PERCEPTIONS OF OUTDOOR LEADERS TOWARDS

THEIR EXPERIENCES OF SPIRITUALITY IN

NATURE: A Q-METHODOLOGY INQUIRY

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It has been an amazing adventure. I want to thank my family, friends, and professors that has been on this journey with me. My dissertation has taken me over 5,000 miles, 18 states, and 16 National Park lands, including my first pilgrimage to the cathedrals of Yosemite. I felt what John Muir (1992) had described; "Everyone needs beauty as well as bread, places to play in and pray in, where nature may heal and cheer and give strength to body and soul alike" (p 713).

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Abstract: Subjective views regarding outdoor spirituality among outdoor leaders were

captured through this Q-methodology study, and the use of spiritual intelligence (SQ)

provided the theoretical framework. Q-sorts consisting of 42 statements about outdoor

spirituality were completed by 30 outdoor leaders, and were analyzed with PQ Method

software. The result of this abductive analysis was a three-factor solution deeply

interpreted as: Sense of Transcending, Sense of God/Higher Power and Fellowship, and

Sense of Challenge. Sense of Transcending is the perception of how nature improved

one's sense of self while feeling connected to nature. Sense of God/Higher Power and

Fellowship is the perspective of feeling closer to God and/or one's travel companions

while in the outdoors. Sense of Challenge is the perception of how nature breaks down

social norms and self-constructed norms. Outdoor leaders and outdoor recreation

organizations can incorporate terminology, awareness of multiple perceptions, and ways

to include outdoor spirituality in outdoor recreation experiences. It may be beneficial for

further research in participants' perceptions, possible transference of beliefs from outdoor

leaders to participants, influences for SQ development, and possible best practices for

including outdoor spirituality in outdoor recreation experience.

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CHAPTER I

INTRODUCTION

One of the many benefits of outdoor recreation has been a spiritual experience and reverence for nature (Ibrahim & Cordes, 2002). The majority of research and literature on the benefits of outdoor recreation focuses on environmental awareness/stewardship (Drury & Bonney, 1992; Frauman & Shaffer, 2015; Yoshino, 2005), connection with nature (Frauman & Shaffer, 2015), self-actualization (Vogler, 2012), mental clarity (Pohl, Borrie, & Patterson, 2000), physical fitness/health (Manning et al., 2015; Wilhelm Stanis, Oftedal, & Schneider, 2014), challenge/accomplishment (Post, Cho, & Velasco, 2015; Vogler, 2012), learning opportunity (Ibrahim & Cordes, 2002), social interaction (Ibrahim & Cordes, 2002; Pohl et al., 2000; Post et al., 2015), group development (Jordan, 2001; Martin, Cashel, Wagstaff, & Breunig, 2006; Priest & Gass, 2005; Williams, Graham, & Baker, 2003), leadership development (Bryson, 2002; Jordan, 2001; Martin et al., 2006; Priest & Gass, 2005; Williams et al., 2003), re-experience flow (Vogler, 2012), and self-sufficiency (Pohl et al., 2000). From this list, there appears to be no connection to outdoor spirituality from the perspective of outdoor leaders.

Outdoor leaders facilitate much of the experiences for guided and educational outdoor programming by introducing the benefits, teaching new skills, providing risk management,

debriefing, and are often perceived by participants as competent and skilled experts (Howell, 2008; Paisley, Witter, & Tyson, 2004; Priest & Gass, 2005; Shooter, Paisley, & Sibthorp, 2012). As the experience continues, the outdoor leader builds relationships, rapport, trust, and connection with his/her participants (Hayashi & Ewert, 2006; Shooter, Paisley, & Sibthorp, 2009; Shooter et al., 2012; Sibthorp & Jostad, 2014). Sometimes participants, especially youth, may start to emulate the outdoor leader's actions and mannerism (Howell, 2008; Nabhan & Trimble, 1995; Paisley, Furman, Sibthorp, & Gookin, 2008; Sibthorp & Jostad, 2014; van Linden, 1998). The beliefs and attitudes can be transferred from the leader to participants (Northouse, 2013).

The outdoor leader is essential for introducing new benefits such as outdoor spirituality to the outdoor experience. The leader optimizes the group by building comradery and cohesiveness, developing and motivating participants, establishing a productive atmosphere, and keeping everyone on track to achieve the expressed benefits (Edginton & Ford, 1985). Sharing benefits such as outdoor spirituality can be presented in the language expressed when talking about nature, directly sharing his/her beliefs about it, or even by leading an informal spiritual prayer, thanks, or meditation session (Bobilya, Kalisch, & Daniel, 2015).

An outdoor leader may have influence on the participants, but the effects of the benefit or perception of benefit may be limited from the participants' stand point. During an outdoor recreation experience, the benefit of outdoor spirituality may be lacking due to the leader not mentioning it or purposely not incorporating it in the experience (Denton, 2011). It may be true that the participants may be intolerant or closed off to the concept or ideology of outdoor spirituality views from the leader (Denton, 2011; McDonald & Schreyer, 1991). A participant may feel like the leader's views are thrust onto him/her. From the participant's perspective, this could contribute towards a negative outdoor experience and/or impression of spirituality in the natural environment if the participant is constantly feeling preached to (McDonald & Schreyer, 1991).

Statement of the Problem

Spirituality "can be thought of as a personal belief in or a search for a reason for one's existence; a greater or ultimate reality, or a sense of connection with God, nature, or other living beings" (Ibrahim & Cordes, 2002, p. 18). So what is outdoor spirituality? It has been called nature-based spirituality (Taylor, 2001), wilderness spirituality (Ashley, 2007), and spirituality in the out-of-doors (Hutson, 2007). Outdoor spirituality is the connection to a higher power, the search for life's meaning, or understanding a greater or ultimate reality while or related to being in the outdoors (Ashley, 2007; Hutson, 2007; Ibrahim & Cordes, 2002). Some individuals feel it as a small voice that speaks to him/her while in nature (Hainsworth, 2014). Other individuals may experience it like an avalanche in the moment (Clark, 2011). Either way, if someone is not attuned or listening for it, it will pass him/her by (Hainsworth, 2014). To be aware of the possibility of outdoor spirituality, someone would most likely have a mature form of spiritual intelligence (SQ) or is guided by someone with a mature form of SQ (Vaughan, 2002), like an outdoor leader.

> Spiritual intelligence is concerned with the inner life of mind and spirit and its
> relationship to being in the world. Spiritual intelligence implies a capacity for a
> deep understanding of existential questions and insight into multiple levels of
> consciousness. Spiritual intelligence also implies awareness of spirit as a ground
> of being or as the creative life force of evolution. Spiritual intelligence emerges
> as consciousness evolves into an ever-deepening awareness of matter, life, body,
> mind, soul, and spirit. (Vaughan, 2002, p. 19)

The spiritual quest can be intensified with inspiration and time in the outdoors to help discover the nature of one's true self, or perhaps a connection or relationship with God or the earth (Vaughan, 2002). The mountains, valleys, forests, and deserts can be cathedrals and temples for those who live and work in the outdoors (Elder, 1981; Johnson, 2006; Worster, 2005). To want to share these experiences and places in the moment with others, outdoor leaders would

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demonstrate some spiritual maturity. This is commonly done by "exercising wisdom and compassion in relationship to other people, regardless of gender, creed, age, or ethnic origins, as well as reverence and respect for all forms of life" (Vaughan, 2002, p. 22).

Purpose of the Study

Outdoor spirituality is considered a phenomenon (Berry, 2008; Heintzman, 2003; Hutson, 2007; Riley, 2014). A phenomenon is "a fact or situation that is observed to exist or happen, especially ones whose explanation is in question" (Oxford American College Dictionary, 2002, p.1024). As a phenomenon, the individual's experience or perception is as real to them as a truth. The truth in the phenomenon occurs through investigation or inquiry. The truth from one person can be different from another person's truth about the same phenomenon. It may be important to see the breadth of the phenomenon of outdoor spirituality from the perspective of outdoor leaders, since they may have an influence on participants.

The purpose of the study was to investigate the perceptions of outdoor spirituality from outdoor leaders' point of view. The researcher sought differences of how outdoor leaders described outdoor spirituality.

Research Question

This study addressed the views outdoor leaders have about outdoor spirituality. The study utilized Q-methodology to examine outdoor leaders' perspectives of what is outdoor spirituality? Therefore, the research question guiding this study was what are the ways that outdoor leaders describe spirituality in nature?

Significance of the Study

The American society is becoming more and more saturated with electronics and a fast-paced urban lifestyle (Pergams & Zaradic, 2008). Adults and youth are spending more time using electronic devices and less time outdoors (Barlow, 2010; Charles, 2009; Pergams & Zaradic, 2008; Thomas, 2009; Tulipane, 2014). As individuals spend less time in nature, researchers indicate there is a decrease in spiritual health (O'Dell, 2015) and a sense of self-worth (O'Shea,

2008; Wells & Evans, 2003). Additionally, others found an increase in psychological distress (Wells & Evans, 2003).

The amount of time spent in nature is not the only factor. When youth and young adults do go into nature, it may be for the interest in the recreational or economic aspects versus communing with nature (Hainsworth, 2015). People are out of practice of communing with nature (Flaskerud, 2014). When someone wants to commune with nature, the individual may ask how long would it take to achieve, then may get discouraged by the unknown for when a result is not guaranteed. Individuals need quality experiences in nature (Barlow, 2010; Bobilya et al., 2015; Stringer & McAvoy, 1992; Tulipane, 2014).

Outdoor leaders can be the catalyst for sparking individuals' interest for nature and the benefits of nature such as outdoor spirituality (Bobilya et al., 2015). Examples of how to accomplish this could include reading a passage about the beauty of nature, have participants sit alone for 30 minutes to up to three days all by themselves for a solo experience, or debrief an intense moment as a spiritual learning experience (Bobilya et al., 2015; Kalisch, Bobilya, & Daniel, 2011).

Definition of Terms

To help readers with terms, here are the definitions for the terms of this study:

- Abduction is the studying of facts in pursuit of an explanation and new insight (Watts & Stenner, 2012) "Abduction is a logic designed for discovery and theory generation, not for testing and theory verification" (Watts & Stenner, 2012, p. 39).

- Concourse is "a random collection of self-referable statements about something of statistical dimensions" (Stephenson, 1993, p. 5).

- Confounded sort is a Q-sorts that has significant loading on more than one factor (Watts & Stenner, 2012).

- Defining sort is a significantly loaded Q-sort for a factor and that factor alone (Watts & Stenner, 2012).

- Exemplar sort is a sort most representative of the factor with high and significant loading on that factor and low loadings on the other factors. High and pure loadings equal exemplars of the factor (Watts & Stenner, 2012).

- Outdoor leader is "the designated person in charge of the group that has legal and moral responsibility to help the group members stay safe and protect the environment during an outdoor recreation experience" (Priest & Gass, 2005, p. 3).

- Outdoor recreation focuses on recreational activities that are in and for the outdoors or the natural setting (Martin et al., 2006; Priest & Gass, 2005). These activities are "organized free-time activities that are participated in for their own sake and where there is an interaction between the participant and an element of nature" (Ibrahim & Cordes, 2002, p. 7).

- Outdoor spirituality is the connection to a higher power, the search for life's meaning, or understanding a greater or ultimate reality while being in the outdoors (Ashley, 2007; Hutson, 2007; Ibrahim & Cordes, 2002).

- P-set is "intentionally chosen individuals selected to participate in a Q-study to provide a holistic understanding of possible views toward a phenomenon or context" (Hutson, 2007, p. 12).

- "Q-methodology is a research technique…which focuses on the subjective or first-person viewpoints of its participants. The basic method combines the gathering of data in the form of Q-sorts and their subsequent intercollorrelation and factor analysis…[T]he key viewpoints extant among a group of participants and allows those viewpoints to be understood holistically and to a high level of qualitative detail" (Watts & Stenner, 2012,

pp. 3-4). Q-methodology illuminates the ways people communicate points of view towards a phenomenon (Hutson, 2007).

- Q-set are stimulus statements derived from a concourse given to participants for rank ordering in a Q-study (McKeown & Thomas, 2013).

- Q-sort is "a technique used in a Q-study to represent an individual's perception through the rank ordering of self-referential responses on a factor array that can be factor analysis" (Hutson, 2007, p. 13).

- Q-study is a research study performed with Q-methodology.

- Religion is a set of tightly held beliefs and practices associated with a divine text to support the spiritual growth of people (Slaton, n.d.; Wigglesworth, 2012).

- Spiritual intelligence is concerned with the inner life of mind and spirit and its relationship to being in the world. Spiritual intelligence implies a capacity for a deep understanding of existential questions and insight into multiple levels of consciousness. Spiritual intelligence also implies awareness of spirit as a ground of being or as the creative life force of evolution. Spiritual intelligence emerges as consciousness evolves into an ever-deepening awareness of matter, life, body, mind, soul, and spirit (Vaughan, 2002).

- Spirituality "can be thought of as a personal belief in or a search for a reason for one's existence; a greater or ultimate reality, or a sense of connection with God, nature, or other living beings" (Ibrahim & Cordes, 2002, p. 18).

CHAPTER II

LITERATURE REVIEW

Outdoor Recreation

In nature, there is freedom to use creativity and expression since the outdoors are dynamic and ever changing (Ibrahim & Cordes, 2002). This allows people to be themselves versus always performing certain social roles. The freedom from social roles, adults can recreate with true self-expression and experience play (Ibrahim & Cordes, 2002). While in the outdoors, adults can be their true selves without worrying about social stigmas that society dictates should be the norm and role that each person has to live up to all the time. Another important element for outdoor recreation is leisure. As a leisure pursuit, the participant freely chooses to participate without obligation to work and meeting the basic needs of survival of everyday life (Ibrahim & Cordes, 2002).

Outdoor recreation focuses on recreational activities that are in and for the outdoors or the natural setting (Martin et al., 2006; Priest & Gass, 2005). Moreover, outdoor recreation activities have been defined as "organized free-time activities that are participated in for their own sake and where there is an interaction between the participant and an element of nature" (Ibrahim & Cordes, 2002, p. 7).

Outdoor recreation is dependent on the natural environment because an outdoor recreationalist interacts with the natural environment (Moore & Driver, 2005). This interaction brings the individual into contact with terrain, flora, fauna, and weather. The natural environment has challenges that involve the terrain and weather that makes the recreation activity dynamic (Ford, Blanchard, & Blanchard, 1993) unlike maintained sport fields, courts, or arenas. Outdoor recreation is more dynamic with the natural environmental challenges such as uneven terrain, changing trail conditions with fallen trees across the path, temperature changes throughout the day and night, weather conditions fluctuating due to seasonal changes, orographic weather, marine cycles, interactions with wildlife, and the lack of civilization and the comforts it provides.

Outdoor recreationalists enjoy many benefits while recreating in the natural environment. Outdoor recreation is more than just having fun in the natural environment (Ibrahim & Cordes, 2002). There are benefits that are spiritual, psychosocial, physiological, communal, and environmental (Corning, Mowatt, & Charles Chancellor, 2012; Godbey & Mowen, 2010; Ibrahim & Cordes, 2002; Manning et al., 2015; Michigan Department of Transportation, 2014; O'Dell, 2015; O'Shea, 2008; Taniguchi, Freeman, Taylor, & Malcarne, 2006; Wilson & Christensen, 2012).

Spirituality can be a benefit from outdoor recreation. Recreating in the natural environment can improve one's spiritual health (O'Dell, 2015; Wolfelt, 2008). This spiritual improvement can encompass the exploration of self (Post & Montgomery, 2016), connection to a higher power (Hutson, 2007; Post & Montgomery, 2016), connection to others (Post & Montgomery, 2016), and connection to nature (Frauman & Shaffer, 2015; Hutson, 2007; Post & Montgomery, 2016; Wolfelt, 2008).

Outdoor recreationalists tend to seek out the solitude that nature can provide (Lee & Scott, 2014). Solitude and rejuvenation from nature can be beneficial (Ibrahim & Cordes, 2002). Many outdoor recreation activities are individualistic. This provides time to commune with nature. The solitude may give individuals a break from technology and even from the crowds of

civilization. The outdoor recreationalist can be mindful on the present (Lee & Scott, 2014). This can be vastly different from the life activities that are constantly involving screens that are electronic and two dimensional (Lee & Scott, 2014). "Nature experiences potentially provide people calmness and skills to develop inner capacity to deal with solitude in everyday life" (Lee & Scott, 2014, p. 3)

Outdoor Leader

Due to the increased popularity of outdoor recreation activities there could be a need for more professionals to help educate and facilitate some of these outdoor recreation activities (Bobilya, 2015; Martin & Wagstaff, 2012). These professionals are outdoor leaders. Outdoor leaders do more than take participants on fun adventures. Outdoor leaders can help teach activity specific skills, reduce the environmental impact, injuries/deaths, and negative experiences while in the natural environment (Ford et al., 1993; Priest & Gass, 2005). Outdoor leaders increase participation in outdoor recreation by helping those who have little to no experience in a particular outdoor recreation activity (Morris, van Riper, Kyle, Wallen, & Absher, 2015). Some individuals are more comfortable trying skilled and high risk outdoor recreation activities with guidance of an outdoor leader (Morris et al., 2015). "An outdoor leader is the designated person in charge of the group who has legal and moral responsibility to help the group members stay safe and protect the environment during an outdoor recreation experience" (Priest & Gass, 2005, p. 3).

Spirituality

Before addressing the concept of outdoor spirituality, two other concepts need to be distinguished: spirituality and religion. Spirituality is the search for one's purpose, a greater or ultimate reality, or the sense of connection to a larger power like God, nature, or other living beings (Ibrahim & Cordes, 2002; Slaton, n.d.; Wigglesworth, 2012). Spirituality is generalizable to the human experience, whereas religion is a set of tightly held beliefs and practices associated with a divine text to support the spiritual growth of people (Slaton, n.d.; Wigglesworth, 2012). Religious experiences

Either confirm or conform to the tenets of a religious tradition or which take

place during religious observance or practices or are the result of lengthy

preparation or devotion, of mental training, prayer or fasting. Such experiences

may be communal, take place with a setting or worship or ritual or may be

solitary. (Rankin, 2008, p. 11)

There is much debate about the connection and differences between religion and

spirituality (King, 2008; McDonald & Schreyer, 1991; Rankin, 2008; Sanford, 2007;

Wigglesworth, 2012). Spirituality can exist outside of religion or religious practices (Rankin,

2008; Wigglesworth, 2012). But religious experiences usually have an element of spirituality

(Rankin, 2008; Wigglesworth, 2012). Thus, a spiritual experience can happen at any time and

any place by anyone (Raschke, 1996).

Spirituality has been expressed as having hope in something much larger than one's self

(Sauter, 1998). Hope is a virtue that is tied with faith and love (1 Cor 13:13, New International

Version). Hope is the spiritual exercise that is the basis for faith and love, and can be developed

and nurtured or stunted and deformed (Sauter, 1998). In spirituality, hope can be seen as the

positive outlook on situations and life (Sauter, 1998).

Spirituality is about communication. This communication can be prayer (Jacobs, 2008;

Milgliore, 1998; Rankin, 2008), meditation (Jacobs, 2008; Rankin, 2008; Sanford, 2007), and/or a

chant or mantra (Jacobs, 2008; Slaton, n.d.). This communication is thought to be two-way

between the individual and a higher power, God(s), *Kami*, mother earth, or nature (Hainsworth,

2014; Yamakage, 2006). It is thought that through communication, an individual is

acknowledging that he/she is not alone (Hainsworth, 2014). This communication can bring peace

and a sense of connection to the higher power (Hainsworth, 2014; Milgliore, 1998; Yamakage,

2006).

Spirituality can bring transformation (Hainsworth, 2014; Raschke, 1996). Individuals have reported spiritual experiences that indicate feelings of change, big or small, for the long-term (Hainsworth, 2014; Raschke, 1996; Wigglesworth, 2012).

A personal transformation is defined as a dynamic sociocultural and uniquely individual process that (a) begins with a disorienting dilemma and involves choice, healing, and experiences(s) of expanding consciousness towards the divine, (b) initiates a permanent change in identity structures through cognitive, psychological, physiological, affective, or spiritual experiences, and (c) renders a sustained shift in the form of one's thinking, doing, believing, or sensing due to the novelty of the intersection between the experiencer, the experience, and the experiencer's location in time. (Ross, 2010, p. 54)

Outdoor Spirituality

There is limited research about spirituality during outdoor recreation experiences, even though spirituality and nature have been linked to together (McDonald & Schreyer, 1991). This spirituality has been described as wilderness spirituality, nature spirituality, and outdoor spirituality (Bobilya et al., 2015; McDonald & Schreyer, 1991; Price, 1996). In all of these, there is a sense of a sacred place and experience as it is connected to spirituality (Bobilya et al., 2015; Hutson, 2007; McDonald & Schreyer, 1991; Price, 1996). For the purpose of this study, this phenomenon was called outdoor spirituality and spirituality in the natural environment. Outdoor spirituality is the connection to a higher power, the search for life's meaning, or understanding a greater or ultimate reality while being in the outdoors (Ashley, 2007; Bobilya et al., 2015; Hutson, 2007; Ibrahim & Cordes, 2002; Marsh & Bobilya, 2013).

Spiritual Intelligence (SQ)

Spiritual Intelligence (SQ) is not a search for beliefs or a system of beliefs. It is an individual's ability or capacity of making spirituality personal. The theoretical concepts of SQ stems from multiple intelligences (Manghrani, 2011; Wigglesworth, 2012).

Multiple Intelligences. In 1983, Gardner proposed that every individual has abilities or aptitudes for different types of intelligences. Originally he listed seven types of intelligences: linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, and intrapersonal (Gardner, 1983). Later, Gardner would add naturalist intelligence and existential intelligence (Wigglesworth, 2012; Wolman, 2001). Persons with each intelligence have the capacity to perform unique sets of functions and abilities (Wolman, 2001). For example, if someone had musical intelligence, he/she could distinguish the key he/she hears in music or for bodily-kinesthetic intelligence, he/she could have a natural tendency for observing a bodily movement and then repeating it with accuracy.

In 1997, Danah Zohar coined the terminology for spiritual intelligence (SQ). Zohar defined twelve principles underlying spiritual intelligence: self-awareness, spontaneity, being vision/value-led, holism, compassion, celebrating diversity, field independence, humility, tendency to ask fundamental "why?" questions, ability to reframe, positive use of adversity, and sense of vocation (Zohar, 1997). These principles help describe how Zohar envisioned what behaviors or mindsets that an individual would possess for SQ (1997).

Aspects of SQ. For the last two decades, SQ has been defined numerous ways. In 2001, SQ was described as "the human capacity to ask ultimate questions about the meaning of life, and to simultaneously experience the seamless connection between each of us and the world in which we live" (Wolman, pp. 83-84). Later King stated that SQ is

> a set of mental capacities which contribute to the awareness, integration, and
>
> adaptive application of the nonmaterial and transcendent aspects of one's
>
> existence, leading to such outcomes as deep existential reflection, enhancement
>
> of meaning, recognition of a transcendent self, and mastery of spiritual states.
>
> (2008, p. 56)

Manghrani simplifies the definition with "the ability to use spirituality for personal wisdom and for personal and social effectiveness" (2011, p. 42). In 2012, the definition was expanded to "the

ability to behave with wisdom and compassion, while maintaining inner and outer peace, regardless of the situation" (Wigglesworth, 2012, p. 8). Then in 2015 a further modification stated, SQ "enhances individual's capabilities and qualities such as compassion, creativity, and wisdom by improving the self-awareness and feelings of connection with divine energy" (Maheshwari, 2015, p. 29).

All of these definitions address the individual's ability to understand there is something bigger than one's self. Then, secondarily, processing the unanswerable questions and making meaning out of life (Isfahani & Nobakht, 2013; King, 2008; Wolman, 2001). While some individuals may naturally be able to process the mentioned phenomenon, others may struggle with them. Like other types of intelligence, there can be a learning curve for individuals. Some individuals have a knack at mathematics where it is easy for them to understand and process. Then some individuals have to work at mathematics but eventually understand them. Then there are some individuals who struggle with mathematics and feel like they never understand (Gardner, 1983).

Through the evolution of SQ over the years, Manghrani (2011) categorized SQ differently than Zohar. Manghrani (2011) categorized SQ into ten key aspects, which were able to be compressed into seven: self-awareness, personal power, spiritual exercises/health, religiosity, love, values/integrity, and interpersonal relations/helping behavior. For this purpose of this study, Manghrani's key aspects of SQ is the theoretical framework utilized.

Self-awareness is the most focused on by most scholars (Bolghan-Abadi, Ghofrani, & Abde-Khodaei, 2014; Isfahani & Nobakht, 2013; Kaur, Sambasivan, & Kumar, 2013; King, 2008; Maheshwari, 2015; Manghrani, 2011; Mayer, 2000; McMullen, 2003; Vathanavisuth, 2015; Vaughan, 2002; Wigglesworth, 2012; Wolman, 2001; Zohar, 1997). The individual knows thyself. An individual's self-awareness influences his/her worldview (Wigglesworth, 2012). The worldview is the filter of how to perceive the world through the five senses and intuition. Self-awareness addresses how an individual see his/her life purpose (Isfahani & Nobakht, 2013;

Wigglesworth, 2012). A hierarchy of what is important and worthy to the individual is established (Wigglesworth, 2012). There is an awareness of the complexity of one's priorities and the world around him/her (Wigglesworth, 2012). The natural environment draws a higher state of consciousness and self-awareness (Young & Crandall, 1984). The individual feels like he/she understands his/her worldview at a deeper level than just the five senses. This takes intuition, emotions, and a connectedness to something larger than one's self (Rankin, 2008).

In the natural environment, an outdoor leader has many opportunities for heightened levels of awareness through introspection (Lee & Scott, 2014). An outdoor leader evaluates his/her own strengths and limitations, purpose in life, and interconnection to everything (Ashley, 2007; Hainsworth, 2014; Sanford, 2007; Stringer & McAvoy, 1992). Know thyself and purposeful living is key for an outdoor leader (Petzoldt & Ringholz, 1984).

Awareness expands even outside of the outdoor leader, he/she broadens his/her awareness to others, the world, and one's place in the world. An outdoor leader needs to be aware of his/her participants, the purpose of the outdoor recreation activity, and of the natural environment around them (Drury & Bonney, 1992; Kosseff, 2010; Martin et al., 2006; Petzoldt & Ringholz, 1984; Priest & Gass, 2005).

The second key aspect of SQ is personal power. Personal power is the ability to control one's self, actions, and emotions (Manghrani, 2011). Who is driving my life? (Wigglesworth, 2012). Beyond just being aware of one's purpose in life, this extends into actually taking control and being in charge of one's life (Wigglesworth, 2012). This can be having responsibility in the moment, but also being free to be spontaneous (Zohar, 1997). To have this freedom, knowing one's strengths and limitations are important (Wigglesworth, 2012). Lastly, personal power is having a sense of purpose or vocation (Zohar, 1997).

An outdoor leader can find meaning in his/her work from the sacred natural environment (Ashley, 2007; Stringer & McAvoy, 1992), helping participants (Ibrahim & Cordes, 2002; Kosseff, 2010), from expanding his/her own and other's awareness and worldviews (King, 2008),

and from sharing his/her passion with others (Maheshwari, 2015; Vathanavisuth, 2015; Vaughan, 2002; Wigglesworth, 2012).

Spiritual exercise and health is the third key aspect of SQ. This is the daily practice of living a healthy life in a holistic manner that includes physical, mental, emotional, and social aspects (Manghrani, 2011; Wigglesworth, 2012; Zohar, 1997). By having the dedication on a daily basis, an individual may better adapt to the ebb and flow of life (Wigglesworth, 2012; Wolman, 2001). The struggles of life are experiences that spur on spiritual growth (King, 2008; Wigglesworth, 2012).

Since an outdoor leader spends time in the natural environment, the outdoor leader likely has had numerous opportunities to experience the wonder and awe of nature (Sanford, 2007; Stringer & McAvoy, 1992). An outdoor leader spends time in the mountains, valleys, forests, and deserts that are holy cathedrals for spiritual inspiration (Elder, 1981; Johnson, 2006; Worster, 2005). There is a connection between the outdoor leader and the natural environment (Hutson, 2007). This exposure and connection to the natural environment can be a spiritual exercise for an outdoor leader (Stringer & McAvoy, 1992). The natural environment, group dynamics, and other challenges also can be forms of spiritual exercise. An outdoor leader has typically faced personal fears and challenges (Stringer & McAvoy, 1992). An outdoor leader will also help others through their fears and challenges (Stringer & McAvoy, 1992).

Religiosity, the fourth key aspect of SQ, is putting importance on faith on what one believes (Manghrani, 2011; Wigglesworth, 2012), but also keeping in mind the views of others so not to negate them (Wigglesworth, 2012). It incorporates spiritual laws into an individual's life (Wigglesworth, 2012). These spiritual laws explain how to live and help guide everyone towards happiness and inner peace (Wigglesworth, 2012). Eventually this can include modeling and teaching universal spiritual laws (Wigglesworth, 2012). Religiosity also includes inspiration of transcendent oneness and connection to something divine (Isfahani & Nobakht, 2013; King, 2008; Wigglesworth, 2012). There is the sense of the sacred, which many times can come from

experiences of wonder and awe (Isfahani & Nobakht, 2013). A sense of sacred can be facilitated when the outdoor leader provides time for solitude, personal reflections, and sometimes prayer for his/her self and participants (Stringer & McAvoy, 1992). Solos, personal journaling, and reflective questions are common for many extended overnight outdoor recreation trips to stimulate the thought process for many abstract concepts like spirituality (Gilbertson, Bates, McLaughlin, & Ewert, 2006; Martin et al., 2006).

The fifth key aspect of SQ is love. Love is the compassion and empathy an individual perceives and practices in the world (Kaur et al., 2013; Manghrani, 2011). Love gives one's self and others patience and forgiveness (Isfahani & Nobakht, 2013). Ultimately there is the understanding the love is divine (Manghrani, 2011). An outdoor leader can have moments of intense feeling or emotion prompted by interactions with the natural environment (Stringer & McAvoy, 1992).

Values and integrity are the sixth key aspect of SQ. Living one's purpose and values is important for one's self and as an example to others (Wigglesworth, 2012; Zohar, 1997). This can be shown as a continuous effect for moral development and refinement (Wolman, 2001). This can be important when an individual is both aware and unaware of others observing him/her and is not concerned with fitting into the norm (Zohar, 1997). Additionally, this is evident when an individual values equality, justice, truthfulness, honesty, and trustworthy and moral relationships (Manghrani, 2011; Vaughan, 2002).

The last of the key aspects of SQ is interpersonal relations and helping others. Compassion and empathy come into play for this aspect as well (Kaur et al., 2013; Manghrani, 2011; Zohar, 1997). This can be demonstrated several ways. An individual can be a wise and effective leader, teacher, or mentor of spiritual principles (Wigglesworth, 2012). This may include sharing words of wisdom, but also listening to other's words of wisdom, and being an example of calm and peace and treating others with equality and dignity (Manghrani, 2011; Vaughan, 2002; Wigglesworth, 2012; Zohar, 1997). Another aspect is by helping others when

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they are in need (Manghrani, 2011). Communicating in a nonjudgmental way about one's and other's spiritual worldviews (Wigglesworth, 2012). Communication also includes the sense to be able to reframe and see others' worldviews (Zohar, 1997).

Caring, compassion, and empathy with personal transcendence (Kaur et al., 2013; Vathanavisuth, 2015) are common in how an outdoor leader treats his/her participants (Kosseff, 2010; Martin et al., 2006; Priest & Gass, 2005). An outdoor leader should model selfless giving (Kaur et al., 2013), humility (Vathanavisuth, 2015), and high moral values (Kaur et al., 2013; Vathanavisuth, 2015). An outdoor leader treats others with equality and dignity (Manghrani, 2011; Vathanavisuth, 2015; Vaughan, 2002). The outdoor leader adapts to the adverse situations (Kosseff, 2010; Martin et al., 2006; Priest & Gass, 2005). The outdoor leader's behavior then helps develop a capacity to tolerate, accommodate, and stay calm and focused for SQ (Maheshwari, 2015; Vathanavisuth, 2015).

Participants benefit from the debriefing process facilitated by an outdoor leader. During the debriefing process, participants learn positive interpersonal skills such as nonjudgmental feedback and empathy by observing the outdoor leader (Harris & Sherblom, 2002; O'Connell & Cuthbertson, 2009). These interpersonal skills help develop SQ in the way of interpersonal relations. An outdoor leader guides participants through questions that help develop a self-awareness of their own worldviews and those of others (Wigglesworth, 2012). Participants may also increase their bond with other participants, the outdoor leader, and to the natural environment by processing and solidifying their thoughts on issues brought up by the outdoor leader and/or other participants (Harris & Sherblom, 2002; O'Connell & Cuthbertson, 2009).

There are a few assumptions for SQ. The first assumption is that SQ is not knowledge about religious texts or practices (Wigglesworth, 2012). Even if an individual has specific knowledge of religious text or practices, it does not mean the individual is connected to the SQ definitions as described previously. Second, SQ is preset or "wired" in everyone. Everyone has the capacity for the fundamental "Why?" questions (King, 2008; Wigglesworth, 2012; Wolman,

2001; Zohar, 1997). However, it may take nurturing and development to be effective with SQ (Wigglesworth, 2012). The third assumption is SQ development can lead to higher quality of life and happiness with feeling more comfortable within the self, with others, and with the world around him/her (Bolghan-Abadi et al., 2014). The fourth assumption is spending time in the natural environment can intensify spiritual experiences (Vaughan, 2002). The natural environment can be an individual's sanctuary as he/she connects with the self, others, and even a higher power. This can help in the development in an individual's SQ (Vaughan, 2002).

Q-Methodology

Q-methodology has been described as a methodology that consists of technique and method. The technique is the data collection tool or the Q-sorts. The method is the statistical analysis to discern the underlying structure of the relationships between and among the Q-sorts. The methodology is the interpretation of all data sources to describe the resulting array of statements by the differing groups of related Q-sorts (D. Montgomery, personal communication. May 20, 2015). Q-methodology can be viewed as a quantitative application in the social sciences (McKeown & Thomas, 2013).

> Q-methodology is a research technique…which focuses on the subjective or first-person viewpoints of its participants. The basic method combines the gathering of data in the form of Q-sorts and their subsequent intercollorrelation and factor analysis… [T]he key viewpoints extant among a group of participants and allows those viewpoints to be understood holistically and to a high level of qualitative detail. (Watts & Stenner, 2012, pp. 3-4)

"Q-methodology illuminates the ways people communicate points of view towards any phenomenon" (Hutson, 2007). A Q-study is research utilizing Q-methodology.

Q-methodology is based on research methodology developed by William Stephenson (1902-1989) in 1953. With the training and mindset of the scientific study of objectivity, he wanted to bring a scientific study to subjectivity (McKeown & Thomas, 2013; Stephenson, 1993;

Watts & Stenner, 2012). In the 1930's, Stephenson studied under Spearman as a research assistant working on factor analysis for intelligence and morality as traits (McKeown & Thomas, 2013; Stephenson, 1993). Stephenson wanted to explore the meaning of consciousness and the self, both subjective matters (Stephenson, 1993). In 1953, he published *The Study of Behavior: Q-technique and Its Methodology* (McKeown & Thomas, 2013; Stephenson, 1993; Watts & Stenner, 2012). It brought together the principles of pleasure/pain, reality, and morality from the view of self-reference (Stephenson, 1993). Stephenson "proposed that the individuals perform the measuring rather than being measured" (as cited in McKeown & Thomas, 2013, p. x). This was a shift from the external metrics to self-reference to "ascribe meaning to the stimuli presented" (McKeown & Thomas, 2013, p. x).

Abduction versus deduction or induction is utilized within Q-methodology (Watts & Stenner, 2012). Abduction is the studying of facts in pursuit of an explanation and new insight (Watts & Stenner, 2012). While induction looks for generalizations, abduction looks at a phenomenon as it is now (Watts & Stenner, 2012). "Abduction is a logic designed for discovery and theory generation, not for testing and theory verification" (Watts & Stenner, 2012, p. 39).

After Stephenson's death in 1989, his legacy continues on with the International Society for the Scientific Study of Subjectivity (ISSSS), its journal publication of *Operant Subjectivity: The International Journal of Q-Methodology*, and the ISSSS's annual conference that focuses on the discussion and research of Q-methodology (McKeown & Thomas, 2013). The use of Q-methodology has expanded outside of psychology. Q-methodology has been used in numerous fields such as political science, sociology, aesthetics, environmental science, recreation, tourism, leisure studies, higher education, geography, health care, and economics (McKeown & Thomas, 2013; Watts & Stenner, 2012).

Components of Q-Methodology. In Q-methodology there are several components that are a part of the research process. During the planning of the study, the researcher(s) need to create a concourse, Q-set of statements, and P-set or participants. During the study, the

participants perform Q-sorts. Then the data is analyzed with a factor analysis and rotation. The

factoring process ends there and standard scores for the statements within each factor are

estimated to be interpreted within the array of statement. Then the factor arrays are analyzed with

all possible data, including the help of additional interviews of exemplar sorters to clarify

meaning.

The concourse is a "collection of self-referable statements about something, of statistical

dimensions" (Stephenson, 1993, p. 5). It is a collection of possible statements about the topic of

study (McKeown & Thomas, 2013; Stephenson, 1953; Watts & Stenner, 2012). The concourse is

usually extracted or flows from literature that surrounds the phenomenon (Hutson, 2007). From

the concourse, a Q-set of represented statements is developed. Q-sets are stimulus statements

derived from a concourse given to participants for rank ordering in a Q-study (McKeown &

Thomas, 2013). The Q-set is an overview of the concourse. The Q-set can be in the form of

images or statements that depicts the phenomenon in the concourse (McKeown & Thomas, 2013;

Watts & Stenner, 2012).

The P-set is "intentionally chosen individuals selected to participate in a Q-study to

provide a holistic understanding of possible views toward a phenomenon or context" (Hutson,

2007, p. 12). The P-set is usually purposefully sampled with additional snowballing to gain

diversity of opinions. While the researcher can purposefully sample those he/she knows that have

knowledge about a given phenomenon, it is important to continue the sampling through a

snowball process. The selected participants in the sample are asked about others who may have a

different perspective on the phenomenon. This helps broaden the holistic view on the said

phenomenon (Hutson, 2007; McKeown & Thomas, 2013).

Q-sort is "a technique used in a Q-study to represent an individual's perception

through the rank ordering of self-referential responses on a factor array that can be factor

analyzed" (Hutson, 2007, p. 13). The P-set sorts the Q-set statements on the continuum

of "most like me" to "most unlike me." The Q-sorts are then recorded for factor analysis

in available software, such as PQMethod (Schmolck, 2015). Factor analysis and rotation as needed are performed on the correlation of all of the Q-sorts resulting in factors (Watts & Stenner, 2012).

> Factors are aligned in an orthogonal fashion along perpendicular axes so Q-sorts that load high on one factor will load low on another, maximizing the distinction and differentiation of subject position while minimizing the correlation among factors. (Robbins, 2005, p. 213)

PQMethod is able to cluster Q-sorts into correlated groups and not with others to illuminate distinct or significantly loaded factors (Hutson, 2007). The findings of a Q-study are displayed by z-scores of each statement within each factor. For each distinct factor, distinguishing statements are calculated using the z-scores differences between factors (Hutson, 2007). The statements are organized with a statement array position according to the z-score. Higher positive z-score demonstrate characteristics most like the factor and the higher negative z-score, the most unlike the statement is for the factor.

Each factor has the sorts of the participants who align with that particular factor. A defining sort is a significantly loaded sort for a factor and that factor alone (Watts & Stenner, 2012). There may be a participant(s) that do not align with a single factor but achieve significance on two or more factors. This is a confounded sort which is a sort that has significant loading on more than one factor (Watts & Stenner, 2012). It is possible to choose a factor solution where a few sorts do not achieve significant on any factor.

The participant whose sort achieved a high significant loading on a single factor is considered an exemplar of that factor array and would be a candidate for a post-sort interview. This individual can give insight in statements that have high positive and negative z-scores for a particular factor. With the additional data from the post-sort interviews, demographic data, field notes, and comparisons of statement clusters, a thematic analysis is interpreted to help describe the phenomenon of the Q-study (Watts & Stenner, 2012).

CHAPTER III

METHODOLOGY

The purpose of this study was to investigate the phenomenon of outdoor spirituality from the perception of outdoor leaders. The researcher used Q-methodology research approach for this study to determine the different ways that outdoor leaders describe outdoor spirituality. This chapter describes the process used to develop the Q-set from the concourse, the participants who were selected as the P-set, the process for data collection, and data analysis are presented.

Instrument Development

The instruments for collecting data include a Q-set, sorting board (Figure 1), and brief demographic survey (Appendix A). The Q-set is a sample of the concourse; defined as possible statements about the topic of study, in this case outdoor spiritually. The statements (Table 2) were sampled from the concourse of various sources of literature about spiritual experiences in the natural environment (Abbey, 1968; Ashley, 2007; Elder, 1981; Emerson, 2004, 2014; Habegger, 2002; Hainsworth, 2014; Ibrahim & Cordes, 2002; Johnson, 2006; Manghrani, 2011, Nichols, 2006; Thoreau, 2003; Vaughan, 2002; Worster, 2005).

Structuring the concourse by theory is recommended as a strategy to garner the best representative sample from the concourse. In this case, the theoretical framework by Manghrani (2011) was used to sample the statements. The categories are self-awareness, personal power, spiritual exercise/health, religiosity, love, value/integrity, and interpersonal relations/helping behavior. Statements that describe the area of theory are grouped together following the principle of homogeneity in sampling the concourse (Brown, 1980). Then statements that are similar, redundant, or unclear were eliminated. Each category consists of five to seven statements that represent the area of theory with different ideas following the principle of heterogeneity (Brown, 1980).

Table 1. Spiritual Intelligence Categories & Q-sort Statements

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Self-Awareness

1   Nature reminds me to keep my attention in the here & now.

2   I feel like nature is only place I can catch my breath.

3   I feel like my true self when I am in nature.

4   I can feel the universe flow through me.

5   I feel nature transforms me to a higher state of being.

6   I go back to a more primal state of being.

Personal power

7   Nothing can bring me peace but myself.

8   The pure magnitude of nature makes me feel humble.

9   I feel like I can conquer the world.

10   I feel my consciousness & unconsciousness come into balance.

11   I am inspired to be creative.

12   I feel insignificant compared to the nature, God, or Mother Earth.

Spiritual Exercise / Health

13   The true grueling and physical experience in nature brings understanding.

14   Nature heals, cheers, and gives strength to body and soul.

15   The more time I spend outdoors, the more relief my soul gets.

16   Every time I go into nature, I am closer to understanding the existence of life.

17   Staying physically active is essential for a spiritual life.

18   Nature gives me new questions and answers.

Religiosity

19   The creator is most evident through wilderness.

20   Be silent to hear the whisper of God.

21   I learn that the forests, mountains, and desert canyons are holier than our churches.

22   In nature I can feel that there is more than just this physical world.

23   In storms and stressful situations, I can hear God speak to me.

24   God speaks through those I'm with in the outdoors.

Love

25   I am filled with compassion and empathy.

26   Nature is my place to give thanks to Mother Earth.

27   Truly loving nature is finding beauty everywhere.

28   God is nothing but true love.

29   The earth measures the depth of my own nature.

Values / Integrity

30   Wilderness is a necessity.

31   I can see evolution first hand in nature.

32   I am so full of gratitude.

33   Life without morals or ethics is meaningless.

34   The goal of life is living in agreement with nature.

35   Everything is connected to everything else.

36   I laugh when someone mentions "Mother Earth."

Interpersonal Relations / Helping Behavior

37   I see more equality of men and women in the outdoors.

38   I feel connected to humanity while in nature.

39   I yearn to share the depth of the experience.

40   I grow from listening to others with different beliefs than mine.

41   I am inspired by those around me when in the outdoors.

42   I build fellowship with those who travel with me in the wilderness.

Note. Spiritual intelligence categories from the framework of Manghrani, N. (2011). Spiritual quotient (S.Q.): An assessment tool. *Journal of Psychosocial Research,*6(1), 41-51

The sorting board (Figure 1) was designed to include 11 columns of 2,3,4,4,5,6,5,4,4,3, and 2 statements respectively. The statistical values range from -5 to +5 for analysis.

Participants sorted to one condition of instruction: "What are your experiences of nature?"

Figure 1. Sorting Board

1	2	3	4	5	6	7	8	9	10	11
-5	-4	-3	-2	-1	0	1	2	3	4	5

Most UNLIKE Me   Most LIKE Me
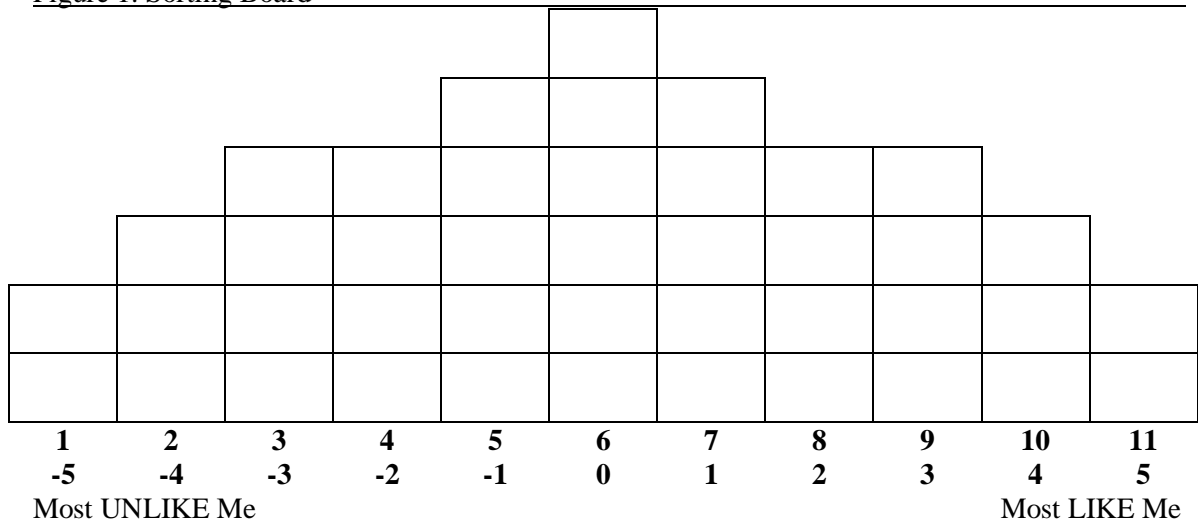
Note. First row with 1-11 was used for sorting procedures. Second row with -5 to 5 is the array position for factor analysis.

Specific demographics were collected at the end of the Q-sort in a demographic survey (e.g. sex, age, religious affiliation, organization, experience, and longest outdoor trip). No real names were collected or connected to the data. Sex was classified as male or female. Age was recorded in years. Religious affiliation was classified but not limited to Christian (Chr), Jewish (Jew), Islamic (Isl), Buddhist (Bud), Hindu (Hin), spiritual but not religious (SNR), atheist (Ath), and other. The organization type of employment was classified as university, nonprofit, commercial, religious, government, and freelance. Experience was years of experience as an outdoor leader. Longest outdoor trip was recorded in days that the outdoor leader has led or participated in. Each outdoor leader was given a chance to volunteer for a possible post-sort interview. If volunteered, he/she wrote his/her first name or codename that he/she would be able to remember and his/her phone number at the top of the demographic sheet (Appendix A).

Participants or P-set

After Institutional Review Board (IRB) approval (Appendix B), the P-set or participant selection was purposefully sampled from male and female outdoor leaders in the United States which resulted in 13 outdoor leaders. These 13 outdoor leaders were identified from networking through professional organizations and colleagues from past work experiences. To diversify the views on the phenomenon, these outdoor leaders suggested other outdoor leaders that they believed held different beliefs for participating. This snowball method provided an additional 17 outdoor leaders, resulting in a total of 30 participants. Each outdoor leader needed to have worked at least one season as an outdoor professional either full time, part time, and/or seasonal. Males (n=18) and females (n=12) participated in the study. Outdoor leaders were all 18 years or older.

Procedures

Outdoor leaders were contacted to arrange a convenient time and place for the sorting interview. Each participant was directed through the sorting process as recommended by Watts and Stenner (2012). First, reading each of the 42 statement card and placing them into three

piles: like me, not like me, and neutral/unknown. Then they placed the statements on the sorting

board (Figure 1) by starting at the ends (-5 and +5) first then working towards the center for the

remaining statements that carry less salience to the sorter. No other comments were offered by

the researcher assuring his/her "own view to assess and structure the importance of each

[statement] in comparison to the other [statements]" (Hutson, 2007, p. 32). The researcher

developed the script and directions to guide the outdoor leader through the Q-sorting process

(Appendix C). Then each outdoor leader filled out the demographic survey. The sorting process

took approximately 40 minutes for each outdoor leader. After sorting, each outdoor leader

completed a demographic survey with age, religious affiliation, organization type, years as an

outdoor leader, and longest outdoor trip (Appendix A).

Data Analysis

The Q-sorts were entered into PQMethod software (Schmolck, 2015) for factor analysis

and statement array positions to be used in interpretation of the factor arrays. PQMethod is a

public domain downloadable software that is free at www.qmethod.org (Schmolck, 2015). The

software is designed for statistical application to reveal interrelated subjectivities in the form of

factors (Hutson, 2007). Each sort was first correlated to all other sorts and subjected to a

principle components factor analysis (McKeown & Thomas, 2013). Factor rotation by varimax

was conducted to highlight the differences among the viewpoints. Viewpoints were revealed

through the z-score calculation of each statement for each factor (Hutson, 2007). The statements

are organized with a statement array position according to the z-score. Higher positive z-scores

indicate agreement of the grouping of statements for the factor array. Higher negative z-scores

indicate disagreement of the grouping of statements for the factor array. Each factor array was

defined by Q-sorts that were most distinctive or defining of the factor. Furthermore, the factor

loadings indicate exemplars of the viewpoint and the most likely outdoor leader to interview for a

deeper understanding of the themes generated in the factor array interpretation.

After each factor had been quantitatively analyzed, one outdoor leader was contacted for each factor for a post-sort interview (Appendix D). At the designated date and time, the researcher called the outdoor leader and asked for clarification and personal meaning for the significant statements and initial thematic interpretations for that particular factor array. The outdoor leaders were able to clarify their thoughts and meanings for statements that were descriptive for that factor array. With the additional data from the post-sort interviews, a thematic analysis helped describe the phenomenon of the study (Watts & Stenner, 2012). In other words, several sources of data and data comparisons were used for the interpretation of the factor arrays, including the highest positive and negative z-scores, the distinguishing statements (z-score comparisons between and across factor arrays), field notes collected during the sorting interview, demographic information, and post-sort interviews conducted by phone. The findings are presented by thematic understanding of the factor arrays and other data sources.

Assumptions

In this study there are the following assumptions:

1. Outdoor leaders will answer the interview questions honestly and accurately.

2. Researcher will understand the outdoor leaders and will be able to report accurately.

3. Outdoor leaders have had a spiritual experience while in the outdoors.

4. Outdoor leaders have made the connection of the outdoors and spirituality.

5. Outdoor leaders have expressed the connection of the outdoors and spirituality during their facilitation of outdoor trips and programs.

Limitations of the Current Study

The limiting factors of this study are the sample representation and memories.

1. The sample may not be representative of the population. With purposive sampling there is some degree of bias (Gay, Mills, & Airasian, 2012). With the sampling not being random, there is no guarantee that the sample will truly represent the population of professionals in the outdoor field.

2. Another limitation for sample representation is race/ethnicity and sex. The outdoor field has been predominantly Caucasian males. It has been described as a bearded, plaid wearing, elitist male club (C. Teeters, Personal communication, February 9, 2015). Although there has been an increase of females and individuals that are non-Caucasian to rise up to be outdoor leaders.

3. The sample of participants may also lack the memory of aspects of their experiences.

4. If an outdoor leader cannot remember their experiences during outdoor recreation activities they have lead accurately, the study may not have validity.

CHAPTER IV

RESULTS

The purpose of this study was to investigate the perceptions of outdoor spirituality from outdoor leaders' point of view. This study utilized Q-methodology to examine the perceptions of outdoor leaders about outdoor spirituality.

Description of Participants

Thirty outdoor leaders participated in the study and completed a sort along with a demographic survey (see Appendix A). The participants included outdoor leaders from California (n=5), Colorado (n=8), Georgia (n=1), New Mexico (n=1), North Carolina (n=4), South Carolina (n=2), Utah (n=1), and Virginia (n=8). Their ages ranged from 19 to 76 years old. There were 12 females and 18 males. The outdoor leaders' experience ranged from 1 to 37 years as professionals in outdoor recreation. They reported their longest trip in the field ranged from 3 to 117 days. The outdoor leaders identified working for universities (n=6), for-profit (n=6), non-profit (n=4), government (n=8), and combination of organizations (n=8). The religious affiliations that the outdoor leaders identified included Christian (n=14), Jewish (n=1), Spiritual but not religious (n=9), Theist (n=1), Atheist (n=1), none (n=1), and combination of beliefs (n=3). See Table 2 for demographic information for subjects.

Table 2. Demographics of Participating Outdoor Leaders

Code Name	Sex	Age	Organization Type	Years as Outdoor Leader	Longest Trip	Religious Affiliation
01M38Chr	M	38	FP	15	28 Days	Chr
02M35None	M	35	FP	15	75 Days	None
03M27Jew	M	27	FP	4	21 Days	Jew
04M52Chr	M	52	Univ/NP	26	12 Days	Chr
05M57Chr	M	57	Univ/Rel	25	7 Days	Chr
06M57SNR	M	57	Univ	37	36 Days	SNR
07M43Ath	M	43	Univ	22	42 Days	Ath
08F30Ath	F	30	Gov't	7	7 Days	SNR/Ath
09M33SNR	M	33	Gov't	10	28 Days	SNR
10M46Chr	M	46	FP/NP/Rel/Gov't	28	21 Days	Chr
11F50Chr	F	50	NP/Rel	32	n/a	Chr
12F29Chr	F	29	NP	4	3 Days	Chr
13F60Chr	F	60	Univ	38	35 Days	Chr
14M38Chr	M	38	Gov't	19	35 Days	Chr
15M19Chr	M	19	FP	1	90 Days	Chr
16M76SNR	M	76	NP	35	30 Days	SNR
17F36SNR	F	36	Univ/FP/NP	14	86 Days	SNR
18F42SNR	F	42	Univ/NP	20	90 Days	SNR
19M28Chr	M	28	NP	8	22 Days	SNR/Chr
20F28Chr	F	28	NP	4	31 Days	Chr
21F31The	F	31	Univ	6	117 Days	The
22F60Chr	F	60	Gov't	35	8 Days	Chr
23F20Chr	F	20	Gov't	1	4 Days	Chr
24F22Chr	F	22	Univ	3	4 Days	Chr
25M20Ath	M	20	Gov't	1	6 Days	SNR/Ath
26F22SNR	F	22	Univ/Gov't	3	10 Days	SNR
27M22SNR	M	22	Univ/NP/Gov't	8	30 Days	SNR
28M22SNR	M	22	Univ	3	8 Days	SNR
29M36SNR	M	36	Gov't	1	14 Days	SNR
30M46Chr	M	46	FP	16	14 Days	Chr

Note: Organization Type: Government=Gov't, University=Univ, Religious=Rel, For-Profit=FP, Non-Profit=NP; Religious Affiliation: Christian=Chr, Jewish=Jew, Spiritual but not religious=SNR, Theist=The, Atheist=Ath.

Factor Solution

Three factors emerged after a principle component factor analysis with a varimax rotation of all of the sorts in the PQMethod software (Schmolck, 2015). Each factor consisted of a cluster

of highly correlated sorts based on the z-scores for each statement. Correlation between factor

scores was shown is Table 3.

> Factors are aligned in an orthogonal fashion along perpendicular axes so Q-sorts
>
> that load high on one factor will load low on another, maximizing the distinction
>
> and differentiation of subject position while minimizing the correlation among
>
> factors. (Robbins, 2005, p. 213)

Each factor was different, with a .24 correlation between factor scores of statements between

Factor array 1 and Factor array 2, a .50 correlation between Factor array 1 and Factor array 3, and

a .31 correlation between Factor array 2 and Factor array 3.

Table 3. Factor Score Correlations

Correlations between Factor Scores			
Factors	1	2	3
1	1.0000		
2	0.2443	1.0000	
3	0.5014	0.3135	1.0000

Each sort was identified as a defining sort for a particular factor as a confounded sort, or

one that was not significant on any sort (see Table 4). The sorts were aligned to factors with

minimum significant factor loading by calculating the standard error (SE) (McKeown & Thomas,

2013). The significance was calculated by the SE $=2.58$ x $(1 /\sqrt{N})$, where N is the number of

items in the Q-set. Numbers for this study was placed into the equation, SE = 2.58 x $(1/\sqrt{42})$ =

2.58 x 0.154 = 0.40 (McKeown & Thomas, 2013; Watts & Stenner, 2012). The SE was used to

determine the minimum for factor loading (McKeown & Thomas, 2013). The SE was then

rounded up to 0.48 to strengthen the factor loading to prevent additional confounded sorts

(Brown, 1980; McKeown & Thomas, 2013, Watts & Stenner, 2013). To be used for the final

statistical calculation of factor scores, a sort achieved significance on only one factor. Factor 1

had seven defining sorts that explained 21% of the variability. Factor 2 had seven defining sorts

but these explained 14% of the variability. Factor 3 had eight defining sorts that explained 19%

of the variability. The variability of a factor is related to the strength or significance within the

Q-set (Brown, 1980). There were eight sorts that were confounded or non-significant (see Table

4). Confounded sorts were significant among multiple factors, therefore cannot be considered a

defining sort for only one (McKeown & Thomas, 2013).

Table 4. Factor Matrix Per Sorter

Q-sorts	Factor 1	Factor 2	Factor 3
06M57SNR	**.8401X**	.0027	.2222
16M76SNR	**.7432X**	.2398	.0964
17F36SNR	**.7702X**	.1293	.0216
18F42SNR	**.6842X**	.0910	.2782
19M28CHR	**.7528X**	.0483	.2257
21F31THE	**.4880X**	.3054	.3064
25M20ATH	**.7076X**	-.2940	.2507
01M38CHR	.4710	**.5485X**	.1217
04M52CHR	-.1835	**.7320X**	.0771
05M57CHR	-.0580	**.7430X**	.1179
11F50CHR	.4688	**.4982X**	-.1741
14M38CHR	.2818	**.6200X**	.0963
22F60CHR	.4787	**.5243X**	.0777
24F22CHR	-.0258	**.7868X**	.1688
07M43ATH	.2099	.0613	**.7817X**
08F30ATH	.4378	.2893	**.5914X**
09M33SNR	.1626	.1007	**.8120X**
20F28CHR	.3840	.1649	**.6284X**
23F20CHR	-.1303	.2359	**.7375X**
27M22SNR	.4704	.3925	**.6137X**
28M22SNR	.2632	-.0452	**.8129X**
29M36SNR	.2587	.0449	**.6365X**
02M35NO	.5182	-.2407	.5026
03M27JEW	.5039	-.1546	.6076
10M46CHR	.4233	.4607	.3862
12F29CHR	.4611	.0836	.2255
13F60CHR	.2451	.4200	.4356
15M19CHR	.3418	.3450	.3982
26F22SNR	.3218	.2456	.2074
30M46CHR	-.0162	.0985	.2106
% expl.Var.	21	14	19
# of defining sorts	7	7	8

Note: Factor loading >0.48 are in bold and indicate significance. X indicates defining sorts.

Interpretation of Factor Arrays

Three factor arrays emerged to describe the phenomenon of outdoor spirituality as Sense of Transcending, Sense of God/Higher Power and Fellowship, and Sense of Challenge. Using abductive reasoning and all available information, the descriptions for these viewpoints are provided.

Sense of Transcending. Sense of Transcending (see Figure 2 and Table 5) was named for seven defining sorts. Four of the sorts identified as spiritual not religious, and one sort for each Christian, Theistic, and Atheist. This view of outdoor spirituality consisted of four males and three females. There was an average age of 41.4 years old. This factor's outdoor leaders had the average of 17.3 years of work experience in the field, and an average of 55.3 days as their longest trip in the field. Through thematic analysis, two themes were supported by data for Sense of Transcending: improvement and betterment, and connection.

Figure 2. Sense of Transcending (Factor Array 1)

				18						
			33	41	11					
		20	13	2	6	16	42	15		
	24	19	17	38	40	10	4	21	30	
36	28	37	31	29	25	39	26	1	35	8
9	23	7	27	34	22	32	12	5	3	14
-5	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**

Most UNLIKE Me   Most LIKE Me
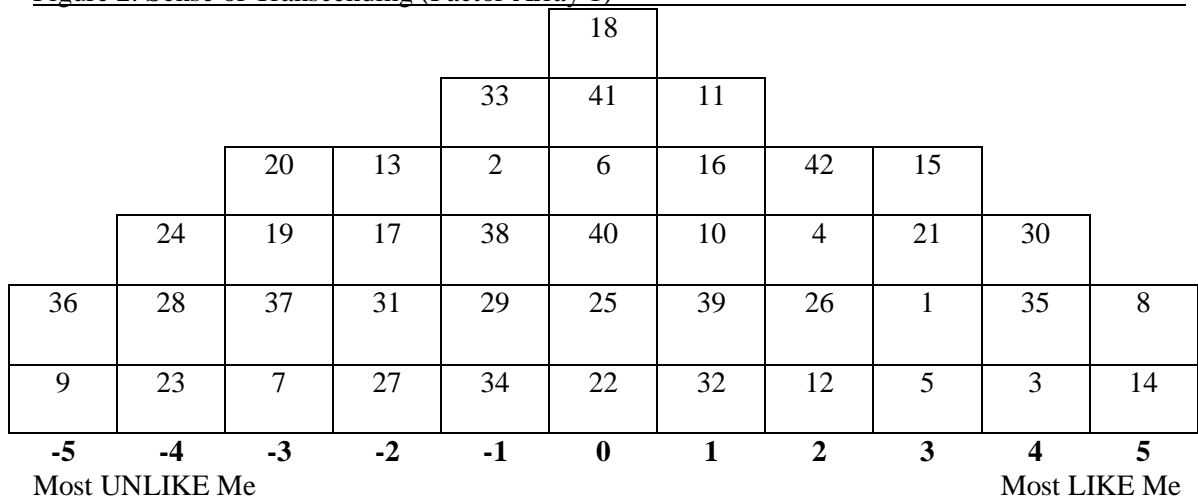
Table 5. Sense of Transcending (Factor Array 1)

#	Statement	Array position	z-score
14	Nature heals, cheers, and gives strength to body and soul.	5	1.569*
8	The pure magnitude of nature makes me feel humble.	5	1.465
3	I feel like my true self when I am in nature.	4	1.460
35	Everything is connected to everything else.	4	1.417**

30	Wilderness is a necessity.	4	1.225
5	I feel nature transforms me to a higher state of being.	3	1.140**
1	Nature reminds me to keep my attention in the here & now.	3	1.123
21	I learn that the forests, mountains, and desert canyons are holier than our churches.	3	1.034
15	The more time I spend outdoors, the more relief my soul gets.	3	1.025
12	I feel insignificant compared to the nature, God, or Mother Earth.	2	0.761
26	Nature is my place to give thanks to Mother Earth.	2	0.648**
4	I can feel the universe flow through me.	2	0.640**
42	I build fellowship with those who travel with me in the wilderness.	2	0.576**
32	I am so full of gratitude.	1	0.502
39	I yearn to share the depth of the experience.	1	0.471
10	I feel my consciousness & unconsciousness come into balance.	1	0.448**
16	Every time I go into nature, I am closer to understanding the existence of life.	1	0.445**
11	I am inspired to be creative.	1	0.435
22	In nature I can feel that there is more than just this physical world.	0	0.358**
25	I fill with compassion and empathy.	0	0.257
40	I grow from listening to others with different beliefs than mine.	0	0.149**
6	I go back to a more primal state of being.	0	0.007
41	I am inspired by those around me when in the outdoors.	0	-0.054**
18	Nature gives me new questions and answers.	0	-0.106
34	The goal of life is living in agreement with nature.	-1	-0.133
29	The earth measures the depth of my own nature.	-1	-0.145*
38	I feel connected to humanity while in nature.	-1	-0.158*
2	I feel like nature is only place I can catch my breath.	-1	-0.191
33	Life without morals or ethics is meaningless.	-1	-0.407**
27	Truly loving nature is finding beauty everywhere.	-2	-0.411*
31	I can see evolution first hand in nature.	-2	-0.726
17	Staying physical active is essential for a spiritual life.	-2	-0.765
13	The true grueling and physically experience in nature brings understanding.	-2	-0.804**
7	Nothing can bring you peace but yourself.	-3	-0.903**
37	I see more equality of men and women in the outdoors.	-3	-0.920
19	The creator is most evident through wilderness.	-3	-1.113
20	Be silent to hear the whisper of God.	-3	-1.485
23	In storms and stressful situations I can hear God speak to me.	-4	-1.546
28	God is nothing but true love.	-4	-1.689
24	God speaks through those I'm with in the outdoors.	-4	-1.691
9	I feel like I can conquer the world.	-5	-1.875

| 36 | I laugh when someone mentions "Mother Earth." | -5 | -2.031 |

Statements that aligned with the theme of improvement and betterment (Table 6) indicated how an individual may go to nature to better one's self. For improvement and betterment, an outdoor leader may look to nature to teach, heal, and rejuvenate one's self. 06M57SNR commented how nature makes him feel more in touch with himself. Out in nature, he is active but also relaxed and stress-free at the same time. "I feel refreshed from simplicity of being out there" said 06M57SNR.

Table 6. Theme: Improvement and Betterment for the factor Sense of Transcending

#	Statement	Array position	z-score	
14	Nature heals, cheers, and gives strength to body and soul.	5	1.569	*
8	The pure magnitude of nature makes me feel humble.	5	1.465	
3	I feel like my true self when I am in nature.	4	1.460	
5	I feel nature transform me into a higher state of being	3	1.140	**
15	The more time I spend outdoors, the more relief my soul gets.	3	1.025	
32	I am so full of gratitude	1	0.502	
10	I feel my consciousness & unconsciousness come into balance.	1	0.448	**
16	Every time I go into nature, I am closer to understanding the existence of life.	1	0.445	**

Statements that aligned with the theme of connection (Table 7) indicated how individuals may feel connected to nature. "I feel more connected to the earth. I feel insignificant to the grandeur of nature. It puts perspective as our place as humans in nature. Humans are not separate from nature. I can see our place as humans in nature. I see how I am no better any other form of life. There is equality in lifeforms" says 06M57SNR.

Table 7. Theme: Connection for the factor Sense of Transcending

#	Statement	Array position	z-score	
35	Everything is connected to everything else.	4	1.417	**
30	Wilderness is a necessity.	4	1.225	
1	Nature reminds me to keep my attention in the here & now.	3	1.123	
4	I can feel the universe flow through me.	2	0.640	**

Sense of God/Higher Power and Fellowship. Another viewpoint that emerged was the sense of God/Higher Power and Fellowship (see Figure 3 and Table 8). This factor had seven defining sorts. All of these individuals identified as Christian. Sense of God/Higher Power and Fellowship consisted of six males and two females. There was an average age of 45.3 years old. This factor's outdoor leaders had the average of 22.1 years of work experience in the field, and an average of 15.7 days as their longest trip in the field. Through thematic analysis, two themes emerged: God/Higher Power and Fellowship.

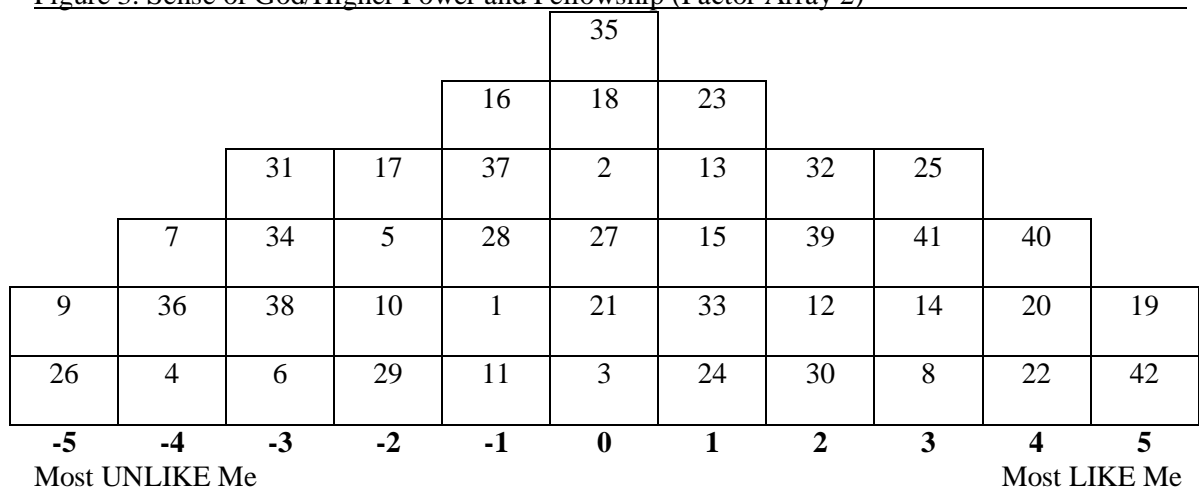Figure 3. Sense of God/Higher Power and Fellowship (Factor Array 2)

				35						
			16	18	23					
	31	17	37	2	13	32	25			
	7	34	5	28	27	15	39	41	40	
9	36	38	10	1	21	33	12	14	20	19
26	4	6	29	11	3	24	30	8	22	42
-5	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**

Most UNLIKE Me   Most LIKE Me

Table 8. Sense of God/Higher Power and Fellowship (Factor Array 2)

#	Statement	Array position	z-score
42	I build fellowship with those who travel with me in the wilderness.	5	1.774
19	The creator is most evident through wilderness.	5	1.330**
22	In nature I can feel that there is more than just this physical world.	4	1.329**
20	Be silent to hear the whisper of God.	4	1.232**
40	I grow from listening to others with different beliefs than mine.	4	1.130
8	The pure magnitude of nature makes me feel humble.	3	1.089
14	Nature heals, cheers, and gives strength to body and soul.	3	1.012
41	I am inspired by those around me when in the outdoors.	3	1.005
25	I fill with compassion and empathy.	3	0.940*
30	Wilderness is a necessity.	2	0.882
12	I feel insignificant compared to the nature, God, or Mother Earth.	2	0.879
39	I yearn to share the depth of the experience.	2	0.838

38

32	I am so full of gratitude.	2	0.804
24	God speaks through those I'm with in the outdoors.	1	0.731**
33	Life without morals or ethics is meaningless.	1	0.703
15	The more time I spend outdoors, the more relief my soul gets.	1	0.552
13	The true grueling and physically experience in nature brings understanding.	1	0.504**
23	In storms and stressful situations I can hear God speak to me.	1	0.420**
3	I feel like my true self when I am in nature.	0	0.370**
21	I learn that the forests, mountains, and desert canyons are holier than our churches.	0	0.221**
27	Truly loving nature is finding beauty everywhere.	0	0.208
2	I feel like nature is only place I can catch my breath.	0	0.075
18	Nature gives me new questions and answers.	0	0.017
35	Everything is connected to everything else.	0	-0.008*
11	I am inspired to be creative.	-1	-0.143
1	Nature reminds me to keep my attention in the here & now.	-1	-0.233**
28	God is nothing but true love.	-1	-0.359**
37	I see more equality of men and women in the outdoors.	-1	-0.539
16	Every time I go into nature, I am closer to understanding the existence of life.	-1	-0.696
29	The earth measures the depth of my own nature.	-2	-0.783
10	I feel my consciousness & unconsciousness come into balance.	-2	-0.810
5	I feel nature transforms me to a higher state of being.	-2	-0.840*
17	Staying physical active is essential for a spiritual life.	-2	-0.858
6	I go back to a more primal state of being.	-3	-0.864**
38	I feel connected to humanity while in nature.	-3	-1.109
34	The goal of life is living in agreement with nature.	-3	-1.168**
31	I can see evolution first hand in nature.	-3	-1.521**
4	I can feel the universe flow through me.	-4	-1.589
36	I laugh when someone mentions "Mother Earth."	-4	-1.589
7	Nothing can bring you peace but yourself.	-4	-1.594**
26	Nature is my place to give thanks to Mother Earth.	-5	-1.652
9	I feel like I can conquer the world.	-5	-1.690

Note. *p>.05 **p>.01

Statements that aligned with the theme of God/Higher Power (Table 9) indicated how

some individuals feel closer to God or a higher power when going into nature or God is evident.

It is easier to be closer to God as there are less distractions of humans and all of the technology

that consumes individuals' lives in civilization. "On the AT [Appalachian Trail], you can walk

for hours and not talk to anyone. This is when I feel like I can hear God the most" says

04M52Chr. 04M52Chr elaborates that the distractions in the social world seems to drown out what God is saying to him personally.

God is evident not only in what is not seen, but also what is seen. When stargazing, 04M52Chr sees the endless boundaries of the universe. He feels like this reminds him of the unlimited boundaries of God. God is represented in nature but is not limited to this physical world/universe.

Table 9. Theme: God/Higher Power for the factor Sense of God/Higher Power and Fellowship

#	Statement	Array position	z-score	
19	The creator is most evident through wilderness.	5	1.330	**
22	In nature I can feel that there is more than just this physical world.	4	1.329	**
20	Be silent to hear the whisper of God.	4	1.232	**
12	I feel insignificant compared to the nature, God, or Mother Earth.	2	0.879	
23	In storms and stressful situations I can hear God speak to me.	1	0.420	**

Note. *p>.05 **p>.01

Statements that aligned with the theme of fellowship (Table 10) indicated how there is fellowship amongst travel companions in the outdoors. Without the distractions of the social world, individuals have more freedom to express their thoughts. Nature brings forth conversations about faith and the questions of life. While some are not open to new points of view, many appreciate the trust and openness amongst their travel companions.

Table 10. Theme: Fellowship for the factor Sense of God/Higher Power and Fellowship

#	Statement	Array position	z-score
42	I build fellowship with those who travel with me in the wilderness.	5	1.774
40	I grow from listening to others with different beliefs than mine.	4	1.130
41	I am inspired by those around me when in the outdoors.	3	1.005
39	I yearn to share the depth of the experience.	2	0.838
24	God speaks through those I'm with in the outdoors.	1	0.731

Note. Even though none of these statements are statistically significant, the statements represent notable importance by array position.

Sense of Challenge. Another viewpoint that emerged was Sense of Challenge (see Figure 4 and Table 11) with eight defining sorts. There were five individuals that identified as spiritual but not religious, two Christians, and one Atheist. Sense of Challenge consisted of five males and three females. There was an average age of 29.3 years old. This factor's outdoor leaders had the average of seven years of work experience in the field, and an average of 20.5 days as their longest trip in the field. Through thematic analysis, two notable themes, challenge social norms and challenge self were identified.

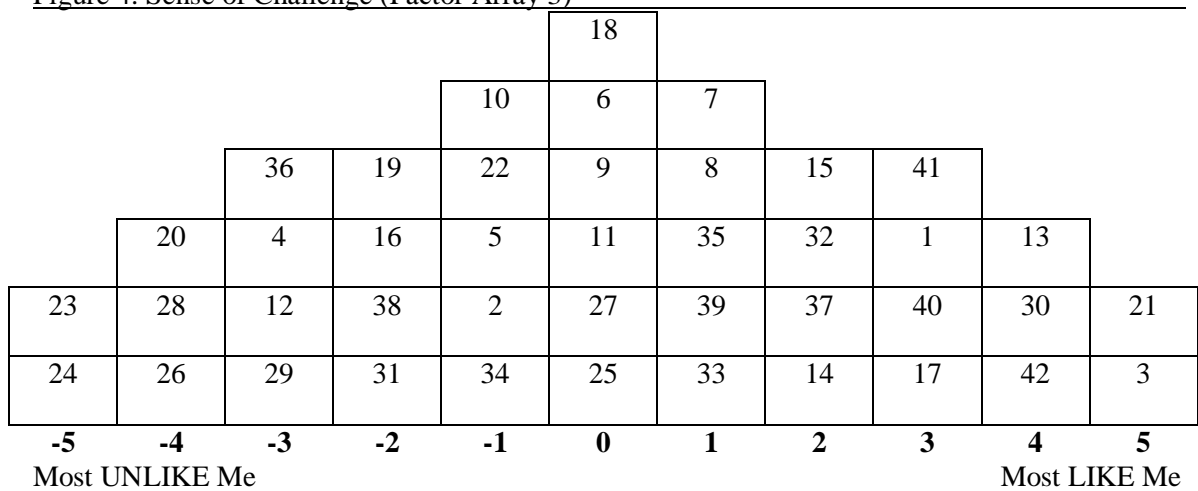Figure 4. Sense of Challenge (Factor Array 3)

-5	-4	-3	-2	-1	0	1	2	3	4	5
					18					
				10	6	7				
		36	19	22	9	8	15	41		
	20	4	16	5	11	35	32	1	13	
23	28	12	38	2	27	39	37	40	30	21
24	26	29	31	34	25	33	14	17	42	3
-5	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**

Most UNLIKE Me   Most LIKE Me

Table 11. Sense of Challenge (Factor Array 3)

#	Statement	Array position	z-score
3	I feel like my true self when I am in nature.	5	1.525
21	I learn that the forests, mountains, and desert canyons are holier than our churches.	5	1.438
42	I build fellowship with those who travel with me in the wilderness.	4	1.334
30	Wilderness is a necessity.	4	1.281
13	The true grueling and physically experience in nature brings understanding.	4	1.236**
17	Staying physical active is essential for a spiritual life.	3	1.151**
40	I grow from listening to others with different beliefs than mine.	3	1.099
1	Nature reminds me to keep my attention in the here & now.	3	1.079
41	I am inspired by those around me when in the outdoors.	3	0.905
14	Nature heals, cheers, and gives strength to body and soul.	2	0.902
37	I see more equality of men and women in the outdoors.	2	0.883**

32	I am so full of gratitude.	2	0.805
15	The more time I spend outdoors, the more relief my soul gets.	2	0.795
33	Life without morals or ethics is meaningless.	1	0.733
39	I yearn to share the depth of the experience.	1	0.702
35	Everything is connected to everything else.	1	0.617*
8	The pure magnitude of nature makes me feel humble.	1	0.579*
7	Nothing can bring you peace but yourself.	1	0.366**
25	I fill with compassion and empathy.	0	0.309
27	Truly loving nature is finding beauty everywhere.	0	0.167
11	I am inspired to be creative.	0	-0.031
9	I feel like I can conquer the world.	0	-0.063**
6	I go back to a more primal state of being.	0	-0.076
18	Nature gives me new questions and answers.	0	-0.149
34	The goal of life is living in agreement with nature.	-1	-0.181
2	I feel like nature is only place I can catch my breath.	-1	-0.194
5	I feel nature transforms me to a higher state of being.	-1	-0.281*
22	In nature I can feel that there is more than just this physical world.	-1	-0.458**
10	I feel my consciousness & unconsciousness come into balance.	-1	-0.578
31	I can see evolution first hand in nature.	-2	-0.597
38	I feel connected to humanity while in nature.	-2	-0.673
16	Every time I go into nature, I am closer to understanding the existence of life.	-2	-0.860
19	The creator is most evident through wilderness.	-2	-0.933
29	The earth measures the depth of my own nature.	-3	-1.017
12	I feel insignificant compared to the nature, God, or Mother Earth.	-3	-1.055*
4	I can feel the universe flow through me.	-3	-1.239
36	I laugh when someone mentions "Mother Earth."	-3	-1.242
26	Nature is my place to give thanks to Mother Earth.	-4	-1.412
28	God is nothing but true love.	-4	-1.474
20	Be silent to hear the whisper of God.	-4	-1.664
24	God speaks through those I'm with in the outdoors.	-5	-1.856
23	In storms and stressful situations I can hear God speak to me.	-5	-1.876

Note. *p>.05 **p>.01

Statements that aligned with the theme of challenge social norms (Table 12) indicated how being in the outdoors challenges many social norms. "When I am on an outdoor trip, I see the changes of more women in the outdoor field" said 28M22SNR. This was with both more women leaders and participants in outdoor recreation.

Another challenge for social norms was where to worship or commune. Communing in nature can give freedom outside a man-made church, temple, mosque, or cathedral. This is also the freedom to worship while alone. "I feel most spiritual while being alone and in an untainted setting. It is where I can connect to myself and the area around me" explains 28M22SNR.

Table 12. Theme: Challenge social norms for the factor Sense of Challenge

#	Statement	Array position	z-score	
21	I learn that the forest, mountains, and desert canyons are holier than our churches	5	1.438	
37	I see more equality of men and women in the outdoors	2	0.883	**
35	Everything is connected to everything else.	1	0.617	*

Note. *p>.05 **p>.01

Statements that aligned with the theme of challenge self (Table 13) indicated how there is the challenge of one's abilities and place in the world. While traveling through the outdoors on one's own physical effort, there is sense of understanding one's abilities and weaknesses. 28M22SNR explains that is crucial to know one's limitations and strengths. An outdoor leader needs to know how to depend on his/her strength. It is also important to know one's limitations, so not to create an emergency or situation because a weakness was in his/her blind spot. "Hiking a 14er, I feel how far I can push myself. With this I also feel how significant I am, but also the realization of how small I am in the world."

Table 13. Theme: Challenge self for the factor Sense of Challenge

#	Statement	Array position	z-score	
13	The true grueling and physical experience in nature brings understanding.	4	1.236	**
17	Staying physical active is essential for a spiritual life.	3	1.151	**
40	I grow from listening to others with different beliefs than mine.	3	1.099	
1	Nature reminds me to keep my attention in the here & now.	3	1.079	
14	Nature heals, cheers, and gives strength to body and soul.	2	0.902	
15	The more time I spend outdoors, the more relief my soul gets.	2	0.795	

Note. *p>.05 **p>.01

All three views of outdoor spirituality had expressed the importance of statement 30 "wilderness is a necessity." This can be viewed from multiple perspectives. 28M22SNR states "being outside and physically active is needed for everyone." Another view is the idea of being in the wilderness or nature is an escape from the material and social world. "It is a place to prioritize what is important in your life. This is where you can get away from people, politics, and the blurriness of the world" explains 04M52Chr. Both 04M52Chr and 06M57SNR agreed that wilderness reveals one's priorities and evaluates one's life. Wilderness also has the ability to re-create one's self. Lastly, wilderness is also a place to reconnect to nature, to learn basic survival, and the importance of open spaces and natural environment.

CHAPTER V

CONCLUSION, DISCUSSION, AND IMPLICATIONS

The purpose of this study was to investigate the perceptions of outdoor spirituality from outdoor leaders' point of view. This chapter will present a summary of the findings, conclusions, as well as a discussion of implications for future practice and research.

Summary of Findings

Subjective views regarding outdoor spirituality among outdoor leaders were captured through this Q-methodology study, and the use of spiritual intelligence provided the theoretical framework. Q-sorts consisting of 42 statements about outdoor spirituality, were completed by 30 outdoor leaders, and were analyzed with PQ Method software (Schmolck, 2015). The result of this analysis was a three-factor solution to be abductively interpreted as: Sense of Transcending, Sense of God/Higher Power and Fellowship, and Sense of Challenge. Amongst the viewpoints of outdoor spirituality, there was little overlap between views, except for Sense of Transcending and Sense of Challenge where there was a z-score correlation between views of .50, thus shared some similarities. Further, abduction was used to explore spirituality in the natural environment.

Sense of Transcending is the perception of how nature makes one's self better while feeling connected to nature. Further exploration of this view indicated that some outdoor leaders experience being a better self when in nature. Nature is a place to learn, heal, and rejuvenate. The outdoors is where some outdoor leaders connect with nature. This connection brings a sense of knowing one's place in the world. It should be noted that this view had the highest average for age and highest amount of days as their longest trip in the field.

Sense of God/Higher Power and Fellowship is the perspective of feeling closer to God and/or one's travel companions while in the outdoors. The interpretation of the data showed that some feel the presence of God while in nature. Some outdoor leaders saw more evidence of God in nature. Also, some outdoor leaders developed a fellowship with their travel companions during outdoor recreation experiences. While in nature, there is more freedom to discuss topics of faith and questions of life. It should be noteworthy that all of the outdoor leaders within this factor had identified as Christian. Religiosity could be the influence of putting faith in what one believes and in this case, focusing on God (Manghrani, 2011; Wigglesworth, 2012). It is unknown if these outdoor leaders' travel companions were also Christian.

Sense of Challenge is the perception of how nature breaks down social norms and self-constructed norms. For Sense of Challenge, some outdoor leaders challenge the social norm of worshiping in man-made structures. Nature provides the best setting for worship and commune. One may not be concerned with fitting into the norm (Zohar, 1997). Some outdoor leaders saw gender social barriers fade, they felt there was more equality for women and men while outside. Another aspect of Sense of Challenge was the notion how outdoor recreation experiences challenges one's strengths and limitations. Outdoor leaders test their physical limitations. This was a challenge to find one's place in the world. Sense of Challenge is notable for having the youngest group of sorts with the least amount of years as an outdoor professional and shortest amounts of days as their longest trip in the field.

It was noted that there was a correlation of .50 between Sense of Transcending and Sense of Challenge. Both viewpoints had similarity of statements and themes. Similarities included focus on the individual and a better self through understanding the inner self or testing one's limitations. It is notable that the view that focused on the physical self was the youngest in average age. For an outdoor leader, it is important to know one's strengths and limitations especially for developing leaders (Petzoldt & Ringholz, 1984). The view that focused on the inner self was the more mature in average age. As an outdoor leader matures in experience and age, not only is it important to know one's strengths and limitations, but there is a draw to strive towards Maslow's self-actualization (Martin et al., 2006; Priest & Gass, 2005).

Across all of the viewpoints of outdoor spirituality, statement 30 "wilderness is a necessity" was important. Wilderness is a place to be physically active and escape from civilization (Ibrahim & Cordes, 2002). It helps some outdoor leaders be conscious of what are their priorities (Wigglesworth, 2012). Wilderness is a place to reconnect with nature (Hutson, 2007). Wilderness can be experienced as a sacred place (Driver, Brown, & Peterson, 1991; Hutson, 2007). Outdoor leaders form an attachment to these sacred places (Hutson, 2007; Worster, 2005). This could be important due to outdoor leaders have chosen a career path that is dependent on wilderness and nature.

Conclusions

For the general topic of outdoor spirituality, this study may add to the literature. Outdoor spirituality can be a transcending experience for an individual (Bobilya et al., 2015; Driver, Brown, & Peterson, 1991; Marsh, 2007; Marsh & Bobilya, 2013). Results indicated the outdoor leader becomes a better person from their experiences in the outdoors. Nature can help an outdoor leader get more in touch with one's self (Petzoldt & Ringholz, 1984). There is a sense of learning, healing, and rejuvenation. Also an outdoor leader can connect to nature and find one's place in the world (Ashley, 2007; Bobilya et al., 2015; Driver, Brown, & Peterson, 1991).

It can be a way to experience God/Higher Power and have fellowship with travel companions (Bobilya et al., 2015; Driver et al., 1991; Marsh, 2007; Marsh & Bobilya, 2013). An outdoor leader can experience the presence of God without distractions of civilization. There is a personal connection to God just like Louisa May Alcott's account when walking to Walden Pond to visit Henry David Thoreau. "A very strange and solemn feeling come over me as I stood there with no sound but the rustle of the pines, no one near me, and the sun so glorious, as for me alone. It seemed as if I felt God as never did before" (Nichols, 2006, p. 178). Then there is the bond of fellowship that develops during outdoor recreation experiences. While the outdoors, social barriers can fade away while in nature. There is a freedom to be able to express thoughts about faith and the questions of life.

Lastly, it can be a way to challenge one's self and social norms (Elder, 1981; Manghrani, 2011; Nichols, 2006; Worster, 2005). For outdoors leaders there is an echo of John Muir's message of "I'd rather be in the mountains thinking of God, than in church thinking about the mountains" (Worster, 2005). Nature allows everyone to worship in the temples and cathedrals that were created by God. Also the outdoors is a place to challenges one's self. It is a place to understand one's abilities and limitations (Martin et al., 2006). The pure physical exertion tests one's knowledge about one's self. This is a constant refinement for some outdoor leaders (Martin et al., 2006).

Each of the three viewpoints had significant statements connected to some aspect of SQ identified by Manghrani (2011). The statements for Sense of Transcending were connected to self-awareness and spiritual exercise/health. Self-awareness is an individual's ability to know thyself and one's worldview (Manghrani, 2011; Wigglesworth, 2012). An example of a significant statement was #3 "I feel like my true self when I am in nature." Spiritual exercise/health is the daily of living a healthy life in a holistic manner (Manghrani, 2011; Wigglesworth, 2012; Zohar, 1997). For spiritual exercise/health, an example would be #14 "Nature heals, cheers, and gives me strength to body and soul." The Sense of God/Higher Power

and Fellowship statements related to religiosity and interpersonal relations/helping behavior. Religiosity is an individual's ability to have faith on what one believes, but respect the views of others so not to negate them (Manghrani, 2011; Wigglesworth, 2012). Religiosity also includes inspiration of transcendent oneness and connected to something divine (Isfahani & Nobakht, 2013; King, 2008; Wigglesworth, 2012). For religiosity, an example of a significant statement is #19 "The creator is most evident through wilderness." Interpersonal relations/helping behavior is an individual's ability to be compassionate, empathetic, and nonjudgement (Kaur et al, 2013; Manghrani, 2011; Wigglesworth, 2012; Zohar, 1997). This can also be one's willingness to help others without expecting anything in return (Wigglesworth, 2012). An example statement for interpersonal relations/helping behavior is #42 "I build fellowship with those who travel with me in the wilderness." The statements for Sense of Challenge were connected to spiritual exercise/health and interpersonal relations/helping behavior. For spiritual exercise/health, an example of a significant statement is #13 "The true grueling and physical experience in nature brings understanding." An example statement for interpersonal relations/helping behavior is #37 "I see more equality of men and women in the outdoors."

Outdoor spirituality is dynamic (Bobilya et al., 2015). Even though this study found three perceptions, there are numerous other perceptions (Bobilya et al., 2015; Marsh, 2007; Marsh & Bobilya, 2013; Post & Montgomery, 2016). For example, within this study, some of the younger outdoor leaders perceived outdoor spirituality as a way to challenge social norms and to challenges one's physical self, while the older and/or more experienced outdoor leaders perceived outdoor spirituality in a more introspective manner to learn, heal, and rejuvenate. However, some of the outdoor leaders in a pilot study perceived communing in nature brought peace and sense of belonging in nature (Post & Montgomery, 2016). According to Sanford (2007), some outdoor leaders had expressed the rush of adrenaline in extreme situations during an outdoor recreation activity was what brought them the closest to feeling the presents of a higher. Moreover, an outdoor leader's perceptions may vary from different outdoor recreation activities, settings,

purpose of the experience, and/or the individual's stage of live (Bobilya et al., 2015; Driver et al., 1991; Hutson, 2007; Sanford, 2007).

Implications for Practice

Outdoor spirituality could use more recognition as a component of an outdoor recreation experience. Outdoor recreation organizations could promote outdoor spirituality as a possible benefit of outdoor recreation (Driver et al, 1991). Outdoor recreation experiences could be marketed as a spiritual journey to help participants connect to a Higher Power, search for life's meaning, or understand a greater or ultimate reality while being in the outdoors (Ashley, 2007; Hutson, 2007; Ibrahim & Cordes, 2002).

Outdoor recreation organizations could develop training for their staff on how to incorporate outdoor spirituality into the programming of outdoor recreation experiences. This could be training on what is outdoor spirituality, examples of how it's experienced, and ways to plan, implement, and debrief outdoor spirituality experiences for participants.

Outdoor leaders can expand their vocabulary for what are outdoor spirituality experiences (Ashley, 2007; Bobilya et al., 2015; Marsh & Bobilya, 2013). Being able to communicate about different perspectives in relation to outdoor spirituality could help participants in their outdoor spirituality journey. With a better vocabulary, an outdoor leader could also be better prepared to explore his/her own spiritual experiences (Bobilya et al., 2015).

Outdoor leaders need to be aware that there are numerous perceptions about outdoor spirituality. The truth from one person can be different from another person's truth about outdoor spirituality. This study highlighted three insights into this phenomenon, even though there are numerous other perspective about outdoor spirituality. An outdoor leader should be aware that participants may have very difference perspectives (Bobilya et al., 2015).

Outdoor leaders can be the catalyst for sparking individuals' interest for nature and the benefits of nature such as outdoor spirituality (Bobilya et al., 2015). Outdoor leaders could read a passage about the beauty of nature, have participants sit alone for 30 minutes to up to 3 days all

by themselves for a solo experience, or debrief an intense moment as a spiritual learning experience (Bobilya et al., 2015; Kalisch, Bobilya, & Daniel, 2011). Any of these experiences should have guided questions that help develop a self-awareness of the participants' own worldviews and those of others (Wigglesworth, 2012). Outdoor leader could also help others through their challenges (Stringer & McAvoy, 1992). With SQ maturity, outdoor leaders could be better prepared to support their participants as they struggle through possible spiritual challenges (Wigglesworth, 2012).

Lastly, outdoor leaders might need to evaluate their comfort level about outdoor spirituality. If an outdoor leader is not comfortable, it would be beneficial to seek advice from another outdoor leader that is mature in knowledge and experience with outdoor spirituality. An outdoor leader who is mature in SQ might be seen as "exercising wisdom and compassion in relationship to other people, regardless of gender, creed, age, or ethnic origins, as well as reverence and respect for all forms of life" (Vaughan, 2002, p. 22).

Recommendations for Further Research

Further research for expanding knowledge about outdoor spirituality. Recommendations include:

1. Replication of this study with a focus on participants of outdoor recreation experiences. For outdoor recreation experiences that are guided, it may be important to get the perceptions of participants. This may help the outdoor leader to understand where their participants are coming from as well as how they may facilitate spiritual experiences for participants. Do participants have similar outdoor spiritual experiences as this study's outdoor leaders?

2. Exploration of possible transference of spiritual beliefs from outdoor leaders to their participants during outdoor recreation experiences. Sometimes participants, especially youth, may start to emulate the outdoor leader's actions and mannerism (Howell, 2008; Nabhan & Trimble, 1995; Paisley, Furman, Sibthorp, & Gookin, 2008; Sibthorp & Jostad,

2014; van Linden, 1998). The beliefs and attitudes can be transferred from the leader to participants (Northouse, 2013).

3. Exploration of influences for SQ maturity for outdoor leaders and participants (Wigglesworth, 2012). Are there possible correlations with the age, religious affiliation, amount of time in the outdoors, type of outdoor recreation activities, intensity of experiences in the outdoors, type of natural environment, and/or the presence of someone with a higher level of SQ maturity?

4. Replication of this study with the focus on different perspectives from other faiths. It would be interesting to investigate if there is variety of outdoor spirituality in different religious societies like Saudi Arabia and Japan? What are the views about outdoor spirituality for outdoor leaders who are Muslim or Shinto? While the United States has a large variety of religions and faiths, Saudi Arabia is primarily a mono religious society. In Japan, the society is primarily Shintoism and Zen Buddhism, and may contribute different perspectives about outdoor spirituality.

5. Exploration of possible barriers of why outdoor leaders would not incorporate outdoor spirituality as an intentional component of the outdoor recreation experiences that they lead.

6. Exploration of possible best practices for developing SQ for outdoor leaders and participants. Would this look like a mentoring process, overcoming challenging situations by one's self or together in a group, or possibly a particular debriefing process?

7. Exploration of possible ways that outdoor leaders define the concepts of nature, wilderness, and outdoor recreation. What meaning do these concepts have for outdoor leaders? The term wilderness has multiple meaning such as a place outside of civilization or such as Wilderness as a designated protected area. For outdoor leaders, what activities are within the concept of outdoor recreation? Are there specific activities or is it any activities that is outdoors?

Concluding Comments

  This study was not to specifically say this is what outdoors leaders believe or should believe about spirituality in the natural environment, but to explore and find new insight in the phenomenon of outdoor spirituality. This study has identified several ways outdoor leaders view spirituality in the natural environment. Many outdoor leaders may not be surprised by these results as they have experienced outdoor spirituality in different ways (Bobilya et al., 2015; Bolghan-Abadi et al., 2014; Driver et al., 1991; Marsh, 2007; Marsh & Bobilya, 2013). Some outdoor leaders are aware of these experiences (Bobilya et al., 2015) while some have not put much thought to it (Bobilya et al., 2015; Driver et al., 1991). Either way, outdoor spirituality is a personal experience (Bobilya et al., 2015; Driver et al., 1991; Hutson, 2007; Marsh, 2007; Marsh & Bobilya, 2013; Post & Montgomery, 2016).

  Through outdoor recreation and time spent in nature, outdoor leaders may experience outdoor spirituality, which may be deeply personal experiences. There is not a best way to pursue spirituality in the natural environment. This study has identified three perspectives about outdoor spirituality by outdoor leaders. Outdoor spirituality can be a Sense of Transcending, a Sense of God/Higher Power and Fellowship, or a Sense of Challenge.

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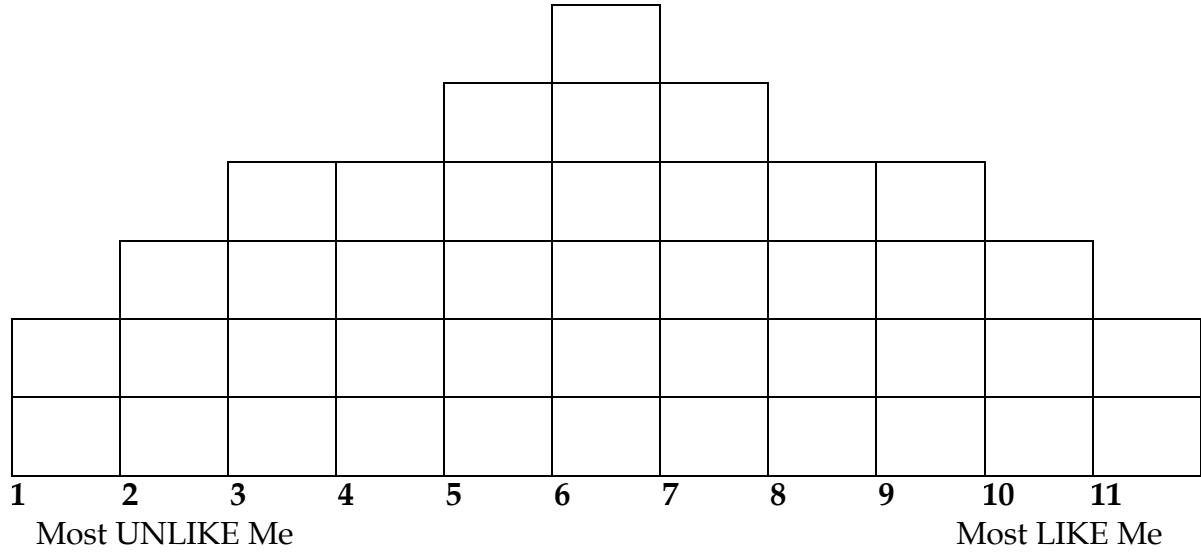
APPENDIX A

DATA RECORD SHEET AND DEMOGRAPHIC SURVEY

Data Record Sheet and Demographic Survey

Please record the numbers on the cards to the following chart.

WHAT ARE YOUR EXPERIENCES OF NATURE?

1	2	3	4	5	6	7	8	9	10	11

Most UNLIKE Me   Most LIKE Me

Please answer the following demographic questions.

Age: _____

Sex: Male   Female   Other

How many days was the longest outdoor trip I've taken? _____

Years as an outdoor leader: _____

Type of organization I work for:

University   For-profit   Non-profit   Religious   Gov't

Other: _____

Religious Affiliation:

Christian   Jewish   Islamic   Hindu   Buddhist   Atheist

Spiritual but not religious   Other: _____

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

Institutional Review Board Approval Letter

Oklahoma State University Institutional Review Board

Date:	Monday, May 09, 2016
IRB Application No	ED1694
Proposal Title:	Perceptions of outdoor leaders towards their experiences of spirituality in nature: A Q-method inquiry
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved   Protocol Expires: 5/8/2019

Principal
Investigator(s):

Jay Post	Melissa Zahl
180 Colvin Center	180 CRC
Stillwater, OK 74078	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☐ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Scott Hall (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

Hugh Crethar, Chair
Institutional Review Board

Attachment A

Research Study

Outdoor Leaders

2016

Our research team is investigating the perceptions of outdoor leaders about outdoor spirituality. We would like to invite you to participate in our study which will require approximately 40 minutes of your time. You will be asked to read several statements and sort them according to how they reflect your opinions.

To Sign Up for the Study contact:

Jay Post: jay.post@okstate.edu; 405-627-9473

Consistent with previous research in this area, we will request your permission to find out descriptors of demographic information (e.g. age, sex, years as an outdoor leader, etc.). No names will be given or used in any way. The information you submit can only be accessed by our research team and will remain private. All data collected in this study will remain strictly confidential and only group results will be reported. Risks associated with participating in this study are minimal.

Questions?

Dr. Melissa Zahl: melissa.zahl@okstate.edu; 405-744-1811

Information about study

Project Title: Perceptions of Outdoor Leaders toward their Experiences of Spirituality in Nature

Investigators: Jay Post M.Ed.: jay.post@okstate.edu: 405-627-9473
Melissa Zahl, Ph.D.: melissa.zahl@okstate.edu; 405-744-1811

Purpose: The purpose of this study is to investigate the perspective of outdoor leaders about outdoor spirituality.

Procedures: You will be asked to complete a Q-sort which involves reading several statements and sorting them into categories based on the extent to which the statements reflect your opinions. You will then be asked to record your results on a Record Sheet and to complete a short survey that has demographic questions about you. The session should last about 40 minutes. If you choose to provide a first name or code name and phone number, you may be called to discuss study results from your perspective. The call will last about ten minutes.

Risks of Participation:

There are no known risks associated with this project which are greater than those ordinarily encountered in daily life.

Benefits of Participation:

There are no direct benefits from participation in this study. However, you may discover insight into your own views about outdoor spirituality. By participating in this interview, you could be aiding in the improvement of programming for justification of outdoor spirituality as a benefit for outdoor experiences. If you are interested, we will send you a copy of the results of the study when it is complete.

Confidentiality:

You are not asked to provide a signed copy of this form so that no names are collected from you, thereby reducing your risk in participation. Please keep a copy. Your responses to both the sort and the survey are confidential. No names or other identifying information will be required and only aggregate data will be reported. The data will be securely stored in a locked file cabinet in one researcher's office, then electronically entered, then paper copies will be destroyed. Only the researchers will have access to the information that is stored electronically without any identifying information and it will be destroyed five years from completion of the study.

The OSU IRB has the authority to inspect records and data files to assure compliance with approved procedures.

Participant Rights:

You understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time, without penalty.

Contacts: You may contact Jay Post, 180 Colvin Recreation Center, Oklahoma State University, Stillwater, OK 74078, 405-627-9473; jay.post@okstate.edu if you have questions or concerns.
If you have questions about your rights as a research volunteer, you may contact Oklahoma State Institutional Review Board (IRB), 223 Scott Hall, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu

Proceeding with sorting implies consent.
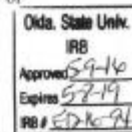
Okla. State Univ.
IRB
Approved 5-9-16
Expires 5-8-19
IRB # ED-16-74

Post Sort Telephone Interview Script

Someone at this number with a code name or first name of _____ participated in a research project sorting statements about spirituality in the natural environment. May I talk to him/her?

Thank you for agreeing to participate in this study and for consenting to a follow up interview. This interview should only take about ten minutes, is this a good time for you?

One of the things that the analyzed results of the study has shown is that people who sorted like you _____ .

What do you think of this?

Repeat as necessary.

Thank you again for your participation!

Bye!

APPENDIX C

RESEARCHER'S SCRIPT: DIRECTIONS FOR SORTING Q STATEMENTS

Researcher's Script: Directions for Sorting Q Statements

Thank you for agreeing to participate in this study. Please make sure you have the materials in front of you. You should have a Form Board and an envelope containing 42 cards, each with a statement printed on it describing ideas about nature. You will need a pencil later.

Step 1: Please read through the statements and sort them into three (3) piles according to the question: "What are your experiences while in nature?"

The pile on your right are those statements that are most like what you think about the question and the pile on your left are those statements that are most unlike what you think about the question. Put any cards that you don't have strong feelings about in a middle pile.

Step 2: Now that you have three piles of cards, start with the pile to your right, the "most like" pile and select the two (2) cards from this pile that are most like how you would response to the question and place them in the two (2) spaces at the far right of the Form Board in front of you in column 11. The order of the cards within the column-that is, the vertical positioning of the cards-does not matter.

Step 3: Next, from the pile to your left, the "most unlike" pile, select the two (2) cards that are most unlike how you would response to the question and place them in the two (2) spaces at the far left of the Form Board in front of you in column 1.

Step 4: Now, go back to the "most like" pile on your right and select the three (3) cards from those remaining in your most like pile and place them into the three (3) open spaces in column 10.

Step 5: Now, go back to the "most unlike" pile on your right and select the three (3) cards from those remaining in your most unlike pile and place them into the three (3) open spaces in column 2.

Step 6: Working back and forth, continue placing cards onto the Form Board until all of the cards have been placed into all of the spaces.

Step 7: Once you have placed all the cards on the Form Board, feel free to rearrange the cards until the arrangement best represents your opinions.

Step 8: Record the number of the statement on the Record Sheet.

Finally, please complete the survey printed on the back of the Record Sheet and add any comments.

Thank you for your participation!

APPENDIX D

POST SORT TELEPHONE INTERVIEW SCRIPT

Post Sort Telephone Interview Script

Someone at this number with a code name or first name of ____ participated in a research project sorting statements about your views of spirituality while in nature. May I talk to him/her?

Thank you for agreeing to participate in this study and for consenting to a follow up interview. This interview should only take about ten minutes, is this a good time for you?

One of the things that the analyzed results of the study has shown is that people who sorted like you

_____.

What do you think of this?

Repeat as necessary.

Thank you again for your participation!

Bye!

VITA

Jay D. Post

Candidate for the Degree of
Doctor of Philosophy

Thesis: PERSEPTIONS OF OUTDOOR LEADERS TOWARDS THEIR
EXPERIENCES OF SPIRITUALITY IN NATURE: A Q-METHODOLOGY
INQUIRY

Major Field: Health, Leisure, and Human Performance

Biographical:

Education:
Completed the requirements for the Doctor of Philosophy in Health, Leisure,
and Human Performance at Oklahoma State University, Stillwater, Oklahoma in
December 2016.

Completed the requirements for the Master of Education in Applied Behavioral
Studies at Oklahoma City University, Oklahoma City, Oklahoma in 2010.

Completed the requirements for the Bachelor of Science in Leisure Studies at
Oklahoma State University, Stillwater, Oklahoma in 2003.

Experience:
Graduate Teaching Assistant: Oklahoma State University   2013-Present
Adjunct Professor: University of Central Oklahoma   2010-Present
Owner & Guide: Two Eagles Adventures LLC   2007-2010
Outdoor Adventure Coordinator: Oklahoma City University   2007-2010
Operations Manager - Outdoor Recreation: Fort Lewis   2005-2006
Outdoor Recreation NAF Management Trainee: Fort Carson   2005
Guest Services & Summer Recreation: Angel Fire Resort   2003-2004
Intern: Adventure Programs & Education: Fort Carson   Summer 2003
Trip Leader/Kayak Instructor/Rental: Oklahoma State University 2001-2003
Summer Kids Counselor: Stillwater Parks, Events, and Rec   Summer 2002
Ranger: Philmont Scout Ranch   Summer 2001
Lifeguard: Greens Country Club, Oklahoma Pool Management   Summer 2000
Backcountry Trading Post Manager: Philmont Scout Ranch   Summer 1999

Professional Memberships:
National Recreation and Parks Association   2001-2006, 2013-16
Wilderness Education Association   2002-2005, 2013-16
Wilderness Education Association Japan   2015
Association of Outdoor Recreation and Education   2005-2007, 2014-16