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The Nature of Peak Experience in Wilderness

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Nature of Peak Experience in Wilderness

Abstract

This study sought to identify the distinctive elements of wilderness settings that

contribute to triggering peak experiences. Thirty-nine participants who had visited

wilderness areas were recruited using a voluntary wilderness registration system operated

by the Victorian National Parks Service, Australia. Using a postal survey participants

were asked to provide a written response to an open-ended question requesting them to

describe, in their own words, a peak experience in wilderness. A conventional approach

to qualitative content analysis of the participants' descriptions revealed the aesthetic

qualities of the wilderness setting and being away from the pressures, people,

distractions, and concerns of the human-made world were key elements in their peak

experiences. In order to gain an understanding of this phenomenon the concept and

theory of restorative environments was applied to the participants' experiences. This

analysis suggested that wilderness settings provide a mix of aesthetic pleasure and

renewal that can lead to a triggering of peak experiences which provides the basis for

individual spiritual expression.

Key Words: peak experience, wilderness, restoration, aesthetic pleasure, spirituality.

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## Introduction

A key contribution to psychology's understanding of positive experiences and well-being has been Abraham Maslow's (1959; 1962; 1964; 1968) concept of peak experience. Maslow (1964, p. 32) notes "When we are well and healthy and adequately fulfilling the concept 'Human Being' then experiences of transcendence should in principle be commonplace". Maslow (1968, pp. 71-96) described peak experiences as revelations or mystical illuminations that are generally short in duration and usually involve both emotion and cognition. They are moments of highest happiness and fulfillment, and generally carry with them some important meaning and/or insight for the individual.

Maslow's (1964) investigations into the peak experience phenomenon revealed that particular settings and activities acted as potent triggers, some of these included solitude, prayer, meditation, deep relaxation, physical accomplishment, and being in nature (particularly water, wild animals, sunsets, and mountains). A number of scholars have sought to understand potential triggers in more detail by studying peak experiences in particular settings and through particular activities; these have included sport (Ravizza, 1977), psychotherapy (Klavetter & Mogar, 1967), wild animals (DeMares & Krycka, 1998), appreciating music and visual art (Panzarella, 1980), and artistic pursuits (Yeagle, Privette, & Dunham, 1989). While it has long been recognized that nature is a common trigger for peak experiences (Davis, Lockwood, & Wright, 1991; Maslow, 1968; Wuthnow, 1978), it has yet to be determined in any satisfactory way what it is about nature, in this case wild nature or wilderness that trigger peak moments. The purpose of this inquiry is to extend our understanding of peak experiences by defining and

identifying the distinctive perceptual and physical elements of wilderness settings that trigger peak experiences.

#### Wilderness

Wilderness is a Western concept applied to large areas of uninhabited land containing native plant and animal communities relatively unaltered or unaffected by human society. Wilderness areas are generally remote, do not contain permanent human-made objects or structures, and do not allow the use of mechanised forms of transport such as motor vehicles and powerboats.

Now that global warming, loss of habitat, and deforestation poses a significant threat to the ecological health of the planet, the world's remaining wild environments have become important symbols of human survival. However, this reverential regard for wilderness is a recent phenomenon in the history of human civilization. Prior to the 20<sup>th</sup> century wilderness was commonly viewed with suspicion and terror, "as something alien to man – an insecure and uncomfortable environment against which civilization had waged an unceasing struggle" (Nash, 1967, p. 3).

Nevertheless, a minority of religious ascetics, philosophers, and artists throughout the ages have found spiritual succor in wild environments (Bratton, 1986; Scott, 1974). However, it was not until the 18<sup>th</sup> and 19<sup>th</sup> centuries that Western artists began to popularize the spiritual, restorative, health giving benefits of natural settings. The backdrop of this emerging shift in cultural values was the industrial revolution, which heralded the unprecedented growth of cities, pollution, poverty, and de-humanizing labor. Poets such as William Wordsworth, Samuel Taylor Coleridege, and John Keats

were repelled by the grime and inequality of urban environments. To counter these radical changes their writing came to celebrate the simple life, for beauty, wholesomeness, and happiness that most surely came from living close to nature; a sentiment most eloquently expressed at the time in Henry David Thoreau's *Walden* (Thoreau, 1854).

As wild environments began to attract popular appeal as an antidote to the ills of industrialization, political movements began to spring up in Australia, Canada, the United Kingdom, the United States, and Western Europe with the aim of ensuring the conservation and protection of landscapes that had remained relatively unaltered and unaffected by modern civilization. The National Parks Movement as it became known led to the designation of the world's first protected areas, to be used by the public for spiritual inspiration, solitude, and the maintenance of physical health and wellbeing. From a political perspective not only did the protection and conservation of pristine natural environments provide a vital public recreation resource, they also became a symbol of national pride and cultural superiority (Nash, 1967).

# The Psychological Benefits of Natural Settings

The psychological benefits of spending time in natural settings are now well documented, they emphasize restoration (Hartig, Mang, & Evans, 1991; Kaplan & Kaplan, 1989; Ulrich, Simons & Losito et al., 1991), flow experiences (MacAloon & Csikszentmihalyi, 1974; Mitchell, 1985), education (Miles & Priest, 1990), personal growth (Kaplan & Talbot, 1983; Levine, 1994; Young & Crandell, 1984), self-sufficiency, independence (Kaplan & Talbot, 1983), creativity, and inspiration (Fredrickson & Anderson, 1999; McDonald, 1991; Scott, 1974). Moreover, research

indicates that natural settings are a common trigger for transcendent experiences, such as ecstasy, mystical experience, and peak experience (Davis et al., 1991; Greeley, 1974; Hood, 1977; Keutzer, 1978; Laski, 1961; Wuthnow, 1978; Williams & Harvey, 2001).

In a similar vein researchers (Fredrickson & Anderson, 1999; Heintzman, 2003; Stringer & McAvoy, 1992; McDonald, 1991) have found that wilderness is conducive to spiritual expression. We take our definition of spirituality from Elkins, Hedstrom, Hughes, Leaf, and Saunders (1988) who provide a humanistic-phenomenological perspective. Elkins et al. outline a number of components of spirituality including *the transcendent dimension, meaning and purpose in life* and *sacredness of life* that have particular relevance to this inquiry. The transcendent dimension refers to a belief and a connection with an "unseen world" and is said to occur through peak experiences (Elkins et al., 1998, p. 10). Spirituality is an expression of the need for meaning which imbues life with purpose, and a belief that all life is sacred - commonly expressed in feelings of awe, reverence, and wonder (Elkins et al., 1998, p. 11). Figure 1 overleaf, adapted from Fredrickson and Anderson (1999, p. 24), provides a conceptual illustration of the relationship between some of these components.

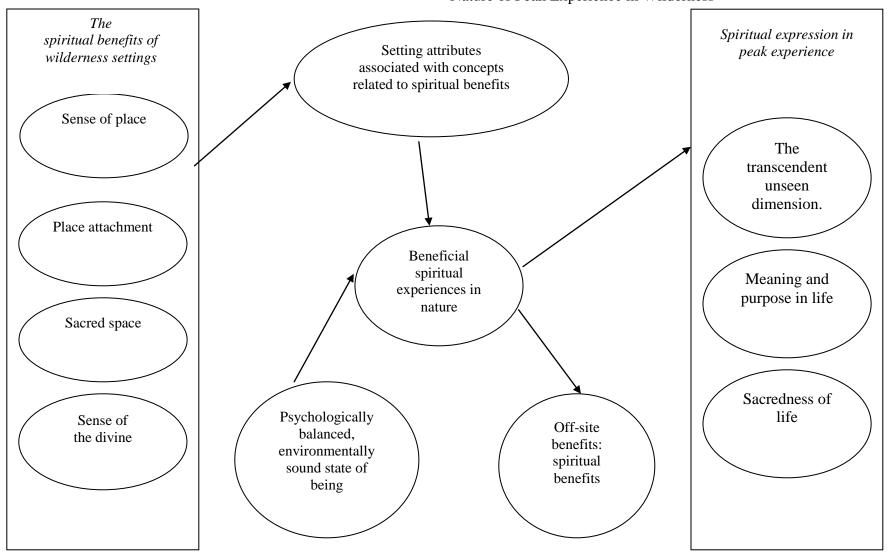


Figure 1. Relationship between wilderness setting and spiritual benefits. Adapted from Fredrickson and Anderson (1999, p. 24).

## Methodology

## **Participants**

Participants for this inquiry were recruited using a voluntary wilderness registration system operated by the Victorian National Park Service, Australia. The registration system is designed to collect information from park users for management purposes; this information includes name, address, size of party, destination, and expected date of return. One hundred and sixty five questionnaires were mailed out to visitors of three Victorian National Parks containing wilderness areas during the months of May and June 1998. They were The Little Desert National Park, Croajingolong National Park, and Wilson's Promontory National Park.

Thirty nine questionnaires were completed and returned, a response rate of 23%. The participants included 11 females and 28 males with a mean age of forty six years. Ages ranged from 17 to 70. Thirty of the respondents had completed a university degree and another three had completed some form of post high school education.

### Questionnaire

Participants were asked to provide a written response to an open-ended question asking them to recall a peak experience in wilderness.

Think of the most wonderful experience you have had in a wilderness area, the happiest moment, an ecstatic moment, a moment of rapture, a natural high. Try to express how you felt at this

moment. Don't rush your answer, if you can't think of anything right away, just relax and try to remember some of the wonderful times you have had in a wilderness area. When you have thought of something please describe it in as much detail as possible in the space below. In your answer you may want to write about how you felt, what you were thinking, doing, what the experience means to you, and provide a description of the landscape where the experience took place.

The open-ended question was adapted from Maslow's (1964, p. 67) instructions to participants in his studies on peak-experience, and Williams and Harvey's (2001, pp. 251-252) study on transcendent experience in forests. Written responses varied in length from 260 to 1100 words. Participants were also asked to provide some demographic information including gender, age, and education.

### **Analysis**

The written responses were analyzed using a "conventional" approach to qualitative content analysis (Hsieh & Shannon, 2005, pp. 1279-1281). Qualitative content analysis is defined as "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes and patterns" (Hsieh & Shannon, 2005, p. 1278). The aim of the analysis was to develop a number of inductive themes that broadly represented the participants' peak experiences in wilderness.

As the majority of the participants submitted their experiences in handwriting, the first step in the analytic process was to type them up in order to facilitate readability. The responses were read and then re-read a number of times in order to gain an understanding of their experiences as a whole, as one would read a novel. Each of the responses was then read with the aim of highlighting exact words, phrases, or ideas that captured units of information that were meaningful in the participant's experiences. Notes were made of these impressions and thoughts in the margins of the responses. Labels for codes then began to emerge that came from both the text and the analysis. This then formed the initial coding scheme. Once the coding of all of the responses was complete, the codes were sorted into categories based on how the codes were related and linked. Definitions were then developed for each of the categories (which we subsequently refer to as themes). The outcome was the production of seven core themes.

In order to ensure a level of reliability in the content analysis process, inter-coder agreement was sought. Inter-coder reliability is a procedure used to check the extent to which an independent judge agrees or disagrees with the way in which the researcher's codes and themes represent the participants' experiences (Lombard, Snyder-Duch, & Bracken, 2002). The typed responses containing highlighted words and sections, our initial thoughts, impressions, and analysis, as well as our coded items and final themes, were passed over to an academic colleague experienced in qualitative research methods. The colleague acted as an independent judge by examining the materials produced in

order to provide an evaluation of the analysis process. The outcome was general agreement with our analysis and final representations.

## Participants' Peak Experiences in Wilderness

Seven core themes emerged from the participants' peak experiences, which are presented in Table 1 overleaf. Each of the core themes is briefly described, as they emerged from the participants' descriptions. The table also includes 2 further columns, one presenting a count of the number of participants who experienced that particular theme and another identifying the theme's relationship to the three components of spirituality defined by Elkins et al. (1988, pp. 10-11) – the transcendent unseen dimension, meaning and purpose in life, and sacredness of life. For the purpose of analysis we have presented each theme separately, however in the participant's experiences they are each closely related to one another.

**Table 1. Content Analyzed Themes.** 

Theme	No. of	Description of Theme	Spiritual expression
	Participants		
1.Aesthetic	15	One's focus of attention was	Sacredness of life
Qualities		absorbed in the aesthetic qualities	
		of the wilderness setting.	
2. Being away	15	Escape from the pressures, people,	Sacredness of life
		distractions, and concerns of the	
		human-made world.	
3.Meaningful	13	The experience was significant to	Meaning and purpose in
Experience		the individual's life.	life
4. Number of Peak	12	The peak experience recounted was	Sacredness of life and
Experiences		only one of a number of positive	the transcendent unseen
		and profound moments	dimension
		experienced in a wilderness setting.	
5.Oneness-	10	Feeling a connection or belonging	The transcendent
Connectedness		to wilderness, a feeling that was	unseen dimension
		described using mystical language.	
6.Overcoming	9	A sense of overcoming limitations;	The transcendent
Limitations		a rush of energy, overcoming pain,	unseen dimension
		renewing depleted energy	
		resources (Williams & Harvey,	
		2001).	
7.Heightened	9	A deeper understanding of	The transcendent
Awareness		world/self/life occurred during or	unseen dimension
		shortly after the experience	
		(Williams, 1998).	

1. Aesthetic Quality: One's focus of attention was absorbed in the aesthetic qualities of the wilderness setting.

The most common theme to emerge from the participants' descriptions of their peak experiences was the aesthetic qualities of the wilderness setting. Wilderness settings dwarf human beings by their sheer size, age, ecological complexity, and uniqueness. The most commonly cited objects of attention at the time of the participants' peak experiences were sunlight (particularly late afternoon sunsets), forests, mountains, wild animals, and valleys.

Watching the sun set I was alone watching the most beautiful shades of mauve and pink on the clouds near the acropolis, I felt a sense of awe. (Participant, 5)

As we skied up to the head of the glacier I remember peering over the very edge and saw this other magnificent glacier spill down into the adjoining valley. It was such an incredible sight, particularly for someone who had never seen mountains on this scale before. My first reaction upon seeing this sight was to start laughing; it just seemed so unreal, like I was on another planet. There was no other way to respond, it was such an amazing feeling. (Participant 2)

My most magical experience was whilst sea kayaking in Glacier Bay in Alaska. There were three of us from Tasmania and I think we all experienced a great high at the same time. The fiord was dead calm - like a mirror - wisps of mist around the peaks which rose to 15,000ft from native forest (Boreal forest) to sea level, glaciers feeding into the bay and ice bergs bobbing around in the

water. All this was completely different and in extreme contrast to anything before that we had experienced. Suddenly, and this is what produced our peak experience, was a Hump Back whale "blowing" very close to us. The surroundings were idyllic the whole surface beside us and the extreme calm of the whole experience was almost beyond description. It was the sort of experience we had travelled 8000 km to hopefully see. (Participant 16).

2. Escape. Escape from the pressures, people, distractions, and concerns of the humanmade world.

In recounting their peak experiences the participants frequently referred to the contrast between wilderness settings and the human-made world. The most commonly cited qualities included tranquility (silence, the gentle sounds of nature, lack of human activity), the absence of time constraints and crowds (affording a level of freedom not possible in a human-made environment), the opportunity for solitude, reflection and contemplation, observing subtle shifts in the weather, and the sighting of wild animals in their native habitat.

I was sitting relaxed in a camp in the West McDonnell Ranges with no intrusion from other people, with convoluted gums nearby and convoluted rock strata pleasing the eye in the middle distance. (Participant, 14)

The beauty of the wildflowers and the thought of how different this is to ordinary life in the crowded asphalt/concrete streets of the city. (Participant, 22)

The weather was perfect. It was peaceful, calm, no man made intrusion (except our kayaks), other wildlife around no other people and an unexpected visitation by three whales. (Participant 16)

Far from the madding crowd, enjoying the sounds of silence. Suddenly no newspapers, radios, or TV - what joy. (Participant, 21)

3. Meaningful Experience: The experience was significant to the individual's life.

The participants noted that their peak experiences were highly valued and would be important to them in the future. Their experiences contained important insights and/or elicited extraordinary emotions rarely experienced in normal day-to-day life.

It was really powerful, for the first time in my life I could truly understand what had been happening in my life. I think it was the solitude that enabled this, I had been on my own for 4 days and it gave me time to properly think on my recent difficulties, in this case divorce. And then in that one moment I saw in nature the struggle to survive and how difficult it was. It was a validation of my own difficulties and in that came a sense of joy for the first time in a very long time. (Participant 19)

I always enjoy the mountains when I'm in them but this time it was different. You so rarely get to feel that connection to an energy source. I could feel it in the trees, the rocks, the birds, and the ridgeline I could see off in the distance, it was exhilarating. I felt I could harness that energy and take it with me wherever I go. (Participant 23)

4. Number of Peak Experiences: The peak experience recounted was only one of a number of positive and profound moments experienced in a wilderness setting.

A number of the participants indicated they had experienced other peak moments in a wilderness setting before. These extraordinary experiences, the opportunity to spend time with friends (the positive social dynamics), and the love of wild nature were the most commonly cited reasons for regularly visiting wilderness areas.

I have revisited this place and still found myself in awe of the surroundings. (Participant 39)

I had a similar experience a few years ago in Southwest Tasmania while trekking with some close friends. Whenever I recall this trip, or I look at photographs, it's always with that experience in mind. I don't think it is something that you can make happen it just comes of its own accord, all of the elements need to be in place and that doesn't happen very often. (Participant 35)

5. Oneness-Connectedness: Feeling a connection or belonging to wilderness, a feeling that was described using mystical language.

As a part of their peak experiences the participants described feelings of merging with or being at one with the wilderness, world, or universe. This feeling was often described using mystical language.

It was a deep sense of connectedness, of heightened awareness, of real relaxation, of a slowed passage of time. (Participant 25)

It was like a sense of fullness, but also one of lightness. I felt that I was an integral part of the landscape, and that the natural beauty around me was reaching out and absorbing me. (Participant, 11)

I could truly see for the first time, I was blessed to be surrounded by such perfect beauty, it was right and I made sense in relation to it. (Participant, 34)

For a fleeting moment you are at one with the earth that is as hostile as Jupiter yet at the same time you are able to imaginatively explore, empathise with, enter into, and truly understand. (Participant 31)

6. Overcoming Limitations: A sense of overcoming limitations; a rush of energy, overcoming pain, renewing depleted energy resources (Williams & Harvey, 2001).

Travel in wilderness areas requires a high degree of self-sufficiency and motivation; food, water and shelter must be carried, any form of travel relies on human power and the natural elements and remoteness always pose a degree of risk. Together these elements represent a significant physical and mental challenge. Negotiating and overcoming these challenges created a powerful sense of achievement for the participants.

## Nature of Peak Experience in Wilderness

All our thoughts of impending gloom vanished at the sight of this beautiful bird in the middle of the snowy bluff wilderness. (Participant 9)

I shared the summit with a group of close friends, 360 degree vista of layer upon layer purples and blues, a wonderful sense of achievement. (Participant, 10)

The feelings of relaxation, exhilaration, and pleasure on sitting quietly at the end of the final day of a first time solo overnight walk, no one else around save some birds around the waterhole. (Participant, 32)

7. Heightened Awareness: A deeper understanding of world/self/life occurred during or shortly after the experience (Williams, 1998).

In the participants' peak experiences, elements of world, self, and life were illuminated leading to greater self-awareness and a deeper understanding of the fundamental realities of the human condition and/or a change in perspective, philosophy or worldview. As the participants adjusted to their new surroundings they became more sensitive to the dynamics of the physical world, which prompted greater sensitivity to the existential elements of life.

I really feel that going bush, and the fact I can be completely alone, allows me to become one with myself. (Participant, 33)

I had the sensation of sticking my head above the water I'd been living in entirely up to that point, and seeing a new world. (Participant 6)

They stood like sentries (the trees) amongst the slopes and rocks defiant of time, fire and flood. This area was very dry and brown due to drought, yet beautiful and majestic...I thought to myself later how old this area must be and how short our lives are, that our time is limited, and that even these trees and rocks will eventually disappear. (Participant 7)

#### Discussion

In his study of aesthetic peak experiences (peak experiences triggered by the appreciation of music and visual art) Panzarella (1980) identified a number of phenomenological factors that emerged from his participants' experiences, the most common of which was *renewal*. Panzarella's concept of renewal is related to the broader concept of restoration, which we will now turn to in order to provide a framework for understanding the perceptual and physical elements of wilderness and the role they played in triggering peak experiences for the participants in this inquiry.

Kaplan and Kaplan's (1989, pp. 177-200) theory of *restorative environments* is founded on the problem of mental fatigue, which is based on what William James (1891) described as *voluntary* and *involuntary* forms of attention. The key distinction between these two types of attention is the concept of inhibition. Kaplan and Kaplan (1989) explain:

As (William) James envisioned it, the way one maintains one's focus on a particular thought is not by strengthening that particular mental activity but by inhibiting everything else. From this perspective, the greatest threat to a given focus of attention is competition from other stimuli or ideas that can be the basis of a different focus. Inhibiting all such potential distractions protects and hence sustains the original focus. In focusing, or directing attention, a great deal of effort is devoted to avoiding distractions or as James put it, "to resisting the attractions of more potent stimuli". (pp. 179-180)

Urban environments place continual demands on voluntary or directed attention due to traffic, crowds, and noise etc; continual effort is expended to gate out extraneous stimuli in order to concentrate on the task(s) at hand. In urban environments inhibitory control is eventually exhausted leading to mental fatigue, of which sleep is the most commonly associated remedy. Nevertheless, providing rest for directed attention during waking hours is just as important for effective restoration as sleep is (Kaplan & Kaplan, 1989, p. 182). This, Kaplan and Kaplan argue, is best achieved by seeking out settings that make minimal demands on directed attention.

Restorative environments must satisfy four main elements (Kaplan and Kaplan, 1989, pp. 182-186). They are (1) being away, (2) extent, (3) fascination, and (4) compatibility. Being away occurs through exposure to activities and environments that are different from those that we attend to on a day-to-day basis. Extent is described as a feeling of otherworldliness and refers to the ability of a particular setting to provide greater scope either physically or perceptually. To achieve the feeling of extent it is

necessary to have interrelatedness of the immediately perceived elements so that they constitute a portion of some larger whole; this is required if they are to provide more than just a momentary diversion or distraction (Kaplan & Kaplan, 1989, pp. 184-185).

Fascination occurs when, out of interest and curiosity, certain objects capture and hold one's involuntary attention. As involuntary attention is engaged demands on depleted directed attentional capacity are restored. Lastly, compatibility refers to the way in which a setting fits one's purposes and preferences, and is sometimes described as a feeling of oneness or connectedness with the environment (Kaplan & Kaplan, 1989, p. 186).

In this inquiry the lack of human-made intrusions and distractions in wilderness, coupled with its visually arresting landscapes engaged the participants' involuntary attention. This occurred in much the same way as Panzarealla (1980) described in his participant's appreciation of aesthetics. The sheer size and novelty of wilderness settings provides a stark contrast to urban environments, as well as providing opportunities for change, and the renewal of depleted energy resources. The participants' descriptions emphasized the physical attributes of the wilderness environment; whether it was a setting sun reflecting beautiful shades, a magnificent glacier spilling down an adjoining valley, or a fjord surrounded by 15,000ft high mountains. These physical attributes provided a high degree of interest and fascination. The participants' focus was absorbed in the various objects of attention; in terms of peak experience it represented a total kind of visual perceiving, listening, or feeling (Maslow, 1968, p. 74-76).

Involuntary attention was illustrated in the participants' detailed descriptions of the wilderness settings. Their descriptions noted a range of subtle attributes, such as shifts in weather patterns (particularly wind direction and speed), changes in light and sound, and identifying unique features of the landscape. Wilderness settings, and the fascinating physical elements/objects they contain, allow perception to become more passive and receptive, object centred instead of ego-centered, providing an external focus that acts as a trigger for peak experiences (Maslow, 1968, p. 79; Panzarella, 1980, pp. 76-77). It was often here in the participants' descriptions of the setting that they articulated a valuing for the natural landscape, describing it as sacred (Elkins et al, 1998).

The participants' interest and fascination also extended to the ecological processes that function in wilderness, enabling greater physical and perceptual scope. The participants' descriptions referred to this complexity in two main ways, (1) as a perfect coming together of the various natural elements (weather, light, sound, landscape features), and (2) an acknowledgement of the interrelationships that make up natural environments. This created a sense of mystery and ineffability, expressed in feelings of insignificance, humility, awe, wonder, and reverence (Elkins et al., 1998, p. 11; Maslow, 1968, p. 87-88).

As previously noted an important element of the wilderness experience is undertaking risk, stemming from its remoteness, lack of shelter, and readily available food and water. Wilderness travel often straddles a fine line between confidence and elation, engendered by the successful negotiation and mastery of its hazards, and fear,

shame, and misery arising form the potential for becoming lost, being caught out in violent weather, running out of food or water, and/or becoming ill or incapacitated. Moments of humility, awe, wonder, and reverence are not only an acknowledgement of the beauty and sacredness of life, they are also an acknowledgement of the unknown, unknowable, and unseen forces of wild nature (Elkins et al., 1998, p. 11), which often raise deeper existential questions.

Compatibility was expressed in a number of ways. The first was the participants' motivations for spending time in wilderness, which was often because of previous peak experiences. Compatibility was also illustrated by the participants' goals and the demands imposed by the wilderness setting. Wilderness travel is a purposeful activity requiring a range of skills that take time and experience to master, when successfully applied they foster feelings of independence and self-sufficiency. This was complemented by the participant's love of wild places by describing them as beautiful, magnificent, untouched, idyllic, perfect, and majestic.

The ultimate expression of compatibility can be seen in the participants' feelings of connection, belonging, or merging with the wilderness environment. These sentiments are understood by Elkins et al. (1988, p. 10) as a transcendent dimension, or connection with the "unseen world" which provided the most powerful and enduring element of the participants' peak experiences. The participants expressed this connection through the use of mystical language such as being at one with nature, connected to nature, or an integral part of nature. Often these sentiments were complemented with descriptions of nature as

powerful and that they had momentarily tapped into an "unseen" energy source.

As Maslow (1968) noted in his original studies, peak experiences often carry some important meaning or insight for the person. In terms of spirituality Elkins et al. (1988, p. 11) suggests that human beings are on a never ending quest for meaning and purpose in an attempt to fill the "existential vacuum". Just over half of the participants in this study noted that their peak experience in wilderness was significant to their life in some way, and that the restorative elements of the setting (solitude, absence of time constraints, lack of human-made intrusions, and distractions) were important in allowing them time and space to think and reflect. Meaning and purpose was articulated in various ways including finding meaning in suffering, the attainment of life-long goals, acknowledging the existential limits of human life, and enjoying the non-material pleasures of wild nature.

## Conclusion

This study sought to identify the distinctive elements of wilderness settings that contribute to triggering peak experiences. Previous research indicated that natural settings are a commonly cited trigger of peak experiences. However, due to the limited body of research on this topic, the connection between wilderness, as a specific form of natural setting, and peak experiences had remained inconclusive. In this study wilderness was defined as a large area of uninhabited land containing native plant and animal communities relatively unaffected by modern civilization. In order to explore this

phenomenon, visitors to wilderness areas were recruited using a voluntary registration system. Participants were asked to describe in their own words a peak experience in wilderness (what they felt, were thinking, the meaning of the experience, and a description of the landscape where the experience took place).

Written responses were analyzed using a conventional approach to qualitative content analysis, which elicited seven core themes. These themes indicated that the most common elements in triggering the participant's peak experiences were the aesthetic qualities of the wilderness setting and escaping the pressures, people, distractions, and concerns of the human-made world. An interpretation of the participant's experiences was provided by linking them to the theory of restorative environments. It was found that in wilderness the participant's experienced a unique combination of aesthetic pleasure and renewal that can lead the triggering of peak experiences. Some evidence also indicates a connection between peak experiences in wilderness and spiritual expression through the valuing of the natural environment as sacred, the construction of new meaning, and a connection with the powerful unseen forces of wild nature. This spiritual expression was found to be a key motivator for spending time in wilderness. These are important benefits illustrating how natural settings promote health, happiness, and wellbeing, as well as providing further reasons for the continued conservation of wilderness areas.

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