

Perceptions Of Outdoor Recreation Professionals Toward Place Meanings In Natural Environments: A Q-Method Inquiry

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Abstract

Although person-place relationships have been studied, there is a need for a better understanding of the relationship between theory and the meanings attributed to places by practitioners. Using Q-methodology to capture subjective perceptions of experience, this study investigated the place meanings of a diverse sample of outdoor recreation professionals. Thirty participants completed a theoretically-grounded sorting procedure (Q-sort) beginning with the question: "How do you find meaning in a place in the out-of-doors?" Analysis followed Q methodology procedures (correlation, factor analysis, rotation) and resulted in three subjective views toward place: *Relational*, *Natural*, or *Spiritual*. Practically, outdoor programming can be intentionally designed according to diversity in place meanings. Theoretically, this study describes a useful research strategy for exploring subjectivity in leisure contexts.

KEYWORDS: Place meanings, outdoor recreation, place attachment, Q methodology

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Introduction

The meanings people attach to places have been featured in research literature to explore the ways persons develop bonds to their physical surroundings. Researchers and theorists have suggested place meanings are results of affective, cognitive, and experiential elements, which coalesce to create meanings and preferences in relation to particular settings (Kyle, Mowen, Tarrant, 2004; Low & Altman, 1992; Moore & Graefe, 1994; Tuan, 1977). Additionally, researchers have explored and debated the subject of place using a variety of constructs, such as place attachment (place identity and place dependence; see Williams & Roggenbuck, 1989), and sense of place. Delineating these constructs has made valuable contributions to our understanding of the meanings people attach to places and the ways those meanings are developed and sustained (Manzo, 2005). For the purposes of this paper, place meanings represent wide ranging characterizations of the personal and thus subjective attachments people use in the ways they construct meaning through experiencing an array of outdoor and natural settings (Gustafson, 2001; Manzo).

Researchers have taken great notice of place-based research constructs due to their possible link to environmental behaviors and potential to resolve conflicts within outdoor recreation contexts (Bonaiuto, Carrus, Martorella, & Bonnes, 2002; Borrie & Roggenbuck, 1996; Kyle, Graefe, Manning, & Bacon, 2004; Williams & Stewart, 1998). Qualitative studies have elaborated on the spiritual dimensions of place (Frederickson & Anderson, 1999), the importance of the roles interpersonal relationships have with leisure setting involvement (Kyle & Chick, 2004), and the ways people find meaning and attach importance to settings over time (Gustafson, 2001). Quantitative approaches have delineated the nature of place attachment (Williams & Roggenbuck, 1989), explored relationships between motivations to visit particular settings and dimensions of place attachment (Kyle, Mowen, & Tarrant, 2004), and have illuminated links between place identity and attitudes toward fees at recreation sites (Kyle, Absher, & Graefe, 2003).

Place-based empirical studies have continued to push the limits of our understandings of place, the meanings attached to it, and its usefulness to the outdoor recreation profession. The purpose of this study was to demonstrate how another innovative, but little known research strategy called Q methodology adds to the diversity of findings on the topic of place meanings. Q methodology is systematic and exploratory as a research process that is grounded in theory with results described through the perceptions of a relevant group of individuals. Q methodology combines qualitative and quantitative techniques by using the mathematical rigor of factor analysis in indentifying patterns of correlation to highlight the subjectivity that operates within individual points of view.

Continuing to explore person-place relationships within outdoor recreational contexts can improve our understandings of place meanings and their use for the profession. Although an abundance of place-based research has been conducted on outdoor recreation participants and stakeholders (see Bricker, 1998; Bricker & Kerstetter, 2000; Driver, 1976; Kyle, Graefe, Manning, & Bacon, 2004), the authors are not aware of any research studies that focus on how professionals within outdoor recreation understand the place meanings that they attribute to natural

environments. Recognizing how outdoor recreation professionals perceive and experience places in the out-of-doors has the potential to illuminate some of the place-based attitudes that operate within the profession as well as those that potentially shape it.

Cheng, Kruger, and Daniels (2003) suggested the ways place meanings emerge in natural environments offer expectations for socially-constructed behaviors within those environments. Additionally, Williams (2002) noted the meanings we attach to settings "convey the very sense of who we are" (p. 353) and McDonald (2003) posited those who work closely with natural environments may have a greater sensitivity toward recognizing meanings that protect them. While those who work in the outdoor recreation profession are held responsible for developing, communicating, and protecting environmental values and beliefs, there is a lack of research that explores the personal place meanings of those holding such responsibility and power. How those within the outdoor recreation profession define meanings attributed to natural environments is relatively unknown in terms of Q methodology, yet it has been suggested that understanding the nature of place meanings is perhaps the most important aspect of outdoor resource management (Davenport & Anderson, 2005). This exploratory study rests on the premise that outdoor recreation professionals may be able to more effectively utilize place meanings by becoming aware of the makeup of their own perceptions toward outdoor settings. It is the purpose of this study to explore part of the mosaic of place meanings that exists within the thinking of outdoor recreation professionals using Q-methodology as a research strategy.

Theoretical Foundation

Place constructs are often confused and continue to be debated and discussed from a variety of different research and philosophical orientations. The popular 'sense of place' construct has been referred to as an overarching general concept with a broad focus on individual and group meanings attributed to a particular setting (Jorgensen & Stedman, 2001; Tuan, 1977). Place identity, place dependence, and place attachment are related constructs that are more specific in delineating particular aspects of person-place experiences (Jorgensen & Stedman). Place identity focuses on the ways an individual defines her or his sense of self in relation to external environments (Proshansky, 1978). Place dependence has been described as the ability of a setting to meet goal expectations of the person or people who experience it (Williams, Patterson, Roggenbuck, & Watson, 1992). Both of these constructs have often been used together to describe place attachment, which more specifically involves the strength and nature of the emotional bonds people form to their surroundings (Kyle, Mowen, Tarrant, 2004; Low & Altman, 1992; Williams & Roggenbuck, 1989).

Place meanings are different from the other place constructs (Davenport & Anderson, 2005). Unlike research on the sense of place concept, place meanings are not restricted to a particular site but may be shared between different people and different environments (Manzo, 2005). Additionally, place meanings cannot necessarily be measured like the strength of place attachment, identity, and dependence, but instead reflect characterizations of what it means to be attached to,

depend on, or identify with a particular site or sites and how those feelings are formed and maintained (Davenport & Anderson, 2005).

Place meanings are explored in this study according to a conceptual overview of place attachment theory proposed by Low and Altman (1992). Similar to other place theorists, they proposed that the meanings people ascribe to places are grouped into primary elements of affect, cognition, and practice, which result in individual attachments. These theorists argued that place attachment most accurately reflects the ways people feel bonded to certain locations through emotions, personal values, and the ways in which people interact with specific settings; combining elements from the other place constructs mentioned. Overall, Low and Altman described place as a multi-faceted concept involving emotional, cognitive, and behavioral attachments, which can be affected by variations in place scale, size and scope, different social actors and relationships, and different temporal dimensions (Low & Altman, 1992). Further, Low and Altman considered these arrangements of place attachment elements and patterns to be beyond a single phenomenon. Exploring the ways a group of outdoor recreation professionals assigns meaning to and structures these patterns reflects the theoretical foundation of place meanings for this study.

Method

British physicist and psychologist, William Stephenson, introduced Q methodology in 1935 as a way to study points of view on a specific topic by using factor analysis to reveal different perspectives in the form of factors. Stephenson, one of Charles Spearman's last graduate students, developed his unique approach to factor analysis based on a radically different view of its application. Unlike traditional factor analysis in which it is the correlations between items or constructs that are examined, in Q-method factor analysis, it is persons who are correlated as the statistical and descriptive characteristics of the responses depend on the individuals who perform a procedure of sorting statements (Brown, 1980). In other words, participants in a Q study are asked to represent their own frames of reference, as opposed to being measured by the pre-determined structure of others. By exploring the diversity of opinions within a small group of people, distinct social perspectives can be revealed (Tuler, Webler, & Finson, 2005). As a research strategy and philosophy, Q method rests on the premise that one's internal frame of reference can be systematically researched, explored, and interpreted (McKeown & Thomas, 1988) in order to describe the various aspects of the phenomenon under study (place meanings in this case).

In Q method, sampling theory is likewise the opposite of traditional statistical studies, a situation where what is sampled is statements (or other stimulus items such as pictures) that are meant to represent all possible reactions, thoughts, opinions, feelings, or beliefs about the topic of study. In Q method terminology, the population of all possible statements is called a *concourse*. Thus, the sample in a Q study is represented through a set of statements sampled from the *concourse*, typically developed from prior research or personal interviews with the people whose perspectives are being explored. Theoretical development of a set of statements demands efforts to capture any likely opinion about the topic of study

(Stephenson, 1953). In this study, statements were structured around Low and Altman's (1992) elements of place attachment using guidance to form statements from related studies (see Hutson & Montgomery, 2006; Wilson, 2005) and other place-related research literature (see Driver, 1976; Jorgensen & Stedman, 2001; Kyle, Graefe, & Manning, 2004; Kyle, Mowen, & Tarrant, 2004; Mesch & Manor, 1998; Proshansky, 1978; Tuan 1977; Williams & Roggenbuck, 1989). Sampling statements in this way was carried out to ensure a broad representation of opinions toward the topic of place, yet within the place attachment conceptual overview proposed by Low and Altman.

The statements were organized to reveal similarity in themes to represent homogeneity across the theoretical constructs. Clarifying statements within these themes was an attempt to diversify statements to represent a full and diverse range of perceptions associated with the ways people find meaning in places. The groups of statements were organized into broad themes of (1) affect, (2) cognition, (3) practice, (4) scale, (5) social relationships, (6) temporal elements, and (7) spiritual elements. Statements that were similar, redundant, or unclear were eliminated. A total of 48 statements were retained for use in the study.

The operation of sorting statements is personally expressive for participants within the context of a question, most commonly referred to in Q studies as a *condition of instruction* (McKeown & Thomas, 1988). In a Q study, participants sort statements on a sorting array (see Figures 1-3) according to their opinions of which statements are *most like* and *most unlike* their personal views toward a topic. The arrangements of statements are then subject to a set of statistical procedures, including factor analysis with the entire sort (by person) serving as the definition of a factor. Factors that emerge from this process represent shared perspectives that exist within a particular group of people (Brown, 1980).

It is worth noting that while many have compared and confused Q method factor analysis with cluster analysis, there are important differences between these two research techniques (Brown, 1980). Cluster analysis focuses on grouping responses through traditional inferential statistics. Typically, random sampling combined with large numbers of participants are used with cluster analysis techniques, which do not aim to preserve individual points of view, but aim to make generalizations and detect patterns found in larger populations based on broad categories. Results from studies utilizing cluster analysis stem from researchers' definitions of sources of variance (Hair, Anderson, & Tatham, 1998). This is not the case in Q method inquiries, which aim to uncover personal perspectives as they are generated and expressed from participants. Generalizations to larger populations cannot be made from the results of Q studies, but they can deepen understanding and detect particular points of view as well as the differences between views on a variety of topics (McKeown & Thomas, 1988). While some of the mathematical applications are similar between cluster analysis and Q method factor analysis, the assumptions, aims, and types of research questions approached are very different between these two research strategies. It is the authors' view that these two different types of research approaches can complement each other as they have the ability to answer different types of research questions.

Procedures

Data were collected over the spring and summer of 2007. Thirty participants were purposively chosen to provide an understanding of the perceptions of a group of outdoor recreation professionals toward places in natural environments. Participants were invited who were both novice and experienced outdoor recreation professionals and pre-professionals who represented a diversity of positions within the profession. Individuals were invited to participate in the study who manage, program, coordinate, lead or led a variety of outdoor recreational programs, activities, and resources and included camp counselors, outdoor education professionals, environmental educators, adventure educators, university outdoor recreation educators and leaders, natural resource managers, and community, state, and federal agency outdoor recreation professionals. Participants were contacted by letter to request participation in the study and completed a consent form (approved through the Internal Review Board for Human Subjects) before data collection. Appointments were set up with the participants at their convenience.

In this Q study, data collection followed four steps. First, a researcher read a script that asked participants to recall a place or places in the out-of-doors that were personally meaningful. Second, participants were asked to sort the uncategorized list of 48 statements into three piles according to (1) meaning they would most likely find in the outdoor setting/s; (2) meaning they would least likely find the outdoor setting/s; and (3) meaning that held little significance. The purpose of having participants sort the statements into three piles was to help them organize the 48 statements before they were placed on the array form. Third, participants were asked to rank order the statements on the array form according to the question: "How do you find meaning in a place in the out-of-doors?" Rank ordering is important as it forces participants to compare each of the statements in terms of how they correspond to their personal opinions (McKeown & Thomas, 1988). The completed array forms constituted the raw quantitative data to be analyzed. Fourth, participants were asked to fill out a demographics questionnaire with information on gender, age range, race/ethnic group, occupation, number of children/grandchildren and years as an outdoor recreation professional. The questionnaire included two open-ended questions asking for further explanation of the ways the statements were sorted and in what contexts. This information was incorporated into factor interpretation. Finally, participants were asked if they would volunteer to be contacted by phone following the procedure for member checks of factor interpretation.

Data Analysis

Data analysis was conducted using PQmethod 2.11, a statistical program available in the public domain at www.qmethod.org. Q-sort data analysis began by developing a correlation matrix and was followed by principal components factor analysis and varimax rotation. Varimax rotation statistically shows, through computation of factor scores, which participants are grouped together determined from their correlations. Principal components analysis was chosen because of its ability to maximize the proportion of variance accounted for by each factor. It is

worth noting that other types of factor analysis may be chosen in conducting Q methodological studies, such as centroid, which uses an approximation of factors. However, no matter which method is chosen, the structure of a factor tends to change very little (McKeown & Thomas, 1988). Overall, factor analysis allows the researcher to examine the various relationships among the correlations of entire sorts.

Varimax rotation is an objective rotation strategy (McKeown & Thomas, 1988) that aligns factors in an “orthogonal fashion along perpendicular axes so Q-sorts that load high on one factor will load low on another” (Robbins, 2005, p. 213). This helps to clarify distinctions in the way a participant sorted the statements as compared to others who sorted statements in similar and different ways (Robbins, 2005). Depending on the purpose and the people who participate in a Q study, judgmental or intuitive rotation of factors may be employed for theoretical reasons (interested readers will find McKeown & Thomas, 1988 helpful for a full discussion on this topic). Varimax rotation was chosen for this study, since the study was exploratory in nature with no apparent theoretical groupings latent in using a rotation other than one that is mathematically succinct.

A participant’s sort was considered to define a factor if the correlation of the sort to the factor was statistically significant, recommended to be between 2 and 2.5 times the value of the standard error formula of $SE = 1/\sqrt{N}$ (McKeown & Thomas, 1988), where N is the number of statements. For this study, the equation $1/\sqrt{48} * (2.5) = 0.36$ was used to determine the necessary size of a correlation to be considered significant for each loading (Brown, 1980). It was determined that individual loadings at 0.40 and above would be used to determine the sorts that define each of the three factors. The distribution of the sorts across the factors is demonstrated in Table 1.

In Q method, it is assumed that the sort of a participant who significantly loaded and who helped to define a particular factor shares similar opinions with others whose sort achieved significance on the same factor (Robbins, 2005). Participants who have a high loading on one factor are distinguished from other factors. These participants are commonly referred to as *high and pure* loaders. For instance, participant 5’s sort (see Table 1) has a factor score of 0.7466 for factor 1, 0.0834 for factor 2 and 0.1317 for factor 3. Her high factor score of 0.7466 for factor 1 compared to her much lower statistically insignificant loadings (<.40) for factors two and three earns her the label *high and pure* for factor one. Whereas, participant 27’s sort (see Table 1) has factor scores of 0.5370 for factor 1, 0.3601 for factor 2, and 0.5023 for factor 3 demonstrating a significant loading on factors 1 and 3 and approaching significance on factor 2 (not high or pure). Because this participant loaded significantly on more than one factor (called a *confounded loading*), this sort was not used in analysis to help define any factor. The viewpoints from those participants that load high and pure tend to define particular factors more than those whose significant loadings are definitional, but lower. Individuals who were high and pure loaders were sought for member checking to better understand the interpretation of the factor arrays.

Participants may load significantly on more than one factor (confounded loadings) or they may not load on any of the factors (called *non-significant load-*

Table 1. Factor Matrix with an X Indicating a Defining Sort

Sort #/ Gender	Age Range	Yrs Exp.	Professional Area	1	2	3
1-female	41-50	32	youth development	0.1111	0.5897X	0.3700
2-male	41-50	16	outdoor education	-0.3307	0.2806	0.0522
3-female	18-30	7	youth development	0.1773	0.6988X	-0.2103
4-male	51-60	12	outdoor leadership	-0.2653	0.1511	0.4819X
5-female	31-40	11	outdoor education	0.7466X	0.0834	0.1317
6-female	51-60	25	outdoor leadership	0.3923	0.1874	-0.0307
7-male	18-30	10	adventure education	0.2366	0.0552	0.5315X
8-male	51-60	35	outdoor education	0.5758X	0.0837	0.0936
9-female	18-30	4	outdoor leadership	0.0211	0.3157	0.3011
10-male	18-30	4	outdoor education	-0.0945	0.1997	0.7036X
11-male	18-30	5	outdoor leadership	-0.0224	0.0805	0.6583X
12-male	41-50	26	resource management	0.1648	0.7067X	0.2935
13-female	41-50	7	environmental education	0.2538	0.3949	0.5421X
14-female	51-60	17	outdoor education	0.1744	0.6123X	0.3765
15-female	51-60	3	outdoor leadership	-0.4650	0.4614	0.2918
16-female	41-50	18	resource management	0.5133	0.0231	0.5739
17-male	51-60	33	other	0.2713	0.6135X	0.3904
18-female	31-40	18	resource management	0.3334	0.6208X	-0.0849
19-male	31-40	5	resource management	0.1762	0.5383X	0.0915
20-male	51-60	9	other	0.2458	-0.1930	0.7125X
21-female	18-30	1	other	-0.4523	0.6021	0.2584
22-female	18-30	8	environmental education	0.4302	0.1515	0.6746
23-female	18-30	1	youth development	0.4356	0.6288	0.2561
24-male	18-30	5	environmental education	0.4574X	0.3399	0.2036
25-female	18-30	6	youth development	0.3673	0.1535	0.1920
26-male	18-30	2	adventure education	0.3231	0.5052X	0.0676
27-female	51-60	32	resource management	0.5370	0.3601	0.5023
28-male	41-50	25	resource management	-0.1482	0.7709X	0.1172
29-male	18-30	10	resource management	0.0092	0.2872	0.6033X
30-male	51-60	43	other	0.4114X	0.1857	0.0486
Number of sorts defining a factor				4	9	7
Explained variance				12%	18%	16%

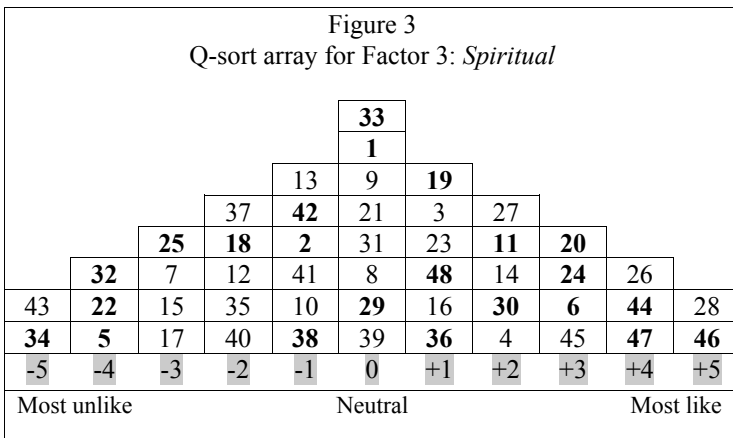
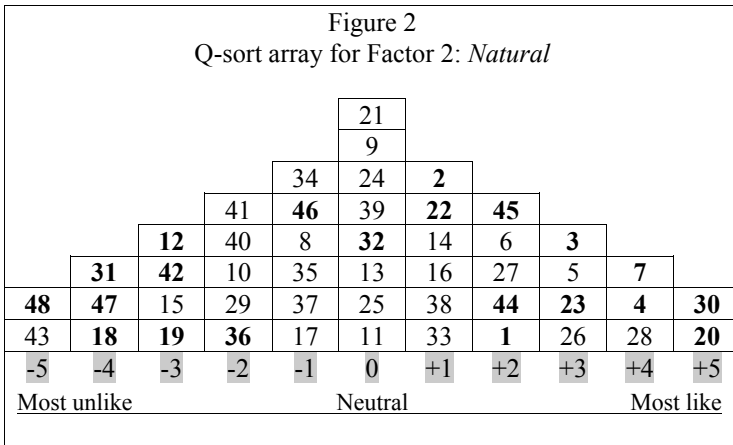
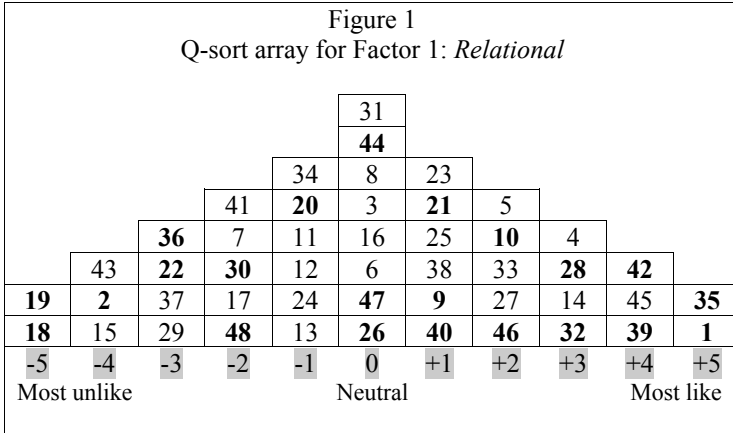
ings, see sort #9). Four sorts were non-significant and six of the participants' sorts were confounded. Data from these ten sorts were not included in the statistical analysis. However, note that confounded loadings share the points of view described in the study results, yet they do not gravitate toward only one. In other words, the six participants who were confounded demonstrate perceptions toward place meanings that operate in multiple ways and those points of view were successfully captured in this study. Table 1 contains each loading for each sort of the participants in the study. Four sorts define factor one, nine sorts define factor two, and seven sorts define factor three.

In order to facilitate factor interpretation, resultant arrays are organized based on the calculation of a z-score for each statement for each of the factors. The z-score represents a standard score or average given to each statement by those who performed the Q sorts. However, within this averaging process, individual Q sorts are weighted based on the strength of their correlation to the factor. In other words, some of the Q sorts mathematically represent closer similarity to the factor than others such as those who loaded high and pure as previously discussed (Brown, 1980).

However, the main focus of interpretation is on the clustering of the statements and is considered more important than the factor loading (Brown, 1980). The arrangements of the statements for each factor are in the same structure according to how participants sorted (see Figures 1-3) arranged according to the z-scores, converted to scores of -5 to + 5 on the arrays. This allows for a comparison of the statements across factors. In this study, a score of +5 for a particular statement on a factor implies the participant, whose sort helped to define the view, endorses that statement as one that is *most like* how they find meaning in an outdoor place. A score of -5 for a particular statement on a factor implies that a statement is *most unlike* how they find meaning in an outdoor place.

Reconstructing these resultant factor arrays (Figures 1-3) illuminates a statement's array position for each factor, which assists in understanding the nature of each perspective. It is important to note that a statement's meaning is interpreted through both its position on the array and by the positioning of statements around it. In other words, the entire arrangement of statements is taken into consideration for each perspective during the interpretive process. No statement is considered unimportant; rather, different statements hold different relevance depending on their positioning in relation to others. This holistic interpretation is essential so that new meaning is attributed to the statement rather than the original meaning thought by the researchers who developed the statements. Consequently, interpreting a statement's meaning from factor to factor can change depending on the clusters of surrounding statements.

In Q methodological studies, the final stage of data analysis is applied interpretively, in a process similar to interpreting data from a qualitative study (Stake, 2005). First, initial analysis was a combined effort of all three researchers to ensure inter-coder agreement. To understand the meaning of each factor, the researchers noted the highly ranked statements, which carried larger z-scores and were positioned closer to the extreme ends of each factor array. Additionally, the researchers noted the positioning of distinguishing and consensus statements.



Distinguishing statements for each factor are those statements that appear in different positions between any two factors. Distinguishing statements were located through a comparison of the z-scores that are calculated to show the statements that are the most different for each factor calculated using PQmethod software (see Tables 2-4). Clearly, statistical differences may not be as interpretable as very large differences across factors may be beyond the statistical significance point. Distinguishing statements are bold on each of the array forms on figures 1-3. Consensus statements are those statements with shared positioning from factor to factor calculated through a comparison of z-scores that do not distinguish between any pair of factors also calculated using PQmethod software. Consensus statements are discussed as commonalities across factors in the results section. The calculation that PQmethod uses in determining distinguishing statements, consensus statements, and other calculations for factor scores is: $\text{Standard Error} = \sigma \cdot \sqrt{1 - \text{reliability}}$ (for a full discussion on this topic see Brown, 1980). The correlations between factor scores were; Factors 1 & 2 = 0.3698, Factors 1 & 3 = 0.2789, Factors 2 & 3 = 0.3723. These correlations demonstrate that the viewpoints are distinct, yet may share commonalities among some statement placements (yet for different reasons, only available through interpretation).

Using an "analyst triangulation strategy" (Patton, 2002, p. 560) the researchers compared ideas from initial analysis, identified groups of statements that merged with individual themes, and then reduced themes to core ideas within each perspective. Then, a modified template analysis approach (Crabtree & Miller, 1999) was used to compare factor interpretation and characteristics to qualitative data collected on the follow-up questionnaire and member check interviews. Rival explanations and negative cases within the findings (Patton, 2002) were intentionally sought to offer multiple ways of understanding each factor. Rival explanations are particularly apparent in factor 1. Finally, defining elements of each factor were highlighted by synthesizing all pieces of data into narratives.

In the following sections, a profile of the participants is described followed by the presentation of factors 1-3 that each describe, through narratives, the different ways meanings were attributed to outdoor settings by this group of outdoor recreation professionals. The statements used in the study drive the narratives and are referenced in Tables 2-4, which contain the nine highest ranked statements, the nine lowest ranked statements, and the five most distinguishing statements for each factor. Additionally, some statements appear in the narratives that do not appear in tables 2-4. Further, qualitative data from the follow-up questionnaire are included from participants that helped to define each factor.

Profile of Participants

The sample consisted of 15 males and 15 females who ranged in age from 18 to 60 years. Among the 30 participants, 25 reported their ethnicity as Caucasian, four as Native American, and one as Asian. Participants included wildlife biologists, park rangers, state land managers, outdoor leaders, professors of recreation and leisure studies, nature center employees, outdoor program coordinators, camp directors, camp counselors, and undergraduate and graduate students studying and working in outdoor recreation contexts.

Results

(Factor 1) *Relational: Social-ritual meaning attributed to places*

The defining features of this perspective are relationships that unfold with family, friends, and environments over time. (See Table 2 and Figure 1, distinguishing statements 35 & 42). Of the four participants who defined this perspective, three were men. These individuals ranged in age and years of experience working in environmental education, outdoor education, and resource management.

A strong characteristic within this perspective is the valuing of established relationships. The need for maintaining established relationships with others in places of personal significance is supported through the positioning of distinguishing statement 32 (Experiencing memories of someone significant, see Table 2) and non-distinguishing statement 33 (Experiencing relationships I have with other people I interact with in a place, Z-score: 0.779, Array position: +2). For those who subscribe to this perspective, merely experiencing a place with others does not seem to be of interest, but experiencing and remembering relationships of personal significance and the refinement of those relationships over time is valued as important to the assignment of meaning to a place.

Male-8 (see Table 1), who helped to define this perspective, illuminates the importance of the relational character of this perspective through time spent on the Appalachian Trail. He referred to his involvement with the Boy Scouts and his sons during his time there in this way:

Working with my sons has been a great joy during their scouting years. Once done with their eagle rank we branched out to one of my goals of hiking the Appalachian Trail. I have been at this for nine years. During my trips I have had one or both boys with me. The experiences with them have been great. At the same time, we have met many new friends on the AT [Appalachian Trail] and we value that relationship. Returning each year has been something to look forward to.

He feels a relational closeness to the Appalachian Trail through his experiences with friends and family. Indeed, it appears that the ritual of returning (see distinguishing statement 42) to these relationships within the setting drives his recognition of the Appalachian Trail as meaningful.

Feeling a sense of personal history with places of significance is a second defining quality of this relational view as evidenced by the rankings of distinguishing statements 39 (see Table 2) and 9 (Knowing my history/past experiences with a place, Z-score: 0.472, Array position: +1). It is clear from the positioning of these distinguishing statements that these people find meaning in settings they have felt personally a part of over time. Statement 38 (Being in a place that feels familiar when I return to it) further accentuates the emphasis on personal and historical connection. It seems a history of ritualized involvement is enhanced through feelings of familiarity. Thinking about places never visited is not something these people tend to do (see Statement 22 on the negative side of the array). Instead, having and knowing one's personal history in a particular environment seems more important to a place's meaning for those with this perspective. In

Table 2. Factor 1: Relational

Nine highest ranked statements, nine lowest ranked statements, and five highest ranked distinguishing statements with z-scores and array positions.

No.	Statement	Z-scores	Array pos.
<u>Nine highest ranked statements (most-like)</u>			
35	Experiencing time with my family.	2.026	+5
1	Feeling positive memories come forth.	1.821	+5
39	Being in a place I have history with.	1.283	+4
45	Encountering the personality and/or spirit of a place.	1.197	+4
42	Being part of rituals and celebrations of a place.	1.147	+4
32	Experiencing memories of someone significant.	1.057	+3
14	Knowing my sense of self is connected to a place.	1.015	+3
28	Feeling attached to nature.	0.928	+3
4	Feeling psychologically rejuvenated.	0.852	+3
<u>Nine lowest ranked statements (most unlike)</u>			
19	Practicing activities that allow me to test my endurance.	-2.535	-5
18	Practicing activities that make me feel physically exhausted.	-2.410	-5
43	Encountering negative memories I associate with a place.	-2.191	-4
2	Feeling my needs are satiated.	-1.591	-4
15	Practicing activities that involve risk.	-1.477	-4
36	Experiencing intensity.	-1.200	-3
22	Feeling attached to a place I have never been.	-0.831	-3
37	Being in a place for a long amount of time.	-0.831	-3
29	Experiencing a place collectively.	-0.648	-3
<u>Five highest ranked distinguishing statements</u>			
35	Experiencing time with my family.	2.03*	+5
1	Feeling positive memories come forth.	1.82*	+5
39	Being in a place I have history with.	1.28*	+4
42	Being a part of rituals and celebrations of a place.	1.15*	+4
32	Experiencing memories of someone significant.	1.06*	+3
P< .05; asterisk * indicates significance at P< .01			

other words, they see themselves within their history of the landscape, and their continued involvement with particular settings fuels their need to maintain that historical connection.

Furthermore, the importance of ongoing experience was expressed by Female 5, who helped to define this view as a high and pure loader. She expressed her bias toward the importance of experience. She reflected on time spent at a state park in hill country in the southern United States and on a lake as she performed the Q-sort. She expressed, "the experience I have generally dictates the meaning as opposed to a specific place." In a follow-up interview, she commented that relationships to her family combined with setting experiences "is how I interact" with particular environments of personal significance. She claimed to view the world "through relationships." This sensitivity to relational and experiential involvement highlights her desire to not only have meaningful experiences in the out-of-doors, but to be in settings where experiences become synthesized and remembered within the context of her personal relationships.

One participant (male-30, see Table 1) offers a rival explanation to how this perspective operates. Like the others who helped to define this view, he agrees with the importance of ritualized involvement over time, but as he reflected on his outdoor travels to places of personal significance he suggested "these visits are with the family, but it's the place I remember." For him, it seems that his memories of the landscape are what drive his relational view toward it. However, as one of the older participants in the study, his relationships to places over time have consistently been with family and the importance of family certainly has colored his relationships to places as evidenced by the highest ranked statement 35.

(Factor 2) *Natural: Sensory and nature-based meaning attributed to places*

The defining feature of this perspective is the emphasis placed on direct sensory and physical involvement with one's natural surroundings (see Table 4 and Figure 2, Statement 20). Five men and four women helped to define this perspective. These individuals ranged in age and years of experience working in youth development, resource management, outdoor education, and adventure education.

The power of sensory involvement for those who define this view was highlighted through the positioning of distinguishing statement 20 (Practicing activities that allow me to see the sights, hear the sounds, experience the smells, and touch my surroundings). These people seem to feel fully engaged in the outdoors by coming into close contact with outdoor settings of personal significance. This need to feel close and to find an emotional connection to nature settings is reinforced by the positioning of statement 28. The ranking of these statements suggests that those with this view position themselves to experience the natural world through direct contact and activities that enliven the senses.

Another important characteristic that supports the emphasis on sensory involvement within this perspective was the expression of closeness to the particularities of places encountered (Statement 26). These feelings suggest a finely tuned attachment to the distinct elements found in natural environments and to an overall sense of closeness to land as evidenced by distinguishing statement 23. However, these feelings of closeness to the particulars of a setting do not necessarily appear to have a cognitive emphasis as evidenced by statement 13 (Knowing

Table 3. Factor 2: Natural

Nine highest ranked statements, nine lowest ranked statements, and the five highest ranked distinguishing statements with z-scores and array positions.

No.	Statement	Z-scores	Array pos.
<u>Nine highest ranked statements (most-like)</u>			
20	Practicing activities that allow me to see the sights, hear the sounds, experience the smells and touch my surroundings.	2.134	+5
30	Experiencing solitude.	2.101	+5
28	Feeling attached to nature.	1.691	+4
4	Feeling psychologically rejuvenated.	1.464	+4
7	Feeling independent.	1.344	+4
26	Feeling attached to the land.	1.318	+3
23	Feeling attached to the particularities of the wildlife, plants and/or the landscape.	1.089	+3
5	Feeling like I can escape from other responsibilities.	1.062	+3
3	Feeling confident, comfortable, and safe.	0.954	+3
<u>Nine lowest ranked statements (most unlike)</u>			
43	Encountering memories I associate with a place.	-2.282	-5
48	Encountering my religious beliefs.	-1.494	-5
47	Encountering God.	-1.452	-4
18	Practicing activities that make me feel physically exhausted.	-1.395	-4
31	Experiencing culturally based meaning.	-1.279	-4
12	Knowing the symbols that are assigned to a place by others.	-1.277	-3
42	Being a part of rituals and celebrations of a place.	-1.255	-3
15	Practicing activities that involve risk.	-1.181	-3
19	Practicing activities that allow me to test my endurance.	-1.104	-3
<u>Five highest ranked distinguishing statements</u>			
20	Practicing activities that allow me to see the sights, hear the sounds, experience the smells and touch my surroundings.	2.13*	+5
30	Experiencing solitude.	2.10*	+5
4	Feeling psychologically rejuvenated.	1.46	+4
7	Feeling independent.	1.34*	+4
23	Feeling attached to the particularities of the wildlife, plants and/or the landscape.	1.09	+3
P< .05; asterisk * indicates significance at P< .01			

the names of flora, fauna, and landscape features, Z-score: 0.103, Array position: 0).

This natural view is further defined through sentiment toward solitude. The positioning of distinguishing statement 30 shows strong agreement with the importance of solitude. Female-1 (see Table 1) expressed her feelings toward solitude through reflecting on a collection of places that hold special significance to her such as the Grand Canyon and mountain ranges in Colorado, New York, and Kentucky. Her particular settings of interest included “high mountain aspen groves, Utah canyons and slot canyons, sitting on a rock high in the mountains looking out over the world...pine forests.” She expressed:

While I love taking people outdoors—teaching them, leading them, seeing them grow in the outdoors—I find meaning in a place when I can be alone—to hear nature—to feel the seasons—to live in the harshness of winter or softness of spring....

This example helps to further illuminate solitude and attachment to particularities of settings as defining characteristics of this perspective.

Those who subscribe to this perspective emphasize psychological rejuvenation, independence, and escape in outdoor places. Distinguishing statements 4 and 7 and statement 5 support this notion. The high ranking of these statements seems to suggest that personal rejuvenation in an outdoor place is an expected outcome achieved through experiencing places closely and intimately. The importance of emotional safety and comfort within this view is further demonstrated through the ranking of statement 3. An intimate connection to places of personal significance seems to center those who hold this view within feelings of contentment. Further, the ranking of statement 3 suggests that it may be necessary for specific needs to be met in order for those with this view to find meaning in outdoor settings.

Oneness and spirituality are other important aspects of this view warranting exploration. The ranking of statement 44 (Encountering oneness in a place, Z-score: 0.794, Array position: +3) suggests those with this view do have a sentiment toward feelings of oneness in the out-of-doors. However, these feelings do not appear to be linked to spirituality as evidenced by distinguishing statement 46 on the negative side of the array (Encountering my spirituality, Z-score: -0.429, Array position: -1). Further, the lower rankings of distinguishing statements 47 and 48 suggest that sentiments toward God and religious beliefs are not part of the place meanings that those with this view attach to outdoor settings or to the oneness they might experience. Instead, those who hold this perspective find meaning in their surroundings more through introspection as evidenced by statement 6 (Feeling introspective, Z-score: 0.562, Array position: +2). Perhaps through introspection, the spirit or personality of a setting is encountered through the senses as suggested by distinguishing statement 45 (Encountering the personality and/or spirit of a place, 0.546, Array position: +2). It appears that those who subscribe to this perspective feel they encounter the spirit of a place through direct sensory involvement that may be considered sacred and meaningful, but not necessarily spiritual or Godly.

(Factor 3) *Spiritual: Oneness and unity attributed to place meaning*

The defining feature of this perspective is an emphasis on finding spirituality and God in nature settings (see Table 4 and Figure 3). Six men and one woman helped to define this factor. These individuals ranged in age and years of experience working in outdoor leadership, outdoor education, adventure education, environmental education, and resource management.

Those who subscribe to this view seem to find their spirituality within natural environments. Figure 4 and Table 4 shows that the strongest agreement is with distinguishing statement 46 (Encountering my spirituality) for those who define this viewpoint. It seems important to those with this perspective to feel that their spiritual beliefs are grounded in natural settings. Additionally, the ranking of distinguishing statement 44 highlights the role of oneness within this perspective. The rankings of distinguishing statements 46 and 44 suggest that feelings of oneness strongly permeate the spiritual meaning these outdoor recreation professionals attach to places in natural environments.

Another characteristic of those who subscribe to this view is their need for spiritual unity and integration in outdoor settings. The second highest ranked statement 28 suggests that place meanings are encountered for those who subscribe to this view through feelings of attachment to nature. The ranking of statement 28 offers insight into the spiritual context of this view. Attachment to nature within this perspective connects participants' spiritual beliefs to their surroundings. Further, this attachment seems to be universalized as shown by the ranking of distinguishing statement 24.

This type of spiritual connectedness was expressed by male-20 (see Table 1) who is a high and pure loader who helped to define this viewpoint. He reflected on a special use area within a national wildlife refuge in the Midwestern United States as he performed the Q-sort. He explained:

It's a great place to go into to be one with the earth. I also take groups back there on occasion to help them find a connection with all [that is] around them. Being Native American I feel a great connection to the Earth. I know that it is sacred and that it contains great spiritual medicine.

His sentiment toward this setting illuminates the emphasis of this view toward universal and spiritual connection. Additionally, these comments show his desire to share with others a certain type of place meaning supported by the ranking of distinguishing statement 11 (Knowing how to teach and lead others in a place, Z-score: 0.714, Array position: +2).

The universal design of this spiritual view is accentuated further through its emphasis on God. The high ranking of distinguishing statement 47 suggests that conceptualizing God is important to the ways individuals who hold this view find meaning in outdoor settings. The ranking of statement 48 suggests sentiment toward religion among those who hold this view, but it does not appear to be strongly emphasized demonstrated by its position on the factor array (Encountering my religious beliefs, Z-score: 0.341, Array position: +1). Rather, the overall ranking of the statements (see Figure 4) shows higher levels of agreement with statements that connote connectedness to nature, spirituality, and God.

Table 4. Factor 3: Spiritual

Nine highest ranked statements, nine lowest ranked statements, and the five highest ranked distinguishing statements with z-scores and array positions

No.	Statement	Z-scores	Array pos.
<u>Nine highest ranked statements (most-like)</u>			
46	Encountering my spirituality.	2.067	+5
28	Feeling attached to nature.	1.999	+5
47	Encountering God.	1.885	+4
44	Encountering oneness in a place.	1.433	+4
26	Feeling attached to the land.	1.385	+4
45	Encountering the personality and/or spirit of a place.	1.303	+3
6	Feeling introspective.	1.264	+3
24	Feeling attached to the whole earth.	1.150	+3
20	Practicing activities that allow me to see the sights, hear the sounds, experience the smells, and touch my surroundings.	1.008	+3
<u>Nine lowest ranked statements (most unlike)</u>			
43	Encountering negative memories I associate with a place.	-2.399	-5
34	Experiencing new people.	-1.623	-5
32	Experiencing memories of someone significant.	-1.578	-4
22	Feeling attached to a place I have never been.	-1.452	-4
5	Feeling like I can escape from other responsibilities.	-1.245	-4
25	Feeling attached to a body of water.	-1.202	-3
7	Feeling independent.	-0.906	-3
15	Practicing activities that involve risk.	-0.906	-3
17	Practicing activities that make me feel physically rested.	-0.808	-3
<u>Five highest ranked distinguishing statements</u>			
46	Encountering my spirituality.	2.07*	+5
47	Encountering God.	1.89*	+4
44	Encountering oneness in a place.	1.43	+4
6	Feeling introspective.	1.26*	+3
24	Feeling attached to the whole earth.	1.15*	+3
P< .05; asterisk * indicates significance at P< .01			

Although the example mentioned from one of the Native American participants shows a sentiment toward teaching and leading others while in nature (Statement 11), those who subscribe to this view do not necessarily need others to find a place personally significant as evidenced by the rankings of distinguishing statement 33 (Experiencing relationships I have with other people in a place, Z-score: -0.283, Array position: 0) and distinguishing statement 34 (Experiencing new people, Z-score: -1.623, Array position: -5). Instead, the ranking of distinguishing statement 30 (Experiencing solitude, Z-score: 0.974, Array position: +2) suggests that people with this view seek solitude to find meaning in their surroundings of choice. Additionally, those who subscribe to this view seek introspection as suggested by the high ranking of statement 6. The ranking of this statement demonstrates the need of those with this view for solitary contemplation in outdoor places of personal significance.

Common Characteristics across Factors

Subscribing to a particular view does not necessarily mean a participant doesn't share elements of other views, rather, they feel more strongly about particular ideas that make outdoor places meaningful as compared to others. There were some strong similarities between the three views. In Q method, a consensus statement is one that was sorted similarly across the resulting factors. This provided information about the ways that the views are similar. For instance, statement 4 (Feeling psychologically rejuvenated) was ranked +3, +4, and +2, for factors 1-3 respectively. Gaining psychological clarity through experiencing and remembering outdoor places seemed to be of importance for participants who helped to define each factor. However, the way in which psychological rejuvenation was achieved appeared to be very different when considering the different groupings of statements for each point of view. Psychological rejuvenation may be an area for further research that perhaps represents an important shared point of reference within place meaning conceptualization.

Furthermore, statement 15 (Practicing activities that involve risk) was ranked -4, -4, and -3, for factors 1-3 respectively. Risk was not something that appeared to be valued for the participants whose sorts defined each perspective. The exact role that risk plays in each of these perspectives is unknown and deserves further attention as risk and managing risk is often something common to outdoor recreation experiences. Yet, risk was clearly ranked as 'most unlike' how these outdoor professionals find meaning in natural settings.

Although statistically not a consensus statement, attachment to nature (Statement 28) is highly ranked within each perspective (+3, +4, +5) and particularly highly ranked for factors 2 and 3. However, attachment to nature appeared to be conceptualized in different ways for the groups of participants who helped to define each view through the other defining characteristics of each perspective. Those who subscribe to factor 1 seem to emphasize attachment to nature as a result of embedded relational place memories. Those who subscribe to factor 2 may emphasize attachment to nature through feeling close to the particularities of places encountered. Finally, it seems likely that those who subscribe to factor 3 would emphasize attachment to nature through finding their spirituality in par-

ticular outdoor places. Research that explores similarities and differences between the ways people conceptualize 'attachment to nature' and 'place meaning' warrants further attention.

Demographic Patterns

The relational, natural, and spiritual points of view did not appear to be shaped largely by demographic characteristics within this sample. However, the particular characteristics of each participant for each factor are useful in understanding the people whose sort helped to define each of the views. Yet, for sampling reasons, demographic characteristics were not interpreted as conclusive in offering insight into the views of these participants toward place meanings.

One potential pattern that may exist is illuminated by the two Native American participants whose sorts loaded high on the *Spiritual* view (factor 3). However, one other Native American participant helped to define the *Natural* view (factor 2) and another Native American participant did not significantly load on any of the factors. Yet, the highest significant loader on factor 3 explicitly made reference to his Native American heritage in the spiritual meaning he ascribes to an outdoor place of personal significance. This possible pattern certainly warrants further exploration in future research.

Another potential pattern warranting further exploration is illuminated by the three men and one woman who helped to define the *Relational* view (factor 1). Stereotypical notions of what women and men value in the out-of-doors might suggest the importance of family is something more women within the sample would gravitate toward. However, this was not the case within this particular group of outdoor recreation professionals. Future research could address this further. Perhaps place meanings represent a topic of study that could cut across stereotypical gender differences.

Discussion

Place meanings and associated constructs have proven to be elusive and are often difficult to pin down within a variety of different research orientations, yet they continue to be viewed as useful and important to the outdoor recreation profession (Kyle, Mowen, & Tarrant, 2004; Williams & Stewart, 1998). As suggested by Stokowski (2002), the meanings that are attached to places hold power and have the potential to benefit and/or degrade social reality depending on how that power is used and represented. The *Relational*, *Natural*, and *Spiritual* views illuminated in this study perhaps offer a beginning to more thoroughly understand how different typologies of place reveal themselves through co-constructed points of view.

Each one of the views explicated in this work has distinct characteristics that make it unique in comparison to the others. Regarding place attachment, Low and Altman (1992) suggested "the interweaving of self, group, and cultural identities yields a complex set of processes" (p. 11). The relevance of place meanings as complex and multidimensional constructs dependent on people and context is clearly supported by the findings in this study and is consistent with other conceptions of the place phenomenon (Low & Altman; Stedman, 2002). Sack (1997) theorized

that the concept of place is crystallized for a person at an individual moment resulting from a convergence of personal meanings that are ascribed to a setting. As a research strategy, Q methodology suggested three coherent snapshots of place meaning convergence. Relationally oriented participants in this study expressed sentiment toward social engagement and ritual connected to places. Naturally oriented participants described place meaning through sensory experiences connected to the physical elements of natural environments encountered. Spiritually oriented participants found God and oneness in outdoor places. These findings illuminate the details of how a construct like place meanings can operate in three different ways and relate to different areas of the literature on place.

First, the characteristics of the *Relational* view understood within Low and Altman's (1992) conceptual overview suggest attachments to relationships can be defining characteristics of place meanings. This conviction aligns with those who subscribe to the *Relational* view in the affective emphasis of their ritual of participation with both people and places. Low and Altman stressed that places are given meaning through group, personal, and cultural engagement. The *Relational* view exudes this combination of elements in a variety of ways. Group engagement is important within this perspective through the meaning attached to mature relationships with people and places over time. Personal engagement emerges within this view through the described need to return to settings to re-experience positive feelings. Finally, cultural engagement is reflected within this view through the emphasis on ritual and the attachment of one's personal history to the history of a setting.

This desire to situate one's history within the history of an environment is consistent with Proshansky, Fabian, and Kaminoff's (1983) stance that people construct personal identities in settings through positive cognitions. However, this view is inconsistent with Proshansky et al's emphasis on learning about a setting to ultimately determine self identification with it. Alternatively, the *Relational* view appears more dependent on the quality of relationships over time that determines the "cognitive connection between the self and the setting where components of the self are reflected in the setting" (Kyle, Mowen, & Tarrant, 2004, p. 451). That is not to say that learning the details of an environment won't increase self identification, yet it does not appear to determine how places become and/or stay meaningful for those who subscribe to this perspective.

The importance of place cognition within the *Relational* perspective can be further connected to the work of Rowles (1980, 1983). This author suggested place identities are highest among those who have the most established history with a setting; typically older persons. The *Relational* view reflects this sensitivity toward maintaining and building a personal history with a setting through relations to it, others, and experiences that take place in particular environments. It seems a ritual of place engagement forms the foundation for these histories to become richer over time.

Second, the findings in this study suggest the *Natural* view of place meanings is contingent on feelings of closeness to particularities of landscapes encountered. Within Low and Altman's (1992) framework, the *Natural* view emanates affective characteristics of place bonding with nature, cognitions of independence,

confidence, comfort, and behaviors that bring those who hold this view close to the intricacies of environments encountered. These ideas are consistent with Seamon's (1979) conceptualization of an 'insideness-outsideness' place dynamic. Seamon contended that as people become more knowledgeable, comfortable, and involved with the particulars of a setting, they move from an outside position to an insider's perspective through becoming more a part of the setting over time.

Moreover, Stewart (2004) suggested that "connecting with nature needs to be connecting with the specifics of a place, coming to terms with the issues that contribute to shaping life in a place" (p. 48). This sentiment was shared by Relph (1976) who postulated that a person can only identify with a place by having a detailed and intimate understanding of it. Further, Stewart reported that encouraging an understanding of the differences between places, through understanding individual setting complexities, helps to communicate multiple ways of relating to nature. This attitude toward giving attention to the particularities of places is underscored within the findings that illuminate *Natural* conceptualizations of place meaning.

Third, the *Spiritual* view connects widely with research literature, which has described spiritual connections to outdoor places as deep and transcendent (see Fox, 1999; Fredrickson & Anderson, 1999; Heintzmen, 2002; Stringer & McAvoy, 1992; Williams & Harvey, 2001). The findings in this study suggest those who subscribe to the *Spiritual* view seek to find oneness and spiritual beliefs in outdoor settings of preference. Within Low and Altman's (1992) framework, the affective bonds illuminated within this view are infused with human-environment spiritual relations.

Further, the *Spiritual* view is consistent with the work of Rockefeller and Elder (1992) and Roberts (1996) who emphasized that outdoor experiences have the potential for eliciting feelings of oneness and unity. Oneness was a prevailing theme within the *Spiritual* viewpoint, which supports the notion of an "expanded sense of identification with nature" (Roberts, 1996, p. 72). Interconnectivity between person and setting pervades the *Spiritual* view described in this study. Additionally, Fredrickson and Anderson (1999) found that wilderness settings can put people in a state of mind that potentially evokes spiritual contemplation. The *Spiritual* view supports this finding with its emphasis on encountering conceptualizations of the spirit through intentional awareness of the sublime that those with this view experience in outdoor settings.

Overall, participants in this study gravitated toward and attached meaning to different parts of Low and Altman's (1992) framework. The purpose of this study was not confirm Low and Altman's ideas, rather, it was to find out how meaning was constructed through a sorting procedure based on theory to form new ideas that illuminate different ways of relating to places that exist within the minds of outdoor recreation professionals. This study deepened understanding about the phenomenon of place meanings by combining the theoretical place-based constructs known to date. This demonstrates that when given multiple options related place theory, a Q sorting procedure can reveal tacit meaning that can then be analyzed beyond individual perspectives.

Limitations

Although the information obtained from this research study is useful, there are limitations that should be highlighted. First, it is noteworthy that 1/3 of the sample did not achieve a significant loading on any one of the three factors. Six participant sorts were confounded (they achieved a significant loading on more than one factor) and four were non-significant (they did not achieve a significant loading on any factor). We believe this suggests that additional research should be conducted to explore other possibilities of place meaning conceptualization beyond the framework presented here. Further, additional in-depth interviews with the participants with non-significant loadings may help to better understand their place meaning views, which could be integrated into future studies. Second, one of the defining sorts for factor 1 (*Relational*) presented an alternative way of interpreting the meaning of the viewpoint as previously discussed. This could be interpreted as a weakness within the coherence of the factor and/or suggests the possibility of multiple perspectives or 'ways of seeing' the meaning of a factor from the participants who help to define it. Both of these limitations may help researchers to more precisely design future Q methodological studies, which aim to explore diversity in place meaning views.

Recommendations for Future Research

Further research might address the relationships between specific place meaning orientations and the ways environmental meanings are facilitated and managed by outdoor recreation professionals who subscribe to the views found in this work. It may be helpful to examine activities in the out-of-doors that elicit place meanings for those who share the same or similar views to those in this study. Replication of this study with particular groups of outdoor recreation professionals who work for specific agencies and organizations could be useful to determine if views of place meanings elicited in this study or additional views dominate particular organizational structures. Additionally, it may be useful to replicate this study with local, state, and federal government leaders involved with managing outdoor recreation to gain insight into the place meaning views of professionals who directly affect outdoor recreation resource policy.

Implications for Practice and Conclusion

Intentional use of the three views uncovered in this work could be applied to various outdoor recreation organizations. For example, resource managers in this study all worked for the same federal land management agency. Four out of the seven resource managers helped to define the *Natural* view, two had more than one view, and one helped to define the *Spiritual* view. These findings offer a sophisticated way for this particular agency to examine the subjective dimensions of place as perceived by personnel. This may be a starting point for discussion on how those meanings might materialize in decision-making processes that relate to upholding and communicating natural resource meanings within a federal land management agency. Outdoor leadership and education programs may find it useful to understand how these points of view are represented and operate within their employees that facilitate outdoor recreation programming. Then, it may be

possible to organize and facilitate outdoor education experiences in a way that is representative of a greater diversity of place meaning perspectives.

In conclusion, the findings from this study represent a beginning to further the dialogue around outdoor recreation professionals' perceptions and opinions toward place. By reflecting on the personal meanings that are assigned to places, outdoor recreation professionals may find greater clarity in the values they espouse by understanding the range of meanings they attach to the natural environments they work in and for. Q methodology, as a research strategy, provided a systematic way to explore how these socially constructed viewpoints operate. While the results from Q studies cannot be generalized to larger populations and must be interpreted carefully, the perspectives generated from Q studies are representative of the variety of perspectives present within larger populations (Tuler, et al., 2005). The relational, natural, and spiritual perspectives toward place revealed in this study do exist within the outdoor recreation profession. The implications of outdoor recreation professionals holding, communicating, and making decisions through these perspectives warrant further attention in future research studies that explore the nature and power of place meanings.

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