidentiality.

Please note that the instructor of the course will not review these consent forms until after all grades have been submitted. Because she will have no knowledge of your decision to participate (or not participate) in any portion of the study, be assured that there are no consequences for participating or not participating in the study.

As a student studying to be a professional in the recreation, parks and leisure studies/environmental education field, a benefit of this study is that you are helping to develop more fully the body of knowledge by your participation. If you have any questions about the study, you can call or talk to any of the seven researchers. If you have questions about research in general at SUNY Cortland, you can call Thomas Frank of the Institutional Review Board at (607) 753-2511. We thank you for your participation!

SUNY Cortland Broc	y Breunig Garrett Hutsor ck University Brock Universi 5) 688-5550 (905) 688-5550 87 x4784	ty Brock University	Amy DiRenzo SUNY Cortland (607) 753-4263	Sharon Todd SUNY Cortland (607) 753-4941	Anderson Young SUNY Cortland (607) 753-4951
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have read the description of the project for which this consent is requested,

understand my rights, and I hereby consent to participate in this study.

(adat as as

Signature

(print name)

Date

2019

 Read aloud to your group at the very beginning of tonight's meeting (should take 10 minutes or so). It might even get them thinking about how to support each other to reach personal and group goals, and could add relevant ideas to your group's discussion tonight.

2. Collect surveys in individual white envelopes.

# Script for Administering Student Survey Packet 2 (Thursday night before trips)

This is the second set of surveys for the research study we are conducting to further understand situational fear in outdoor pursuits recreationists.

As a reminder, participation is voluntary: you have the right to decline or discontinue the questionnaire at any time with no consequences. Also remember that the only identifying information on the questionnaires is your ID number, which you will assign yourself. It is only used to match the pre-questionnaires to middle- and post-questionnaires. *Please use the exact same ID number you used on the first survey*. Your ID number will not allow us to know your identity. None of the instructors or trip leaders at your session of Raquette Lake will see your individual responses. Thus, your anonymity is assured.

Upon completing the questionnaire, please place it in the attached envelope and seal it prior to returning it to your trip group staff member.

 Read aloud to your group at the <u>very beginning</u> of tonight's meeting (should take 10 minutes or so). It might even get them thinking about how to support each other to reach personal and group goals, and could add relevant ideas to your group's discussion tonight.

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Upon completing the questionnaire, please place it in the attached envelope and seal it prior to returning it to your trip group staff member. Read aloud to your group at the very beginning of tonight's meeting (should take 15 minutes or so).
 It might even get them thinking about outcomes of this course that relate to your group's discussion tonight.

2. Collect surveys in individual white envelopes.

# Script for Administering Student Survey Packet 3 (Thursday night after trips)

This is the third set of surveys for the research study we are conducting to further understand changes in sense of community, nature relatedness, and sense of place in outdoor pursuits recreationists and trip groups.

As a reminder, participation is voluntary: you have the right to decline or discontinue the questionnaire at any time with no consequences. Also remember that the only identifying information on the questionnaires is your ID number, which you will assign yourself. It is only used to match the pre-questionnaires to post-questionnaires. *Please use the exact same ID number you used on the first survey.* Your ID number will not allow us to know your identity. None of the instructors or trip leaders at your session of Raquette Lake will see your individual responses. Thus, your anonymity is assured.

Upon completing the questionnaire, please place it in the attached envelope and seal it prior to returning it to your trip group staff member.

 Read aloud to your group at the <u>very beginning</u> of tonight's meeting (should take 15 minutes or so). It might even get them thinking about outcomes of this course that relate to your group's discussion tonight.

2. Collect surveys in individual white envelopes.

# Script for Administering Student Survey Packet 3 (Thursday night after trips)

This is the third set of surveys for the research study we are conducting to further understand changes in sense of community, nature relatedness, and sense of place in outdoor pursuits recreationists and trip groups.

As a reminder, participation is voluntary: you have the right to decline or discontinue the questionnaire at any time with no consequences. Also remember that the only identifying information on the questionnaires is your ID number, which you will assign yourself. It is only used to match the pre-questionnaires to post-questionnaires. *Please use the exact same ID number you used on the first survey*. Your ID number will not allow us to know your identity. None of the instructors or trip leaders at your session of Raquette Lake will see your individual responses. Thus, your anonymity is assured.

Upon completing the questionnaire, please place it in the attached envelope and seal it prior to returning it to your trip group staff member.