Originally established in 1992, the Illuminare quickly became a well-recognized, refereed journal within our field, created and managed by students of the Indiana University’s Department of Recreation, Parks, and Tourism Studies. The Illuminare was the result of a collective vision of these students and founding advisor Dr. Ruth Russell, who saw a need to provide a platform for student publications in the field of leisure services in order to gain a sense of professionalism, share ideas, and promote student work.

The journal had nearly a decade of success with the inaugural, hard-copy volume published in Spring 1993. Six subsequent volumes were published totaling to 53 peer-reviewed manuscripts, 10 dissertation abstracts, and one book review, which covered an extensive scope of topics that accurately illustrates the diversity of our field. The journal’s name, Illuminare, is derived from the Latin llūminō and means to light the way, illustrate, or inform. Aptly, it corresponds with the overall purpose of the journal:

The Illuminare strives to light the way by reviewing, encouraging, and assisting students in efforts to publish and participate in the publishing process, and to inform by distributing and sharing student research in the field of parks, recreation, tourism, or leisure studies.

Over the past decade, the journal has published occasional manuscripts upon request, but has primarily been in remission. This edition marks the revival of the Illuminare as an online, open access student journal. The journal continues to be a peer-reviewed and publishes research in five core areas of leisure studies: Recreational Sport Administration, Park and Recreation Management, Outdoor Recreation, Therapeutic Recreation, and Tourism Management.

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Letter from the Editors

Welcome to the Illuminare!

On behalf of the Editorial Board, we would like to thank you for your interest in and support of the *Illuminare: A Student Journal in Parks, Recreation, and Leisure Studies*. As it is familiar to us all, research and publishing are core obligations of being in academia. While this is so, it should be recognized that the process of publishing is not always easy, especially for young academics that are looking to make their first appearance in the literature. However, as it was recently noted by an editor of a top-tier journal in tourism, often researchers are not aware of the evaluation criteria or have little idea of how to successfully contend for publication in academic journals. This is the essence as to why the Illuminare exists today: graduate students enrolled in leisure programs should have an opportunity to understand both sides of the publication process. To this end, they should have experience not only publishing their own work, but also be acquainted with the reviewing process. We firmly believe that students who are involved with the *Illuminare* will be better prepared and more confident in their ability to research and subsequently publish their findings in high quality academic journals.

For this 2010/11 *Illuminare* edition, we have decided to publish online as an open access, peer-reviewed journal. Our joining of the open access movement is in response to the discerning situation of the academic publishing process: rising costs for subscribers, coupled by the propensity for universities to cut back on the number and variety of subscriptions they have due to difficult economic restraints. Consequently, quality work is increasing unobtainable to the field at large, which is costly for authors, readers, and the future of leisure studies. With this move, we can provide Illuminare publications at no cost, while exposing the student work to a broader audience.

We would like to acknowledge the hard work of all of our reviewers, topic editors, and advisor Dr. Marieke Van Puymbroeck, as well as the support from the Indiana University’s Department of Recreation, Park, and Tourism Studies and the School of Health, Physical Education, and Recreation. We are tremendously thankful for IU ScholarWorks, specifically Jen Laherty and her team, in their guidance and support. We would also like to thank the Leisure Research Institute for their generous financial support for this academic year. In addition, thanks goes to Barbara Duffy for her assistance in designing our visual graphics. Special thanks goes to Dr. Ruth Russell for her continuous support and the guidance that she provided graduate students throughout her entire career.

The Illuminare Editorial Board

Austin Anderson
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Illuminare: A Student Journal in Recreation, Parks, and Leisure Studies

Whitewater Kayaking: A Social World Investigation

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Whitewater Kayaking: A Social World Investigation

Abstract

This exploratory research identified kayakers participating at urban whitewater kayaking parks as a specific recreational user group that had yet to be examined socially and recreationally from a managerial and theoretical standpoint. To examine the social world of whitewater kayakers, twelve participants were interviewed at whitewater kayaking parks in Colorado and Utah. The interviewer utilized naturalistic methods with a concentration on grounded theory techniques. Constant Comparative Methodology (CCM) was used during the data collection and analysis process. Triangulation permitted the identification of thematic findings across participants and sites to determine the relevant meanings and practical applications associated with kayaking participation, social aspects, motivations, and perceived benefits. The implications from this study suggest natural resource managers may attract non-participating user groups by taking advantage of the social nature and pre-established mores found in the whitewater kayaking community. Recommendations suggest other adventure-based outdoor recreational user groups may be examined using a similar social-based lens.

Keywords: Benefits, Motivations, Recreation, Social World, Whitewater Kayaking

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Introduction

Outdoor recreation participation and public land visitation have experienced a recent decline in the United States (Pergams & Zaradic, 2006, 2008). This decline has been attributed to several factors such as changing population composition, age structure (Murdock, Backman, Hoque, & Ellis, 1991), socio-cultural demographics (Gramann & Allison, 1999) and income levels (Abercrombie et al., 2008; Moore, Roux, Evenson, McGinn, & Brines, 2008). Resource managers have noticed that many land-based recreation activities (i.e., hiking and backpacking) are especially affected by this national trend (Pergams & Zaradic, 2008; Zaradic, Pergams, & Kareiva, 2009). In contrast, participation in water-based recreation activities remains strong and continues to increase (Cordell et al., 2004; Jennings, 2007). Today, over 60 percent of the U.S. population participates in a water-based activity such as boating, swimming or visiting a beach at least once per year (Cordell et al., 2002). Paddle sports and adventure-based activities such as whitewater kayaking are becoming particularly popular. Increasing interest and participation in whitewater kayaking have helped establish its prominence in the field of outdoor adventure-based recreation (Jensen & Guthrie, 2006). In fact, research indicates that this type of water-based recreation will continue to increase in the future and comprise a larger percentage of the general outdoor recreation market (Cordell, Green & Betz, 2002).

Despite the growth and potential future market for water-based recreation activities such as whitewater kayaking, limited research has examined the sport and its participants. The small but growing body of literature that has examined participation in whitewater kayaking suggests that participation is often social in nature. For example, Schuett (1995) described the importance of the social aspects of whitewater kayaking by attempting to predict the types of participation enjoyed by kayakers. Schuett found that many factors (i.e., classes, guides, instruction, and skill level) could predict social participation within the sport. Schuett called for continued investigation into the social world of whitewater kayaking using qualitative methods to further identify factors contributing to explaining kayaking behavior. More recently, Galloway (2010) examined the continuum of behavior of whitewater kayakers in New Zealand from a social world perspective. Galloway found that motivation and site preferences varied by the specialization within the social world.

In addition to studies examining whitewater kayaker participation, there has been substantial growth in the construction of urban whitewater kayaking parks that support a unique culture similar to that found in skateboarding parks (Sanford, 2007). Urban whitewater kayaking parks may be especially conducive to the social interactions between paddlers. As the urban population continues to increase, these whitewater parks provide important recreation opportunities to avid urban kayakers. Despite studies examining whitewater kayaking participation, there remains an absence of practical, qualitative investigations into the meaning and value of whitewater kayaking in the lives of its participants.

One way to gain this type of understanding is through studying the unique social worlds that are built within adult play groups, similar to those found in whitewater kayaking communities (Schuett, 1995; Scott & Godbey, 1992; Scott & Godbey, 1994). A social world can be loosely defined as an alternative value structure that contains its own rules and systems that are adhered to by its members (Abercrombie & Longhurst, 1998). This social world perspective could provide a unique opportunity to examine interrelationships that may lead to insights about the social norms, motivations and benefits of whitewater kayaking (Scott & Godbey, 1992).

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1 In keeping with local parlance, the terms kayaker, boater, and paddler are used interchangeably, and, in all cases, these refer specifically to whitewater kayaking.
By developing a foundational understanding of these social factors, public resource managers may be able to determine if the current recreational needs of their participants are being fully met. For example, in describing predictors of social group participation in whitewater kayaking, Schuett (1995) suggested “specific information that can predict and/or possibly explain the role of the social groups in adventure recreation participation will not only add to developing theory, but benefit managers in service delivery” (p. 43). Therefore, by focusing on the entire participation process, public resource managers could potentially assemble information about other socially involved outdoor recreation enthusiasts or adventure-based user groups whose needs and preferences may not be fully understood.

Insights from the social norms, motivations, and benefits experienced by those in the whitewater kayaking community could be used to conceptualize and define the kayakers’ social world. Norms have been shown to influence participant interactions and behavior, helping to create a more socially dynamic and cohesive construct of group membership (Heywood & Murdock, 2002). Whitewater kayakers may also be unified by similar motivations. Research indicates that many whitewater kayaking participants engage in their activity for reasons such as thrill seeking and socialization (Schuett, 1995). These motives translate into a variety of benefits. For instance, participation in outdoor recreational activities has been shown to foster healthy lifestyles (Hanley, Shaw, & Wright, 2003; Weepie & McCarthy, 2002). In outdoor recreational pursuits such as whitewater kayaking, participants often realize additional benefits that are physical, psychological, social, spiritual, economic, and environmental (Driver, Brown, & Peterson, 1991).

Emphasis on this social world perspective may provide public resource managers with opportunities to highlight the values and benefits of whitewater kayaking with the goal of increasing participation. For instance, research has indicated that access to many water-based resources has become a concern for public resource managers, and subsequently whitewater kayakers (Cordell et al., 1999). Hence, the ability to attract and retain participants in other less-used public and federal water-based resources, where whitewater kayakers may be presently underrepresented, may become a valuable strategy in the future. Overall, an enhanced understanding of the social world of whitewater kayaking participants could provide a model for to assist recreation programmers and resource managers with securing the visitation of existing kayakers and attracting new participants.

Review of Literature

This qualitative study of the social world of whitewater kayaking was based upon the theoretical perspective of symbolic interactionism. This perspective allows actions and behaviors to be denoted symbolically (Blumer, 1969), a lens that is particularly useful in allowing researchers to apply subjective meaning to understand human behaviors associated with a particular social phenomenon. Of particular interest in this study was how kayakers adjusted their behavior to the actions of other individuals within community whitewater parks. From this perspective, it is the participants who are actively involved in creating their own social world. Hence, focusing on the face-to-face interactions between individuals is particularly important when attempting to interpret exchanges involved in the social processes of an outdoor recreational pursuit. Hence, this study focuses on the following themes:

**Social Worlds**

An understanding of participation in adult play groups, such as those found in many outdoor recreation endeavors, can be enhanced by examining the interactions between members of a group through socially based lenses (Scott & Godbey, 1992). Examining certain phenomena within the context of a “social world” may allow public resource managers to better understand and meet the needs of a particular user group (Gahwiler & Havitz,
A social world has been defined as providing a structure of an alternative value system, which contains its own rules and systems (Abercrombie & Longhurst, 1998). Behaviors and interactions between social world members are therefore identifiable even though no defined boundaries exist (Shibutani, 1955). In fact, there have been several different views on how to study social worlds (Choi, Loomis, & Ditton, 1994). For example, some research has focused on forms of communication and symbolization associated with social worlds (Schütz, 1967; Shibutani, 1955), while other research has focused on sites, technologies, activities, and organizations that deal with social groups (Strauss, 1978).

For the purpose of this study, social worlds will be used to examine recreation participation within the whitewater kayaking community; therefore, members of this social world are individuals who recognize themselves as whitewater kayakers and are recognized by others as belonging to the social world (Unruh, 1980).

In essence, participants within a social world may have different needs and preferences that must first be understood before outside influence can be exerted to affect their overall participation within any given activity (Scott & Godbey, 1992). In examining river-based user groups (i.e., kayakers, canoeists, and multisport racers) in New Zealand, Galloway (2010) found that social groups encounter specific barriers that limit their participation. Therefore, obtaining these insights into social worlds found in natural areas may be particularly useful to resource managers who are tasked with meeting public needs. One way to further this understanding is to examine the social norms, motivations, and perceived benefits of particular user groups.

**Norms**

Social norms can be defined as the distribution of potential approval and disapproval by others for various alternatives of behavior along a continuum under specified conditions that affect participation with an activity (Jackson, 1966). In an attempt to conceptualize social norms, Jackson (1966) created the Return Potential Model (RPM) to measure conditional norms of group behaviors. From Jackson’s model, other researchers have attempted to explain the power of social norms to influence interactions between expectations about behavioral standards and the costs or benefits of a particular behavior (Heywood & Murdock, 2002).

In outdoor recreation research, investigators have applied normative theory to examine both conditional and behavioral norms. Conditional norms, for example, have provided a foundation for studying issues such as crowding, whereby a researcher asks respondents to determine the appropriate level of acceptable encounters with visitors in outdoor recreational settings (Manning & Valliere, 2001). In contrast, researchers examining behavioral norms are more interested in the behavior that results from particular interactions and less about the environmental and social conditions that occur as a result of individual or group behaviors. Therefore, by examining the conditional and behavioral norms displayed by outdoor recreational-based social worlds, resource managers can better understand the subtleties of user groups, which can enable them to further meet the needs and preferences of such groups.

**Motivations**

By conceptualizing the motives of participants engaging in outdoor recreation on a behavioral level, researchers support the theory that individuals participate to fulfill a particular need or goal. These goals may be either intrinsic or extrinsic (Hurd, 2001; Iso-Ahola, 1980; Lee, Graefe, & Li, 2007), and are associated with an expected reward as a result of participation.

Lee et al., (2007) found strong relationships between specialization level, gender, motivations, and preferred environmental settings of canoeists. Other research shows the pursuit of status has also been a major motivation for outdoor adventure activities. Social artifacts, such as photographs, have also been seen as status symbols for individuals (Driver,
Brown, & Peterson, 1991). Many recreational participants feel a sense of satisfaction by pursuing, obtaining, and displaying artifacts such as photographs that portray their recreational endeavors (Jensen & Guthrie, 2006). Schuett (1995) suggested that whitewater kayaking participants engage in their activity for multiple reasons including seeking thrills, excitement, and socialization.

By recognizing that many individuals or user groups are motivated by the possible outcomes, or desired consequences, of their participation in a certain activity, researchers can gain a better understanding of the underlying objectives that influence behavior. Through this insight, researchers may reinforce their theories about the social tendencies of those involved within the realm of outdoor adventure-based recreation while realizing the scope of benefits received by participants.

**Benefits**

Substantial research has examined the specific types of benefits that participants engaging in outdoor recreation activities receive as a result of their participation (Driver et al., 1991). Benefits pertaining to whitewater recreation are often realized on physical, psychological, emotional, spiritual, and social scales that tend to improve the state or condition of the individual (Driver et al., 1991). For example, Sanford, (2007) described whitewater kayaking as a religious experience where the “ritual practice of an embodied encounter with the sacred…is mediated through the body’s performance in the water” (p. 875). Others have suggested that the social interactions experience in whitewater kayaking can lead to learning more about a participant’s individual identity (Kelly, 1990; Schuett, 1995). These types of psychological outcomes are often positive and central benefits experienced by those involved. Hence, resource managers who are aware of the different types of benefits experienced by certain user groups may become better qualified to evaluate how public resources serve certain user groups, while also better understanding their recreational needs and preferences. For whitewater kayakers, these social norms, motivations, and benefits can be better examined through the social world in which they exist.

**Purpose Statement**

The purpose of this study was exploratory in nature and sought to provide descriptive and interpretive insight into the social world of whitewater kayaking. The following research questions guided this study:

*Research Question 1. What factors influence whitewater kayaking participation?*

*Research Question 2. How can social norms, motivations, and benefits be used to depict the social world of whitewater kayaking?*

**Methods**

This research used an interpretive design where naturalistic research methods allowed for meaningful information to be extracted by investigating the lives, stories, behaviors, and relationships of whitewater kayakers (Corbin & Strauss, 2008). The study also incorporated grounded theory techniques developed by Glaser and Strauss (1967) in an attempt to unveil and describe the social world of whitewater kayakers.

**Study Setting**

This study was conducted on two separate rivers, the Clear Creek River in Golden, Colorado and Weber River in Ogden, Utah, during the months of May and June of 2007. This time of year was chosen due to the spring run-off, which attracted large numbers of whitewater kayakers. The rivers were also chosen due to the close proximity of community whitewater kayaking parks located along sections of the rivers. These parks were excellent locations for field observations as they provided access to the interactions between kayakers both on and off the water.

**Selection of Study Participants**

This study employed purposive and snowball sampling techniques as a means of focusing on selective settings frequented by whitewater kayak-
ers. These settings included the whitewater kayaking parks and other facilities (e.g., parking lots and picnic areas). Twelve individuals who were regularly observed were identified and intentionally selected as key participants who held status within the social world. Specific criteria to identify these participants were individuals who had (a) been identified to have a particular whitewater kayaking skill set (Class III minimum and surfing abilities), (b) purchased their own equipment, (c) frequented the whitewater kayaking park at least two consecutive days during the first week of the study, and (d) consented to participate in the study and were over 18 years of age. The twelve participants that met these criteria were approached and asked if they would be willing to participate in the study. From the semi-structured interviews and ensuing conversations with these twelve participants, the primary researcher felt theoretical saturation was achieved.

Data Collection and Analysis

Using an inductive theory building approach, questions were created for the purpose of conducting semi-structured, in-depth interviews. The questions assisted the researcher in identifying the conditions that gave rise to specific sets of social actions and behavioral patterns between kayakers (Corbin & Strauss, 2008). Interviews were administered to the twelve participants within the study area, often near river focal points or surrounding parking lots. Social and behavioral trends were assessed throughout the study to generate grounded propositions leading to grounded theory about observations and interviews. These observed trends were documented in a field journal both during and after field sessions.

The process of constant comparison was also used during the data analysis and throughout theory construction (Glaser & Strauss, 1967). The steps used in analyzing data began with open coding to form initial categories that represented data relationships. Following the coding process, categories and themes were organized and refined through the use of conceptual mapping (Corbin & Strauss, 2008). Finally, examples were provided from the data that explain how themes were created (Glaser & Strauss, 1967). During the coding process, several thematic categories emerged that relevant to the specific research questions. The four major categories included whitewater kayaking participation, social aspects, motivations, and benefits.

In an effort to establish trustworthiness and maintain proper rigor throughout this study, the criteria of credibility, transferability, dependability and objectivity were addressed (Lincoln & Guba, 1985). Credibility was established through prolonged engagement, persistent observation, negative case analysis (i.e., examining other recreational user groups at the park), mechanical recording of data, and participant consent (Lincoln & Guba, 1985). Transferability was addressed by examining multiple sites using thick description and triangulation of methods (Geertz, 1973). Dependability and objectivity was achieved through peer debriefing, reflective journaling, and adjusting to changing field conditions (Lincoln & Guba, 1985).

The primary researcher/field observer was an avid outdoor enthusiast and whitewater kayaker, which increased his accessibility to the social world. This unique connection allowed him to effectively administer semi-structured interviews and conduct insightful field observations. The primary researcher took measures to account for his personal biases by relating his observations back to participants and to his isolated, non-kayaking research team. A reflective journal was used frequently during and after field sessions to record the events and details of the each day and to further account for possible personal biases. Employing this analytical process allowed the researcher to base viewpoints from the participants’ perspectives while acknowledging his inherent biases as a participant-observer (Charmaz, 2000).

Results

Results are divided into four sections: factors influencing participation in whitewater
Whiting, Pawelko, Green & Larson/ Whitewater Kayaking: A Social World

Illuminare, Volume 9, Issue 1, 2011

Whitewater Kayaking Participation

Although this study concentrated on two whitewater kayaking parks, many participants did not paddle exclusively in these parks. A number of kayakers stated they often participated on other rivers along the Wasatch Front that did not contain park-type amenities. Despite geographical differences in participation, many kayakers commented upon preferring participation at whitewater parks due to their easy access. For example, most white-water parks are constructed near downtown urban areas that allow riverside access in a variety of forms. Convenient parking lots in addition to biking and walking paths are situated along river corridors throughout these parks. Park characteristics allow paddlers to “escape” to the river with relative ease. Participants spoke of how this “park and play” mentality is different than participating in traditional river running in which kayakers must spend time on more logistical concerns, such as finding partners, arranging vehicle shuttles, and obtaining river permits. Furthermore, the hydrological improvements found in many whitewater parks are condensed, allowing kayakers to practice on simulated features found on natural rivers within a more controlled environment. The main hydrologic features in a park are the waves where kayakers are able to surf their boats. Surfing is accomplished as moving water runs under a boat while the kayaker maintains a central location on the wave without moving up or down the river. Participants mentioned that while they practice surfing and other tricks on the wave, others would wait in small pools off to the side for their turn on the wave. This “waiting” is one of the many types of participating etiquettes practiced by in whitewater kayaking parks.

The whitewater parks allowed paddlers the freedom to participate frequently and for different durations. While many participants in this study spent considerable amounts of time in the parks each day (e.g., 5-7 hours), it was not uncommon for kayakers to arrive at parks in business attire during lunch breaks or at the end of the workday for a quick play session before returning to the office or home for the day. To this extent, whitewater kayaking parks are used in similar ways to fitness centers or indoor rock-climbing gyms. Kayakers are able to budget and schedule times in their week when they can paddle. Hence, participation often results as a consequence of both a recreational pursuit with an emphasis on performance and exercise, or simply as a leisure activity. Furthermore, flexibility of scheduling time in the water and easiness of access also foster greater participation. Participants in this study claimed to participate between 25 to over 100 days per season (i.e., May-October).

Social Aspects

Part of participating in whitewater parks is observing other paddlers. This process of observation mixed with participation is born partially out of necessity, but it also encourages the formation of friendships between kayakers. These friendships formed around kayaking are evident in a statement made by Old School (pseudonyms are used throughout), a 56 year-old musician from Denver regarded by others as a type of patriarch: “If you flip over or miss a roll and you get out of your boat, you are going to see other people paddling to you, directing you, grabbing your boat, your paddle and stuff. To see people watching out for you is comforting.” While at the park, kayakers are uniquely interested in the individuals that are paddling around them because these same individuals may be reciprocating help in the case of an incident. Incidentally, kayakers experience an unspoken trust between each other. This social norm was observed and commented upon.
by participants as they left their vehicles unlocked, with a set of keys on the outside of the vehicle during the time they spend on the water. Others leave personal kayaking equipment in public areas unattended while running shuttles, talking with others, or visiting other locations in the park.

This open, supportive ethos is conducive to high levels of camaraderie. In this friendly setting, novice paddlers seek advice and instruction from other more advanced kayakers. Subsequently, the behavioral process of mentoring is common. Gunny explained, “It is as if everyone becomes adopted by the person that has got just a little bit more experience than them…you find somebody you can learn something from and it’s a progression.” Mentoring on the river takes place informally without any structure. Despite the lack of structure, the instructor/pupil relationship is often a rich source of long-term friendships. Participants who develop a passion for kayaking tend to have close social relationships with their mentors. Creeker, an elementary school teacher from Golden explained, “The guys who taught me to kayak back in 1992 are still my good friends. All we do is kayak. We don’t see each other all year until three months [of paddling season] and then we separate again.” While relationships founded for the sole purpose of paddling occur, many participants explained that relationships formed from paddling became meaningful in other areas of their lives. For example, many participants spoke of the unique support in their lives that came from other paddlers. These relationships were unique in that participants felt they could share anything with fellow boaters who they had shared time with on the river.

Social relationships within whitewater kayaking may also be explained in terms of commonalities that are found among paddlers. An aspect of this shared commonality is illustrated by the comment of Bliss Stick: “When you see a boat on a roof of a car you sort of figure that person has this unique enjoyment for whitewater and you feel a bond that is rare.” The similar interests that kayakers hold in common can be the medium for creating intense relationships that often transfer into other aspects of their lives.

The strong bonds among kayakers are evident in the conflicts they experience with other types of recreational visitors. In general, kayakers cited crowding as the one negative factor affecting participation on the river. As urban hubs for physical activity and water-based recreation, whitewater kayaking parks attract both large numbers of kayakers and other types of recreationists. Conflicts typically arise between kayakers and non-kayakers. For instance, one participant, Creeker stated “Non-boaters act inappropriately on the river and there is not a lot of sympathy for it. Inevitably, they drink a few beers and come stumbling in here and we end up pulling them out of the river every summer.” For the most part, whitewater kayakers participate in ways that enable them to interact with their peers and increase their ability to have a pleasant experience on the river.

Motivations

For many paddlers, the kayaking community serves as a motivational source for their participation. The kayaking ethos that is understood and embraced by paddlers may be an intrinsic motivation that allows individuals to relate to one another while providing meaning and importance to their participation. Whitewater kayaking is difficult and acquiring skills takes a significant amount of time, effort, and commitment. The individual challenge, however, provides a unique opportunity for self-discovery and motivates individuals to continue paddling in an attempt to refine their skills. Incidentally, some individuals’ participate simply to be seen. Several paddlers explained that many kayakers paddle to show off for each other and nearby community observers. Others, however, are passive participants, less competitive, who simply enjoying interacting with others. Hence, differing characteristics of paddlers often
determine the extent of personal involvement and enjoyment of the kayaking community.

Another source of motivation found in this study were environmental-based motivations. The scenic beauty found in riparian environments in which kayaking occurs allows paddlers to interact with nature in a way many others seldom have the opportunity to experience. Even in urban-based whitewater parks, the connection with nature through moving whitewater is important to participants. Bliss Stick, a 36 year old physician from Denver, described this interaction and relationship with the natural environment as “an interplay of the forces of nature with the [the paddlers] ability to sort of dance amongst them.” This interaction and affinity towards the river fills a particular need in the lives of kayakers and becomes meaningful and valuable. As a result, kayakers are interested in preserving the natural aquatic environment from potential dangers such as development, restricted access, and river closures. Kayakers support organizations such as American Whitewater and the American Canoeing Association because of their efforts to increase river access and support the geo-politic that allows free-flowing rivers to exist. These pro-environmental attitudes and behaviors often influence kayaking behaviors and serve as a motivating factor in site preferences and attitudes towards participation. Overall, participants described a variety of motivations, however, the social, physical, and environmental motivations were most prevalent.

Benefits

Participants described a wide range of benefits that they received as a result of their participation. Listening to these participants as they discussed these benefits, two broad subcategories emerged: interpersonal relationships and physical benefits.

Interpersonal relationships are formed as individuals paddle together. As based upon previous discussion, these relationships allow kayakers to form unique friendships that are initially premised upon trust through watching each other while on the water. Several paddlers explained that kayaking was enjoyable because of the social atmosphere, both on and off the river. For example, it is not uncommon for participants to consume alcohol or eat together after playing on the river together. These behaviors are often accompanied by discussions about kayaking experiences. The telling of epic kayak stories is common and allows members of the kayak community to share information about rivers, rapids, and other relevant information. Many participants described the ways which friendships formed while kayaking permeated into other areas of their lives. Some participants described “going out” or “having a barbeque” as ways to spend time together when not paddling. Jerry, a middle-aged elementary school teacher from Provo, mentioned “When I am having a bad day, there is a certain hard core group of friends, that is who I am going to contact, because you’ve already put your life on the line with those folks.” These ties that extend beyond the whitewater kayaking park were seen as meaningful and of a great benefit to those participating.

Many participants discussed the physical benefits of their participation. Whitewater kayaking provides good exercise and those who paddle regularly often stay fit as a result. While physical fitness was perceived as a benefit, there were other physical benefits that dwelt more with the psychological interaction between boater and the environment. Many paddlers described these benefits of kayaking in metaphysical anecdotes like the “river speaking to them” or the water “touching their souls.” Others explained that paddling and being physically engaged with the river brought about “balance” and “direction” in their lives. While navigating a particular section of whitewater, there are moments when kayakers must perform crucial moves to avoid injury or death. Because of this, their physical performance also requires a unique psychological focus when paddling. A Denver boater mentioned, “the cool thing about boating is there is no yesterday, or tomorrow, or even five minutes from now. There is
just you, the river, and now.” Participants described this psychological and physical focus as a large benefit. One participant mentioned, “I am completely A.D.D., but with boating I’m not A.D.D. I’m completely focused.” Other participants suggested that, because of their involvement, they experienced a more “even keel” as they approached life in general. Kayaking helped one participant not feel “overly focused on one thing” such as work or relationships. For nearly all whitewater kayakers, the benefits they received from paddling and engagement with their unique social world were major factors that inspired their continued participation in the sport.

Discussion and Implications
In an effort to provide more outdoor recreational opportunities, public resource managers and service providers strive to understand participation trends and preferences of their constituents. Studying social worlds has proven to be useful in this respect, helping to explain recreation participation across a variety of activities (Schuett, 1995). This study revealed defining features of the whitewater kayaking social world that have substantial implications for public resource managers.

Results showed that whitewater kayaking participation was influenced by the geographical characteristics and accessibility of urban whitewater parks (in comparison to unaltered sections of river). The results from one-on-one, semi-structured interviews indicated that individuals experienced an increase in participation by frequenting whitewater kayaking parks. This increase in visitation was partially due to the convenience and ease of access of park locations in proximity to urban areas, in addition to altered hydrological features, which support “park and play” participation. Park amenities (e.g., restrooms, changing rooms, put-in and take-out areas, walkways, and observation areas) also facilitated participation by serving paddlers needs both before and after kayaking. These site-based factors allowed kayakers the flexibility to participate frequently for shorter periods of time than they would have on unaltered sections of river. Recognition of this participation trend in whitewater kayaking may allow resource managers to focus their efforts to abate park crowding by taking advantage of the flexibility and ease of access of participation through promoting activities or events during low-use times in an attempt to dissipate popular, high-use periods. For example, attracting individuals during lunch breaks and before or after work may allow kayakers to participate more often during these nontraditional times. As managers promote these types of programs, it is likely that issues of crowding and conflicts between user groups will subside and participants may experience quality recreational opportunities.

A central aspect of the whitewater kayaking experience was the social world that the paddlers created. The experience of whitewater kayaking was largely centered on the camaraderie and bonds formed with other boaters. There was an acceptance and openness supported by participants that was evident in the unspoken norms of the social world. These norms included the physical wellbeing of boaters on the water, the perceived lack of concern for the security of personal belongings, and general instructive support and mentoring to novice boaters. From their participation and adherence to these norms, boaters received multiple benefits that acted as motivation for their continued participation within social world and the urban park locations.

A common thread throughout the interviews was the significance of social relationships constructed through the kayaking social world. The importance of mentoring was an especially significant theme that may serve as a tool for managers to sustain current participation and increase involvement from nonparticipants by fostering relationships between novice and experienced kayakers. Because this norm is pre-existent and evident in this study, utilizing it to encourage bonding and retention of kayakers, both new and experienced, may be very effective in increasing participation. Research has
shown that novices prefer larger groups that increase companionship between whitewater kayakers (Schuett, 1995). This study suggested that capitalizing and improving on pre-existing mentoring relationships within the kayak community may therefore be particularly useful for resource managers targeting lower skilled individuals. For example, managers could recruit “gate keepers” or key personnel to serve as mentors to potential users who do not currently participate in whitewater kayaking. Management may also be able to use these individuals as volunteers in outreach programs geared towards nonparticipants. Research shows that one main reason that individuals do not participate in outdoor activities is because they often lack a partner to participate with (Jackson, 2005; Patterson, 2001). This may be especially true in whitewater kayaking because of the physical risk associated with participation. Hence, having established mentors in place to teach and introduce the activity and the social world to nonparticipants may prove useful in attracting individuals who are not currently using whitewater resources. Previous research suggests these types of mentoring and recruiting strategies have been particularly useful and effective with other recreational user groups (Enck, Decker, & Brown, 2000).

Programming around a particular resource area with an emphasis on increasing interactions between participants may also be applicable to other outdoor recreational user groups such as runners. The recent surge in charity events or fun runs has illustrated the positive impact of interactions between individuals participating in special events based on physical activity. Group based participation in running can be similar to the social world of whitewater kayakers. For example, both activities are based around a particular recreational pursuit that may have unspoken norms understood by participants. Both groups also can benefit from natural areas purposefully managed for their use. Increased participation may occur as managers take advantage of the social motivations experienced by participants who desire to engage in certain activities. Therefore, this study of whitewater kayakers may provide a model for understanding the complexities of other recreational user-groups involved in activities that are particularly social in nature.

This study explored the social world of whitewater kayakers participating in urban-based whitewater kayaking parks. A baseline understanding of whitewater kayaking activities was described along with participation patterns, social aspects, motivations, and benefits that were relevant themes discussed by participants. Future research should look to use and expand upon this study’s methodology to examine other recreational social worlds and the implications they may hold for natural resource management.
References


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A Case Study of Place Meanings Among Managers of Aransas National Wildlife Refuge Complex

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A Case Study of Place Meanings Among Managers of Aransas National Wildlife Refuge Complex

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Abstract
Place meaning and related concepts that reference human attachment to the physical world have received considerable attention from resource and recreation managers and scientists. Although much work has focused on understanding the meanings that key stakeholders associate with landscapes, the perspectives of managers have generally been absent from these investigations. In this case study, we explore the meanings resource managers associate with Aransas National Wildlife Refuge Complex, Texas. We draw on a thematic analysis of five semi-structured interviews with managers from Aransas. Our findings illustrate that managers have emotional attachment to places under their jurisdiction, and use this attachment to provide high quality experiences for their public constituents. This study offers insights into the characterization of values that managers ascribe to Aransas National Wildlife Refuge Complex.

Keywords: place meanings, management decision-making, Aransas National Wildlife Refuge

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Introduction

Investigations of the meanings people associate with places reference ideas about the activities that occur within places and the interactions between people and the environment (Altman & Low, 1992). In a broad sense, a place can be defined as a space that is imbued with values and meanings (Relph, 1976; Sack, 1997; Tuan, 1980; Vanclay, Higgins, & Blackshaw, 2008). There are three popular conceptualizations of the idea of place. First, “sense of place” is an overarching concept that encompasses both place meanings and forms of attachment between people and an environment. Second, “place attachment” is a similar yet distinct idea that measures the importance and strength of a person’s connection to the physical world. Finally, “place meanings” are the characterizations of the personal attachments that people share with a natural landscape. For the purposes of this study, place meanings were more specifically defined as the emotional bonds used to conceptualize attitudes toward a spatial setting, which had affective, cognitive and conative components (Jorgensen & Stedman, 2001).

Studies of place-person bonding offer a promising approach to better understand the meanings that stakeholders ascribe to resources and, therefore, what is or is not important (Kyle, Mowen, & Tarrant, 2004; Manzo, 2005). This information offers a guide for decision-makers to oversee resource and recreation conditions in ways consistent with those meanings. Several managerially relevant issues have been explored through the lens of place, including intergroup conflict (Gibbons & Ruddell, 1995; Hawkins & Backman, 1998; McAvoy, 2002; Yung, Freimund, & Blesky, 2003), public involvement (Brandenburg & Carroll, 1995; Gahwiler & Havitz, 1998; Kyle & Chick, 2004), and human responses to changing environmental conditions (Brown & Raymond, 2007; Davenport & Anderson, 2005; Kyle, Graefe, Manning, & Bacon, 2004; Stewart, Liebert, & Larkin, 2003; White, Virden, & van Riper, 2008). Although the idea of place has provided extensive insight into how individuals and groups perceive and experience the natural world, little is known of managers’ perceptions of place meanings (Hutson, Montgomery, & Caneday, 2010).

This paper has two primary objectives: 1) Describe the meanings that managers ascribe to protected areas under their jurisdiction, and 2) Explore how managers act as providers of place meanings for their public constituents. These objectives shed light on the reasons why places hold particular importance for managers and offer insights into how managers maintain place meanings according to their subjective views of what is and what is not important. This study assesses managers’ place meanings and their roles as place providers at Aransas National Wildlife Refuge Complex, Texas, U.S.A. (Aransas).

Literature Review

Place research has received increased attention in natural resources management, in part due to a relatively recent shift toward understanding public perceptions of the environment (Farnum, Hall, & Kruger, 2005; Trentelman, 2009). Diverse methodological approaches have been applied in this area to better understand human-place bonds, including evaluative measures such as survey scale items that assess levels of attachment (Hammitt, Backlund, & Bixler, 2006; Williams & Vaske, 2003) and descriptive measures such as in-depth analyses of place meanings (Davenport & Anderson, 2005). Resource and recreation managers have used these tools to integrate the subjective interpretations of places into decision-making (Brandenburg & Carroll, 1995; Mitchell, Force, Carroll, & McLaughlin, 1993). This process of considering public interests helps to minimize conflict and guide decisions toward outcomes that are consistent with public expectations.

For example, Davenport & Anderson (2005) assessed local community members’ emotional attachments and perceptions of landscape change. The authors supported the use of place-based frameworks to explore contentious issues in natural area plan-
ning, and proposed four dimensions – identity, tonic (i.e., dependence), sustenance, and nature – of meanings that residents associated with the Niobrara National Scenic River. The findings from this study helped decision-makers recognize why a river in north central Nebraska was important to community members and the benefits that public constituents gain from interaction with this environment. Cheng & Daniels (2003) also examined subjective attachments between people and places, and urged managers to consider the political consequences of places and the varied perceptions of environmental change. The authors highlighted the social influences that places could have on individual and group behavior, thus informing the process of strategic decision-making.

Central to past research is the idea that emotional ties bind people to the physical world. Within natural resources management, these connections have been proposed as social phenomena influenced by current and changing identities (Greider & Garvakovich, 1994; Stokowski, 2002; Williams, 2002). In this sense, the social contexts that people exist within help to define and symbolically represent the meanings assigned to places (Kyle & Chick, 2007; Low & Altman, 1992). Previous experience and interaction with on-site resources also underpin the particularities of place meanings (Hammitt et al., 2006). The process of creating person – place bonds is socially constructed over time, therefore shaping and reinforcing one’s self-definition. Understanding these characterizations of attachment helps managers understand why places are considered important.

Methods

Study Context

Aransas is a U.S. Fish and Wildlife Service Refuge Complex located in southwestern Texas along the Texas Gulf Coast. This site was established in 1937 with the primary purpose of protecting and providing habitat for migratory birds. Specifically, the area is vital resting, feeding, wintering, and nesting grounds for migratory birds and native Texas Wildlife including the American Alligator, the Javelina, White-tailed Deer, and Armadillo (Aransas National Wildlife Refuge, 2010). The four units within Aransas encompass approximately 115,000 acres of land, which were initially set aside to protect the Whooping Crane. After the bird population diminished to a low of 15, Aransas was established within the Department of Interior.

Although the primary legislative charge for Aransas is to protect fish, wildlife and their associated habitats, opportunities for public use are also considered important aspects of management. The Claude F. Lard Visitor Center is a good example of the ways in which Aransas offers quality experiences for the public. In the visitor center there are opportunities to view exhibits and enjoy public programs at an indoor auditorium. Interpretive signs and a range of educational exhibits inform the public of the historical context and on-site resources at Aransas. Various management tools are employed to protect conditions at the Refuge and facilitate public use through biological programs, fire management, outreach, and partnerships (Aransas, 2010). Aransas is well-suited for this research, because of the biological and social importance of the area, which enables managers and visitors to develop emotional attachments to the natural world.

Within the larger Refuge Complex there are nature trails, public spaces and an auto tour loop that leads to a 40-foot high viewing platform that towers over the tree canopy near a wetland habitat and allows visitors to watch the endangered Whooping Cranes in their natural wintering ground habitat. Additionally, public involvement and community engagement are facilitated through volunteering, outdoor educational courses and a youth environmental training area for organized groups and overnight camping. Both consumptive (e.g., hunting, fishing) and non-consumptive (e.g., picnicking, wildlife viewing, photography) uses are permitted within Aransas.
Research Approach

Our case study drew on a grounded theory approach to develop a preliminary account of managers’ place meanings by drawing on observations and conversations with managers of Aransas (Glasser & Strauss, 1967). This entailed an inductive method to sift through and analyze various forms of qualitative data, the primary source of which were semi-structured interviews (Clarke, 2005). The themes extracted from interviews helped us to identify categories and subcategories to marshal the study findings. The exploratory nature of the present study lent itself well to grounded theory because we developed concepts throughout the process of collecting data and thematically analyzing interviews using ATLAS.ti version 4.2. All conversations were tape recorded and transcribed verbatim. Common themes, relationships and patterns within the text were organized to organically create a preliminary theoretical frame for understanding managers’ place meanings.

Our semi-structured interviews were conducted both in-person and by telephone in the spring of 2010 (n = 5). The interview guide consisted of 20 interview questions aimed at understanding the meanings resource managers ascribed to the Refuge. More specifically, the guide explored participants’ position descriptions, length of employment, previous experiences in decision-making, involvement in recreation and/or leisure activities, place meanings, salient management issues, techniques employed to integrate knowledge into decisions, ways to increase public participation, and socio-demographics. Following Schroeder (1996) and Wynveen, Kyle, & Sutton (2010), we elicited responses about place meanings by requesting participants to “Describe a place at Aransas that is particularly important for you.” This question was followed by another prompt: “Why does this place hold special meanings or values”? A purposive sample of managers was selected according to recommendations from the primary manager of the Refuge Complex who identified the individuals that could be contacted for the purposes of the study. A total of six individuals were invited to participate, five of whom agreed. Each participant was provided with background on the study purpose and personal copies of the consent form and interview guide. Conversations ranged from 39 minutes to 2 hours and 30 minutes, amounting to 4 hours and 58 minutes of total interview time.

Additional forms of data were assessed to build a stronger and more holistic understanding of the study context (Marshall & Rossman, 2006). A total of 10 hours of participant observation were completed at various places at Aransas, including the visitor center, the auto tour loop and the Whooping Crane viewing tower. Participant observations were employed to triangulate the findings and better understand the professional worlds that managers operated within. This information is not explicitly presented in the study findings, rather, applied to better understand the general context of this research. Prior to completing the study interviews, a brief content analysis was conducted of available public information (e.g., website, media) and historical documents (e.g., reports). This information was used to form the study context section of this paper. This methodology allowed us to synthesize findings and build a preliminary theoretical framework for further research on place meanings among resource and recreation managers.

Study Findings

Study findings illustrated emotional attachment between managers and natural environments under their jurisdiction. This information provided insight into why places at Aransas were of particular importance for the five study participants. The following two sections, developed from the study interviews, explore the meanings that managers ascribed to Aransas and their roles as providers of place. Excerpts from the study interviews are presented to illustrate how the construction of place meaning was uncovered throughout the research.
process. The socio-demographic characteristics of managers are presented in Table 1.

Table 1. Socio-demographic characteristics among five managers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
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<td>Gender</td>
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<td>Male</td>
<td>3</td>
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<tr>
<td>Female</td>
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<td>Age</td>
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<td>Average</td>
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<tr>
<td>Ethnicity</td>
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<tr>
<td>Hispanic/Latino</td>
<td>2</td>
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<tr>
<td>Not Hispanic or Latino</td>
<td>3</td>
</tr>
<tr>
<td>Race</td>
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<tr>
<td>White</td>
<td>5</td>
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<tr>
<td>Education</td>
<td></td>
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<tr>
<td>Four year college degree</td>
<td>3</td>
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<tr>
<td>Graduate degree</td>
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<tr>
<td>Annual Income</td>
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<td>Less than $20,000</td>
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Place Meanings

Place meanings were partially shaped by participants’ interests in the ecological and naturalistic values of the Refuge Complex. When asked to identify places of particular importance at Aransas, the natural environment was often referenced: “It’s hard for me to pinpoint one place, because it’s so ecologically unique.” Other individuals emphasized environmental attributes such as the “barrier island habitat,” “pristine system,” “coast prairie,” and “native vegetation.” In this sense, many of the descriptions were grounded in the natural environment. One participant derived satisfaction from “experiencing nature and wildlife,” and further explained “It’s a place that I can get to, where I can reconnect with nature and not have to think about personnel problems or people or just the wildlife and just get back to what got me here from the get go.”

The remote location of Aransas and an associated sense of solitude were important factors that aided in the construction of managers’ place meanings. One participant stated, “Well, I’m kind of reclusive and I don’t seek crowds. I prefer not to be in the presence of crowds and the observation tower is a favorite spot of mine, in the absence of people.” Another participant deemed a place important because “it’s closed to the public and it’s a place that I can get away and I’m not going to run into anybody....Most people and wildlife biologists, they don’t get into it for the people, they get into it for the wildlife. So the chances to actually get out and see stuff, that’s when your best opportunity is going to be, is when there are not many people around.” Another confirmed, “This place is special to me. It’s unique. Uh, I’ve helped or tried to help every person and every manager in particular who has come to this place. Some appreciate it, some don’t. So I got in it for the resource.”

Participants’ interactions with natural resources were integral to their connections to the natural environment. Many of the managers pursued environmentally-oriented activities outside of their professional positions: “I bird to no end. I hunt and I fish to no end. Those are the three time consuming [activities].” Another stated, “I love the coast. I love to boat and to fish.” Most participants were affiliated with professional organizations such as the Wildlife Society, Ducks Unlimited and the Society for Range Management, thereby indicating support for use and preservation of natural resources. This finding suggests that participants better understood and derived meaning from the natural landscape at Aransas through involvement in environmentally-oriented activities.

Interaction with natural resources helped managers build familiarity with on-site conditions.
According to one participant, “We should not all be slaves to our desks. We should get out there and see it on the ground firsthand. Review the work that the people you supervise are doing. Get engaged.” This participant went on to say, “They know that I try at least once a week to get out in the field. And that is just once a week whereas in the past it was every day. But that’s the most I can afford anymore to keep up with the workload. But yes, I will take the time once a week to get out for several hours to touch base with the crews as they’re working on different projects.” According to another participant, “It can be deadly to the resource if the manager allows himself or herself to get too removed.” However, the time dedicated to interacting with resources was difficult for some to maintain: “I’m not in the field as much anymore…it seems like I’m behind the desk, uh, too much. Uh, and that’s tough on me ‘cause I’m a field-loving outdoor person.” Another participant presented circumstances that prevented interaction with natural resources:

“Policy wise, vision wise, objective wise that to really spend a lot of time actually out in the field that for me probably it hasn’t been an option. Probably won’t really be an option. Probably at least through this first year because there’s just too much to learn as far as being able to take responsibility for the Refuge.”

Thus, we see that managers of Aransas prioritized experiencing natural settings firsthand, because it enhanced their ability to make decisions about and be familiar with places. This interaction with the environment appears to enhance the importance of natural conditions at Aransas, and therefore, amplify the meanings that managers associate with places. However, it should be noted that although managers’ engagement in outdoor activities was important in their professional worlds, constraints were faced to maintain sufficient time in the field.

Place Providers

Managers of Aransas facilitated the creation of meanings through community engagement and cooperation with outside organizations. For example, at the visitor center, interpretive boards and educational programs helped to define the resources for visitors to the area. This in turn shaped the way that resources were subjectively interpreted according to management guidelines and objectives. The agency also engaged the public in activities that would create bonds between people and the natural environment at Aransas. For example, opportunities to volunteer and engage in conservation work related to the Refuge were provided through the Friends of Aransas group. When asked about the importance of place meaning, one participant referenced this group:

“Most every Refuge has a friends group, because it affords the opportunity to do things that you couldn’t otherwise do. And also it’s a way of reaching out to the community and having the community play a part in the management of the Refuge. Very important, very supportive.”

Another participant mentioned a Youth Hunt as an activity that facilitated support among community members: “And my whole, the whole idea behind it is to give them a better appreciation for National Wildlife Refuges. Certainly this Refuge can show them that in this case hunting, not always, but hunting can be compatible even with endangered species if done correctly.” This participant went on to say, “experience has shown me that compatible public use is good.” The relationship between Aransas and the surrounding community was seen as “mutually beneficial…they lead to volunteers and potential funding sources.”

Although managers of Aransas prioritized providing quality experiences for user groups, it was emphasized that a number of challenges inevitably accompany public involvement in management: “Every project leader and wildlife Refuge manager
has in their position description the need to maintain those community contacts and be a part of the community, but yet, a lot of us don’t, because we are so pulled in the direction of wildlife and habitat management. It becomes a time issue.” Others mentioned “time,” “resources” and “staffing” as limiting factors. Several conflicts emerged in conversations about public involvement. For example, one politically contentious issue was a proposal to open a naturally occurring pass that formed the south boundary of an area in the Refuge Complex (i.e., Matagorda Island), which had silted in overtime. “There is a misconception on part of the public that the Refuge is opposed to the breaching of that pass. And they could not be more wrong. We support it. It is just a matter of how they go about doing it.” In this light, the emotional attachments between people and place can potentially lead to social conflict. However, not all participants pointed to disputes when discussing community engagement. One participant offered a contrary opinion: “You know we protect, conserve, enhance, uh, for the American people. Uh, but I think since we’re doing it for the wildlife first I think it’s. There’s less. I guess there’s less issues with it.”

**Discussion**

Our case study extended the current literature on place meaning within the context of natural environments to include the perspectives of managers of Aransas National Wildlife Refuge Complex. Specifically, this study provided a preliminary account of the meanings that five managers associated with the natural environment and the ways in which managers defined themselves as providers of place meanings for their public constituents. Findings illustrated that managers’ place meanings evoked emotional attachments and encouraged them to engage public constituents of Aransas. In other words, managers developed an understanding and a connection to Aransas through their personal value systems, and embraced their roles as custodians of natural areas.

The participants in this case study associated a variety of meanings with Aransas. The majority of participants referred to a suite of natural values related to the biological world. Several managers reported “getting into it for the resource,” suggesting that these participants may have been relatively concerned with protecting natural resource conditions (Hammit & Cole, 1998). These findings aligned with past research that has pointed to the importance of naturalistic values in protected area management decision-making (Kellert, 1996; Manning, Valliere, & Minteer, 1999). According to Davenport & Anderson (2005), there is a strong need for human-environment relationships to “include ecological and sustenance-related dimensions in scales measuring the bonds people have with places” (p. 638). Along similar lines, solitude was integral to managers’ place meanings at Aransas, in that participants desired solitude while enjoying the Refuge. Perceptions of solitary experiences in remote settings such as Aransas may provide opportunities for temporary release from the rules and pressures of everyday life (Hammit, 1982).

Involvement in environmentally-oriented activities contributed to the meanings reported by managers of the Refuge. In this sense, the social worlds surrounding managers’ professional positions shaped their meanings and attachments to the natural environment (Gahwiler & Havitz, 1998; Kyle & Chick, 2007). Managers engaged in recreational pursuits such as fishing, hiking and hunting, which were linked to memberships of environmental organizations and recreational activities. This process facilitated the development of specific value systems, social worlds and meanings associated with places at Aransas. In turn, these interactions helped managers define and shape their connections to the natural world.

Managers saw themselves as place providers charged with connecting public constituents to places at Aransas. Volunteer and educational activities were two mechanisms used by managers to engage
Managers framed their roles within the agency as custodians of natural areas that were charged to protect natural resources while also facilitating connections to those resources. Several conflicts arose from public participation, including resolutions over water quality and structural developments; however, despite these challenges, managers in this case study prioritized the provision of public experiences, and framed their professional responsibilities in terms of providing a sense of place for their public constituents.

**Management Implications**

The following management recommendations flow from the information explored in this case study. They are meant as suggestions or areas of consideration for managers to think about human-place bonds in the context of Aransas National Wildlife Refuge Complex. The following recommendations are offered for consideration:

1. Utilize the results of this study to identify the level of importance associated with particular places at Aransas.
2. Manage to protect naturalistic values, ecological health and solitary experiences.
3. Aim to maintain a minimum amount of time spent in the field for managers to continue building familiarity with and knowledge of on-site conditions.
4. Utilize interpretive techniques and outreach programs to maintain the connection between public constituents and the Refuge.
5. Provide necessary opportunities for staff to keep-up-to-date with formal and informal regulations.
6. Encourage resourcing and networking to maximize efficacy in decision-making.

**Limitations**

There are several limitations and potential sources of error that should be noted and taken into account when interpreting the results. For example, the intellectual biography and academic training of the primary investigator inevitably shaped the interpretation of study findings. The underpinning beliefs about natural resources management and personal value systems contributed to the interview questions used to guide the interviews. This approach was recognized and reflected upon throughout the research process to respond to preexisting knowledge concerning the study topic, maintain a flexible and receptive attitude and encourage a critical analysis of various forms of data. This yielded an in-depth understanding of place meanings among managers, rather than a representative sample used to extrapolate to larger populations.

**Conclusion**

Much of the place literature focuses on the meanings that public constituents associate with the physical world, and although these insights are important, the perspectives of managers are rarely considered (Hutson et al., 2010; Stokowski, 2002). This gap in the literature needs to be filled because managers, as stewards of natural areas, are responsible for protecting natural and recreational resources and educating the public about the importance of these special places. The findings from this case study offer a preliminary understanding of the relationship between managers and areas under their jurisdiction. This research will help managers identify the particularities of their relationship with the environment, therefore enabling them to work toward integrating place meanings among public constituents into the decision-making process.
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Learntertainment: Evaluation of an Alternative Instructional and Assessment Tool for Tourism and Hospitality

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Learntertainment: Evaluation of an Alternative Instructional and Assessment Tool for Tourism and Hospitality

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Abstract

Traditionally, tourism and hospitality educators have relied on lectures in their classrooms; while there has been a gradual shift from teacher-centered (lectures) to student-centered processes for instruction, assessment processes still remain teacher-centered. Testing continues to be the dominant form of assessment. The purpose of this paper is to describe an approach called learntertainment, and how it can be used as an effective, combined teaching-learning and assessment tool in a tourism and hospitality classroom environment. Through a series of semi-structured interviews of college and university faculty, it was found that the subjects believed learntertainment assessment aids the identification of topics that students do not understand, facilitates grading, eliminates subjectivity in evaluation, provides on-the-spot feedback, allows educators to identify students needing further assistance, and identifies tactics for corrective action. Generally, the findings revealed that the methods were effective, stimulating, and challenged students to think and/or question themselves. This study concludes that learntertainment tactics and strategies can be used both as an effective classroom instruction and an alternative form of assessment, and can be used to eliminate some of the stresses and problems associated with classroom tests and examinations, while at the same time improving students’ learning.

Keywords: Learntertainment, alternative assessment, student learning assessment, assessment for learning, assessment of learning, Higher Education Institution (HEI).

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Introduction

Universities are shifting from education processes that are too often seen by students as boring and teacher-centered to processes that are exciting and student-centered (Haugen, 1998; Slater et al., 2004). Such a shift is very important in light of demands on higher education institutions: (i) to promote the development of critical thinking and problem solving skills among students; (ii) to open the curriculum to more than students’ listening and regurgitating information; and (iii) to analyze and evaluate student learning (Armoo & Garrick, 2006).

The transformation of teaching and learning processes demands that educators and administrators re-examine current assessment practices. For the teaching and learning process to be effective, new forms of assessment need to be explored. According to Wolf, Bixby, Glenn III, and Gardner (1991), “the irony of social inventions is that one-time innovations turn to habit”. Consequently, assessment strategies of the 20th century perceived as innovations have become habitual and unquestioned. Students’ learning styles differ, and as a result of technological advancements, new educational approaches are needed.

Learntertainment, according to Armoo & Garrick (2006), involves “the process of weaving and implementing elements of fun and entertainment into every learning experience, thereby ensuring that learning comes to life for everyone involved in the teaching-learning process” (p. 6). This strategy has the potential to become an effective teaching approach as well as improved assessment tool. Authors such as Ernest Boyer, Alexander Astin, and Sylvia Grider have highlighted the need for instructional improvement in higher education in recent years (Kher, 1996).

In order to meet their goals, educators should provide students with learning experiences that are exciting, authentic, and practical; students are bombarded everyday by entertainment in their personal lives and recreational experiences such as video games, BET, YTV, and much music to name a few. The Internet and a variety of new communication technologies (iPhones, iPADS, Blackberries), visualization (DVDs, video games,), and simulation technologies (Wii) are attractive to students and readily capture their attention. In addition, university faculty and administrators are acutely aware of the increasing pressures and distractions students today bring to the campus: inordinate work commitments, lack of parental social support, guidance and college familiarity, family obligations requiring their attention. These all require new educational strategies.

Roughly 40% of all students in higher education today are considered non-traditional, averaging 25 years or older. (DiFiore, 2003; US Census Bureau October 1996). These students usually work part-time, returning from the workforce for a second degree, or are complementing their business skills through professional development programs. They bring diverse perspectives to the classroom.

In addition, there is greater diversity in cultures and the student population due to immigration (Seurkamp, 2007). Thus, the traditional learning environment needs to adapt to a more complex social environment. Academics using traditional methods will need to adjust to be able to teach from a learntertainment perspective and to enable them to handle the multicultural challenges faced and to facilitate the anticipated gains of increased student motivation, mastery, and autonomy as students develop their capacity to monitor and plan their own process.

Problem Statement

Many students’ best learning experiences come when they are engaged in activities that they enjoy. Moreover, assessment techniques can shape the experience of students and influence their behavior even more than the teaching they receive (Gibbs & Simpson, 2004, p.5). Well-designed assessment sets clear expectations, establishes a reasonable workload (one that does not push students into routine/rote learning), and provides opportunities for students to self-monitor, rehearse, practice, and re-
Garrick, Armoo, & Smith/ Learntertainment: Evaluation Tool

Table 1. Paradigm shifting in assessment

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<tr>
<td>Written examinations</td>
<td>Coursework</td>
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<td>Tutor-led assessment</td>
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<td>Implicit criteria</td>
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(Source: Brown, Bull & Pendlebury, 1997)

Reigeluth & Squire (1998) and Barr & Tagg (1995) point out that the classical approach, relying heavily on psychometric tools, is insufficient to assess students learning, especially in the current social environment.

Purpose of the Study

Given that education may be described as a planned teaching and learning experience, educators must understand the reality of such an experience. Hence, the purpose of this study is to examine faculty experiences who have utilized a learntertainment assessment strategy within tourism and hospitality settings. It is hoped that the findings of this study will promote future research on the conceptual underpinnings and empirical outcomes of learntertainment teaching strategies.

Review of Literature

Learntertainment

Findings from research on students’ learning indicate that pedagogical techniques influence how well students learn to apply concepts (Michlitsch & Sidle, 2002). To meet the goals of unambiguous expectations, authentic tasks, choice, and flexibility, educators should provide students with learning experiences that are exciting and practical. This involves making every learning experience interactive, practical, and entertaining, while not slacking in content. At the same time, revisions in assessment tools are needed. It has long been asserted that some in-class exams, such as multiple-choice tests encourage guesswork and reduce independent thinking (Monahan, 1998).

Furthermore, many students are susceptible to stress, and thereby, become nervous under examination conditions, leading to forgetting large components of studied material (Huerta-Macias, 1995). In addition, in the case of standardized tests, some educators provide “coaching” geared at assisting students to significantly raise their test scores, without actually increasing their general intelligence or knowledge significantly (Huerta-Macias, 1995). Despite these and many other limitations, testing can be a valuable tool for evaluating student learning. Tests can function as diagnostic tools to establish what students already know, how well they are learning, provide students with feedback, and help educators to improve their instruction. Testing also allows educators to build and pace the curriculum and balance students needs with standards.

Despite these applications of traditional tests, educators will have to change their modus operandi so that students can better learn the skills and competencies needed to succeed. Industry’s demand for employees with critical thinking and problem-solving skills, effective communication, and good human relations skills, has necessitated changes in the teaching-learning process.

Although the phrase “active learning” aptly describes learntertainment and is frequently heard in educational circles, perhaps the best way to think of learntertainment or active learning in the classroom is to focus on learning processes rather than on learning products. Learning processes focuses on what happens when the learning takes place. It can be thought of as a process by which there is a change in attitude or behavior as a result of experience. Ac-
tive learning redefines classroom practice from a static view in which knowledge is poured into the passive, empty minds of students by lecturers to a more dynamic view where, through project-based, collaborative, and problem-based activities and assessments, students play a more active role in creating new knowledge to be applied to other professional and academic contexts.

**Student Learning Assessment**

Alternative assessment strategies, such as learntertainment, can be defined as those that are not discrete point tests. The advantages of alternative assessment focus on "how well," rather than "how many" (Gripps, 1994) and the individual achievement relative to self. The other advantage of alternative assessment is the emphasis on competence rather than intelligence or in other words, how well students know the material for the test. In the best case, students are not worried by standardization, but instead focus on how to improve rather than to prove.

Consequently, alternative assessment strategies such as learning journals, course biographies, portfolios, and games have been widely advocated by educators lobbying for change (e.g., see Brookhart, Andolina, Zuza, & Furman, 2004; Clarke, 1997; Hargreaves, Earl, & Schmidt, 2002; Kulm, 1994). Together with new developments, assessment is seen more as an integrated part of the teaching and learning process. As noted by Pegg and Panizzon (2007/2008), “[t]he emphasis on embedding assessment into the teaching and learning process is identifiable globally”. Alternative assessment methods such as learntertainment, in addition to being fun and in the “language” of today’s students’, work well in learner-centered classrooms because they are based on the idea that students can evaluate their own learning and learn from the evaluation process. This method gives students opportunities to reflect on both their course development and their learning processes (what helps them learn and what might help them learn better). Alternative assessment thus gives instructors a way to connect assessment with review of learning strategies.

Assessment programs must be combined with high performance standards and should encourage learning, not just measure it. Knowledge gained from assessment should drive improvement and growth, for programs as well as for the students. Assessment should be clearly and thoughtfully built into instruction. It should be part of learning rather than the conclusion or the means to end the learning process. It must also be fair and equitable as well as valid and reliable. Assessment must have a clear, precise connection with the expected learning outcome, provide students with an opportunity to demonstrate performance and must adopt alternatives for determining whether learning has been achieved. This calls for a distinction between *assessment of learning* (i.e., assessment with the intent of grading and reporting with its own established procedures) and *assessment for learning* (i.e., assessment with the intent of enabling students, through effective feedback, to fully understand their own learning and the goals for which they are aiming; Elwood & Klendowski, 2002).

Educators, as they increasingly involve students in the teaching-learning process, need to build in many opportunities to include students in the assessment process and then use the information obtained through assessment to improve the teaching-learning process. Studies have shown that students who understand the learning objectives and assessment criteria and have opportunities to reflect on their own work show greater improvement than those who do not (Frederikson & White, 1997). In learntertainment assessments, students understand what criteria will be used to evaluate their performance. The problem of interpretation differences that result when performance requirements are ambiguous can devalue and discredit an assessment program. In an effort to assess higher-order cognitive skills and complex problem solving, educators should develop assessments that have no single right
answer and in which students’ interpretation of information or evidence is key in defending their solution. Educators should also make sure students know if the content, rather than enunciation, punctuation, and or grammar, is the criterion on which performance will be judged. This poses a challenge for many educators, especially those who are creative educators, when they operate in an educational environment where there is no correlation between the instructional environment, communication devices, and the methods used.

Several learntertainment techniques can be effectively used as assessment strategies. Through role play, students are able to develop critical thinking and problem-solving skills. As an assessment tool, the students are given an opportunity to undertake activities that require them to move away from established, normal, and standard ways of doing things (Armoo & Garrick, 2006). Such exercises can be used by an educator to assess how creative students can be at finding solutions to problems.

“Circle of minds” involves students being put in groups with each group required to come up with the best solution to a problem. The members of a group sit in a circle and take turns to suggest possible solutions (Armoo & Garrick, 2006). The group analyzes each suggestion and selects their best solution. Through this method, the students learn how to debate their points and the basis of decision-making as well as display an application and analysis of issues and concepts. Class/group discussions are a good means of evaluating the general understanding of students. Adult students bring to the college classroom a variety of experiences, knowledge, and skills, class/group discussion are an avenue for them to share and learn from one another. The breadth and depth of their input in the discussion is ample to determine the extent of their knowledge.

While these approaches are fun for students, they also require students to think and be analytical. Puzzles are effective tools to evaluate how well students remember key words and definitions. Creative summaries involve the use of key concepts covered in a unit in a creative format to produce poems, songs, rap, or skits (Armoo & Garrick, 2006). Group presentations involve students presenting topics to the class. In order for it to become an effective assessment strategy, group presentations should be designed to inquire into students’ competences. Evaluation should assess how students analyze, apply, assess, explain, and articulate their points during the presentation, and also during the question-and-answer session that follows each presentation.

With each of these learntertainment strategies, adequate instructions in the application of the methods must be given. Students must clearly understand, prior to the activities, what criteria will be used to assess their performance. Students are graded on their responses, actions, or the prepared portion of the presentation. In addition, points are given for:

1. Effective identification of concepts and definition of the key words
2. Portrayal of adequate knowledge of the topic(s)
3. Ability to stay with the topic(s) or problem under review
4. Organized presentation
5. Familiarity with and knowledge of basic information

In addition, the flexibility with which questions, comments, and enquiries are encouraged and entertained from the audience is also assessed.

**Methods**

The conceptual approach in this study is constructivism. As such, meaning is understood as generated through the researcher’s interaction with data. Results drawn from studies done from a constructivist approach are intended to be relevant in particular to the setting under study and to the research question (Liu & Matthews, 2005). Interpretive phenomenological analysis (IPA) is the method used. IPA allows for an exploration of subjective experiences and, more specifically, social cogni-
tions. IPA’s conceptual underpinnings grew from the phenomenology that began with Husserl’s attempts to build a philosophical understanding of consciousness, with hermeneutics (the theory of interpretation) and with symbolic interactionism that posits that the meanings an individual ascribes to events are of central concern but are only accessible through an interpretative process (Smith & Osborn, 2007).

Consequently, IPA acknowledges that the researcher’s understanding of the participant’s words is necessarily based on subjective interpretation. IPA also assumes an epistemological stance whereby, through careful and explicit interpretative procedures, it becomes possible to access an individual’s cognitive world. An interpretive researcher steps back from searching for a prescriptive answer, and instead, approaches the issue with the aim of better understanding the nature of interaction in a learntertainment environment, and the impact of this upon participants (Smith & Osborn, 2007). Given that this study seeks to explore the lived experiences of faculty using learntertainment strategies, a phenomenological methodology was chosen as the best means for this type of study as indicated by Davidson (2000), Jones (2001), and Easterby-Smith, Thorpe and Lowe (2002).

**Research Design**

Data were collected using semi-structured interviews. In the constructivist approach used here, according to Hycner (1999, p. 156), “the phenomenon dictates the method (not vice-versa) including even the type of participants”. To access the faculty, no single sampling method was employed, but rather a combination of criterion sampling (Atkinson & Flint 2001) and purposive sampling (Guba & Lincoln 1981). Both techniques are acceptable within interpretive approaches to research and conceptual development (Guba & Lincoln 1981; Strauss & Corbin 1998). The sample was selected based on judgment and the purpose of the research (Babbie, 2007; Greig & Taylor, 1999; Schwandt, 1997), looking for those who “have had experiences relating to the phenomenon to be researched” (Kruger, 1988 p. 150).

Purposive sampling is considered by Welman and Kruger (1999) as the most important type of non-probability sampling. It is especially useful in interpretive research in cases where the researcher has some personal contact or is involved within the field of study. It entails the researcher actively looking for people who meet the aims of the inquiry and who can offer “information-rich cases for study in depth” (Patton 1990, p. 169). As a sub-set of purposive sampling, criterion sampling entails selecting the cases that meet a (set of) particular criterion (Wengraf, 2001).

The four criteria applied in this study were that the participants needed to be: (a) actively teaching at the tertiary level; and (b) at the time of interviewing a full time employee at one of the four institutions teaching tourism and hospitality. In addition, the participants needed to be: (c) teaching courses within tourism and hospitality degrees using learntertainment strategies at the time of interviewing. The participants, finally, needed to have (d) some exposure to learntertainment teaching and assessment strategies either as a participant in or attended one or both workshops or conferences on learntertainment.

Participants for this study were drawn from four institutions. The sample of six interviewees originated from (1) a community college in Kingston, Jamaica, (2) a private college in the U.S., and (3) two universities in the U.S. (one a land-grant, the other private). Initial contact was made by e-mail outlining the purpose and scope of the research, asking faculty for their agreement to participate. Of the ten faculty members initially approached to participate, six agreed. Once their agreement was obtained, a formal letter was then sent to the selected faculty asking that contact be made by email and a suitable meeting place arranged. For the most part, inter-
views took place in the offices of the faculty and lasted an hour.

Data were collected using a semi-structured interview comprised of five open-ended questions.

1. What were your experiences using learntainment strategies as teaching and assessment tools?
2. What concerns and or constraints did you experience using learntainment strategy?
3. What strategies did you use to facilitate active learning?
4. What does this mean for you now, will you continue using it?
5. What value, if any, has been derived from using the learntainment teaching and assessment strategies?

The interviewees were asked these open-ended questions about their experiences to explore their perceptions and to provide a better understanding of their experiences, feelings, beliefs, and convictions about learntainment instructional and assessment strategies.

Research Limitations

Beyond the obvious limitation of a very small sample size, an interpretivist researcher can never be completely neutral because she/he will carry her/his background and beliefs into the research situation. In this study, the author worked as faculty member of institutions in Jamaica and the US and, up to fall of 2009, was a doctoral student employing learntainment as a teaching and assessment strategy in a Midwest U.S. university. In addition, along with a colleague, the author developed the learntainment teaching strategy and, as such, brought this experience to the analysis. Further, the constructivist approach carries the risk of confirmation bias (unintentionally missing contradictory evidence that would mediate against conclusions and the narrative fallacy) – the tendency of human beings to impute stories in any set of data regardless of whether the stories are valid.

Faculty Profile

Three faculty members taught in tourism and hospitality departments and had several years of teaching experience across various years. Two faculty members taught both in Jamaica and the US, also across various years. Of the other three, one was in a business school with less than a year of teaching experience and taught only first-year students and the other two had twenty-five years experience in a business school. All three taught courses in tourism and hospitality.

Class Size and Room Setup

With the exception of the community college in Jamaica, which had tablet arm chairs joined in blocks of three or four, the other college and universities in the US used a room set up comprising one large conference table or several tables configured together into one large seating area, or lecture/theatre rooms with fixed seating and a well-defined “front” or main lecture area in the front of the room. The college and universities in the US were also equipped with new audio-visual technologies: overhead projectors, multimedia projectors, computers, and DVD and video players. In contrast, the college in Jamaica, though not equipped with the technology, offered the potential to access limited equipment for use. The class size at the community college in Jamaica was approximately 45 students, whereas in the U.S., class sizes were between 20 and 30.

Data Analysis

The interviews were audio-recorded, transcribed, and coded. Each interview was assigned a code, for example “faculty 1, Ms A. June 20 2007”. In the case where more than one interview was done on a specific date, the interviews were identified in a similar fashion; however a superscript numeric value was assigned such as (Faculty 2, Mr.-B, August 18, 20071 and Mrs. C. August 18 20072) after which the researcher listened to the recording and made notes. The assigned interviews were coded using a color scheme. These notes were then documented in a
journal. From these statements, meaning units were derived, and clustered in themes after the removal of repetitive and overlapping statements. Textual descriptions of the participants’ experiences were developed from the clustered themes and meaning units.

**Findings**

Overcoming tension between frustration with existing systems and visions of new possibilities was the overarching theme identified. This theme is structured around several other themes: experiencing frustration with existing systems and visions of new possibilities, plus sub-themes: bureaucratic padlock and metamorphosis of assessment. The frustration experienced can be viewed as those factors (real or perceived) that hinder or caused faculty to feel restricted in implementing a learntertainment strategy.

**Frustration with Existing Systems**

Increased work load, time-consumption, lack of resources, fear of the unknown, lack of autonomy, lack of recognition, feeling disempowered, lack of incentives, blockage of information flow, and disenchantment with decision-makers and the decision-making process are common concerns invoked by all interviewees. Phrases such as “red tape”, “inflexible”, “organizational politics”, “insensitivity”, “self-doubt”, and “frustration with the status quo” were frequently used. The structure of the institutions themselves contributed to the frustration experienced due to the complexity of their systems. Intense feelings were generated from the frustrations and challenges experienced by faculty based on their perceptions of being hindered by bureaucratic padlock. Faculty indicated that the bulk of the work had to be done prior to the activities and, as a result of the bureaucratic padlock, it took a very long time to obtain material that was needed.

“It is very time consuming but enjoyable at the same time because you feel like you need to constantly be up to date with technology, the latest lingo, music, what’s new on BET. It is a 24/7 format. When preparing for games for example, I have to prepare all questions, props, etc. before the class activity. This I have found to be very time consuming for myself as well as to other faculty members who also use the strategy. We already have too much work to do”.

The faculty were constantly apprehensive about, and frustrated by, their efforts to obtain material needed to facilitate the learntertainment strategy. It affected their ability to structure and use time effectively. They waged a constant battle to get the material needed, to get over-time approved, to find the time and energy needed for the amount of work that they had to do. The tasks associated with learntertainment were time consuming. They felt that they needed to learn how to use their time and limited material effectively. Target dates and deadlines made them anxious and they felt that they were forced to neglect some activities in favor of other demands on their time. The limited time available in which to complete the various tasks also made it difficult to work alone, and drained their energy. However, by team teaching and including students in the process, interaction among faculty and between faculty and students was strengthened, thus allowing both to feel empowered. Students were more motivated, had more confidence and felt valued.

“The students were motivated by the change, the fun associated with learntertainment as did myself and the token given as incentives further sweeten the pot. But girl, I could not afford it and you and I know about all the red tape one has to go through to get... to get requisition, more so you have to be in the right place at the right time to get your needs to the principal’s ear or to get in to see her to discuss material need. That was the most frustrating part and at
times I was tempted to scrap the whole thing.”

The attempt to employ learntertainment was experienced as stressful. Learntertainment was experienced as frustrating, demanding, and daunting. Faculty became irritated, frustrated, disillusioned and pessimistic, especially when they felt that there was no satisfactory progress in their work because organizational politics was at play, administration inflexible and insensitive. However, once the problem of material was addressed, they were more motivated, and positive about continuing, and more relaxed. Initially they had seen learntertainment as something that would not be taken seriously, extra work not worthy of their time and effort, and they had therefore been apprehensive and afraid of getting caught up or hooked on this strategy.

“. . . however, a major concern I had was that it would not be taken seriously as a form of assessment by the powers that be even if it worked, our management system is not receptive to change plus it will remove people from their comfort zone. We are often asked to be creative, use our initiative, get students more involved, challenge them, get them thinking, not just regurgitate and to do more to motivate them to learn. That’s a lot of responsibility but where is the authority to go with it. In terms of being innovative, we are held on a tight leash. We have no autonomy, not in the true sense of the word. . . Quite frankly I was quite skeptical and thought it was a joke. I feared that management was just humoring us and that it would not ever be considered an acceptable assessment strategy no matter how effective it is.”

However, as they became more involved and interested, and as they saw the results, they also became positive.

“. . . The fun that is experienced by both the students and faculty provides positive experiences. Many students have a phobia for some forms of assessment (e.g. exams) so when they are given an opportunity to have fun while they are being assessed, they tend to enjoy it. Their pleasure can in itself provide instructors with a sense of pleasure too.”

Visions of New Possibilities

Negative feelings were replaced by hope and personal vindication as the strategy’s effectiveness became evident. Faculty members commented on their recognition of needed adjustments in the assessment process and pointed out that learntertainment strategies were an effective assessment method that allows students to convey the concepts they had learned. These strategies also demanded attention to the social and public nature of understanding. Consequently, faculty became innovative, interest in their jobs increased, they became more focused, and they not only incorporated fun but also students in the teaching and assessment process. This, they pointed out, made teaching less tedious and facilitated greater teacher/student interactions.

“I felt vindicated, my faith in my abilities as a lecturer was renewed. I had begun to doubt my capability as a teacher in light of the well banded statement ‘the teacher did not teach if the students do not learn’. I feel good, there seems to be a light at the end of the tunnel.”

Some faculty initially harbored unrealistic expectations of what this novel instructional strategy entailed. They were either over-confident and opti-
mistic, because they perceived the event as relatively simple, straightforward, juvenile and believed that they knew what was expected of them, while others felt unsure, unable, and unwilling to become involved and doubted their ability to shoulder the responsibilities of a novel teaching strategy all on their own. They felt that they needed more support from their supervisors and from university/college administration. They were disillusioned when the added support that they anticipated did not materialize, but very grateful when they did receive some support. However, their perceptions changed as the learntertainment strategy progressed. When they were forced to make their own decisions and to use their own initiative, they experienced it as a personal revelation.

They discovered hidden qualities and strengths in themselves, and they experienced personal growth. In the end they felt stronger and surer of themselves. Learntertainment demanded long hours from them, but they were proud of their achievements and derived great pleasure and satisfaction from their students’ accomplishments. They felt that they were rewarded for their hard work. They realized that learntertainment demands tenacity, determination and commitment. As they discovered these characteristics in themselves they felt more confident in handling the challenges of the learntertainment teaching and assessment strategy.

The feedback from faculty indicated that learntertainment assessment aids the identification of topics/areas that students do not understand. In addition, educators were able to provide on-the-spot feedback to students, which allowed students to know how well they did or did not perform. It also helped educators identify weak students and make arrangements for corrective action. Some faculty members were visibly surprised at how much fun they had, and also, at information (sometimes new to the faculty member) that students brought to the fore through their presentations, suggestions, and solutions to problems.

“I thoroughly enjoyed it. It made grading much, much, easier particularly considering the size of our classes. What can I say about my experience uuumh! It was an ‘ah ahh’ moment for me. I could see the light of understanding evidenced in the eyes of students (pause) eyes that were once dull and blank. Students visibly came to life; they were more responsive, readily offered suggestions and shared ideas as to other types of learntertainment strategy.”

One recurring point that is worthy of mention was that although faculty thought the approach was cutting edge and they would like to continue to explore its use, some faculty expressed concern about the indecisiveness of management and getting their hopes up that learntertainment strategy would be adopted for use in collaboration with already existing traditional methods of assessment.

“A major concern though, for me as well as the others is the indecisiveness of management. We fear getting our hopes up that ‘learntertainment’ strategy would be adopted for use in collaboration with already existing traditional methods of assessment only to have them unceremoniously dashed. Management is known to be fickle like that.”

Research about the learning process has demonstrated that learning occurs when students are actively engaged, has opportunities for interaction with others, is presented with challenging situations or questions that require critical thinking skills, and are surrounded by a nurturing fun environment (Chickering & Gamson, 1987; McKeachie et al., 1986.). Furthermore research has suggested that to achieve these goals faculty need to be knowledgeable of alternative techniques and strategies for questioning and discussion (Hyman 1980) and need to create a
supportive intellectual and emotional environment that encourages students to take risks (Lowman 1984).

Faculty indicated that the learntertainment techniques provide opportunities for higher order thinking as opposed to passive listening. The techniques they pointed out reinforce listening to others and provide opportunity for immediate feedback and adjustment of thought.

“However, Change is inevitable and a part of life. This change however is welcomed, it is positive and I feel honored to be a part of what might be a possible breakthrough in non-standardized assessment. I believe that it is a step in the right direction; learntertainment is a positive change towards becoming an accepted viable working strategy learning and assessment.”

Learntertainment strategy also promotes greater student-faculty and student-student interaction. In so doing, problems or misunderstandings can quickly be addressed. In addition, learntertainment strategies also:

1. Contribute to increases in student retention and reduced anxiety among students. Students are not overloaded with information and their grades are not dependent solely on traditional assessment. Thus, students actually get time to think about, to talk about, and process information.

2. Provide opportunities for students to connect the content to real life. Students who are shy or who are often hesitant to speak up and offer opinions, especially in very large classes find it easier to share. No answer/response is perceived as wrong and there is value added by every point made thereby affording students opportunities to provide real life examples of the content being discussed, thus increasing the relevancy of the learning.

3. Builds self-esteem in students. Students tend to understand the information better because they must articulate the content to each other. Greater satisfaction with the learning experience occurs as students make personal connections to the content. Enjoyment of learning often leads to greater retention. Interaction often promotes a more positive attitude toward the subject matter or course.

4. Encourages alternative forms of assessment. Faculty members perceived that they had greater opportunities to observe the actual processing of information, seeing the results of group or individual projects/presentations. The applied projects/presentations they believe indicates true knowledge (Bean, 1996; Bonwell, & James, 1991; Fink, 2003; Foyle, 1995)

**Conclusion**

As the calls for the teaching and learning process to become more interactive, collaborative, and learntertaining increase, the call for assessment to move away from traditional testing to alternative assessment, should also pick up momentum. This paper has discussed the experiences of faculty using the technique rather than simply opinions. Therefore, in this study, the experiences of interest to the researcher are not necessarily the experiences of the present, but the participants’ reflections on their experiences in teaching in a learntertainment environment.

The study further highlights the dynamics of learntertainment, and how it can be used as an effective teaching, learning, and assessment tool in a tourism and hospitality classroom environment. It also discusses how learntertainment tactics and strategies can also be used as assessment tools, thereby, making learntertainment an all-round teaching-learning tool. The strategies that have been discussed can be fun for tourism and hospitality students and faculty and can effectively serve as alternative methods of assessing of students learning.
Findings indicated that learntertainment resulted in faculty experiencing visions of new possibilities. Negative feelings regarding existing assessment and teaching strategies were replaced by hope and personal vindication as the strategy’s effectiveness became evident. This essence accounted for a large segment of how participants perceived the effectiveness of the strategy, how they experienced it, their move towards acceptance, and what it meant for their work lives.

By using the information learned about learntertainment, faculty become aware of alternative instructional styles which can encourage the same level of participation and inclusion by all students. These observed differences in learntertainment strategy suggest that the inclusion of students and the incorporation of fun activities in the learning process may be helpful in creating successful learning opportunities for all students. The purpose of using learntertainment teaching strategies is to help students think about material presented during class. Faculty need to know what students don’t understand before the students leave class. The use of learntertainment teaching strategies can help faculty find student misunderstandings and allow faculty to give students needed information during class. In addition, learntertainment facilitated easier grading, eliminated subjectivity, provided on the spot feedback, allowed educators to identify weak students and identify tactics for corrective action.

Despite there being certain concerns and constraints experienced by the faculty, many also had a good number of positive experiences when teaching in a learntertainment environment. Although the faculty expressed great concern about personal time pressure, inadequacy of material and equipment, or worry about the validity and acceptability of the assessment strategy for students, these concerns did not preclude them from experiencing some very positive aspects of their use of learntertainment teaching and assessment strategies. In conclusion, educators are encouraged to rethink the present situation of using tests/exams as the main, and in some cases, the only form of assessment, and instead adopt a new approach that is a combination of testing and alternative assessment strategies such as learntertainment assessment.

Learntertainment teaching can enhance the traditional approach to learning; however, educators must understand how to adopt and maximize this new mode of instruction. Based on the results, the researcher offers the following recommendations for preparing and assisting faculty who will be using the learntertainment strategy.

1. The practice of learntertainment teaching must transparently demonstrate mutuality, respect, and trust to foster a transformative learning environment. No relationship can exist without caring for and understanding the learner.

2. All stakeholders involved in learntertainment must work collaboratively to define and establish new landmarks and transitions into new techniques.

3. Along with an orientation program, administrators must consider providing the necessary tools and or equipment for a smooth transition to the learntertainment environment.

4. In order for ‘Learntertainment’ assessment to be effective, there must be an agreement between course objectives and assessment. The assessment must flow in tandem with high performance standards as stated in the learning outcomes and goals, and must encourage and lead to learning; not just measure what has been learned, but what is valued; not just those skills that are quick and easy to measure.

5. Classroom assessment can be embedded into a ‘Learntertainment’ instructional environment; however it has to be carefully and thoughtfully done. It should be a part of the learning process rather than a conclusion to
the learning process. ‘Learntertainment’ assessment must be fair, equitable, valid and reliable in order to effectively assess how students do research, evaluate situations, apply knowledge, think critically and present findings.

Finally, this study was exploratory in nature and the results may be limited only to the faculty who participated in the investigation. Thus, only general suggestions for future research can be offered. One possibility is to explore the experiences of learners who have been taught using learntertainment strategies. Other possibilities are to examine students’ perceptions of learntertainment effectiveness as an instructional method and the comparative effects of learntertainment versus traditional teaching methods on tourism and hospitality undergraduate students.
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The Role of Outdoor Recreation in Promoting Human Health

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The Role of Outdoor Recreation in Promoting Human Health

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Abstract
This literature review demonstrates how outdoor recreation in urban, backcountry, and program settings can enhance human health. This study begins with a discussion about sedentary lifestyles and constraints hidden behind three nationwide surveys, which implies that outdoor recreation is a common life experience enjoyed by Americans. Benefits and opportunities are subsequently explored, including factors affecting increases in park use, as well as health promotion through interaction with nature and related outcomes of outdoor adventure programs.

Keywords: sedentary lifestyles, urban and neighborhood parks, nature, organized adventure activities

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Introduction

The National Survey on Recreation and the Environment (NSRE; 2000-2002) reveals that significant numbers of people (about 202 million people aged 16 or more) had attended at least one outdoor event during the previous 12 months. In addition, the fifty activities, classified as land-based, water-based and snow/ice-based, show diversity of activity. According to these findings, outdoor recreation is a standard life experience. Nonetheless, although Americans participate in a number of outdoor recreational activities, the frequencies and proportions of participation are not balanced (Cordell et al., 1999). For instance, walking is the most frequent activity (i.e. 108 days per person) due to low cost and convenience, such as its ability to provide travel to work places. Participation in other activities, on the other hand, may be limited by travel distance or financial capacity. Moreover, walking enthusiasts, who only represent 21.4% of the population according to NSRE 1994-1995, comprise 76% of total walking days, indicating that a large portion of the population’s walking days are below average.

The Outdoor Foundation (The Outdoor Foundation, 2009) reports on issues and trends of outdoor recreation. Approximately 48.6 % of Americans aged 6 or more participate in outdoor recreation, taking 11.16 billion outings. However, 43% of 135.9 million participants attended outdoor recreation activities less than once every two weeks in 2008, and the percentage of participation for youth aged 6 to 17 years old dropped 16.7% in total over a three year period. This decline indicates a trend of physical inactivity. This report also indicates that outdoor recreation participation can be constrained by the same factors found in NSRE. Another distinctive factor worth further research is the association between an individual’s life stage and leisure constraints (Son, Mowen, & Kerstetter, 2008). For example, an adolescent may be encouraged to participate in an activity alongside his peers. When reaching early adulthood, this individual may have to consider whether outdoor recreation is affordable.

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Fish and Wildlife Service & U.S. Census Bureau, 2006) presents information on participation in wildlife-related recreation. As in the other two surveys, wildlife-related recreation also reports massive numbers of participants (87.5 million people) and economic impacts. In 2006, $122.3 billion was spent on wild-life recreation. Participation has grown by approximately 5 million people since 2001, possibly because of a noticeable increase in wildlife watching. Despite this specific increase, the overall population, participation days, and expenditures of fishing and hunting have been on a gradual decline since 1996 (Fish and Wildlife Service & U.S. Census Bureau, 2006). One study indicates that anti-hunting attitudes and preferences, costs, commitments to life necessities, and accessibility to hunting grounds are possible constraints of hunting (Wright, Rodgers, & Backman, 2001).

As shown in the above discussion, these three nationwide surveys present similar issues. First, types of and places for outdoor recreation are diverse, and federal and state lands reserved for recreation use support such diversity (Ibrahim & Cordes, 2002). Second, outdoor recreation attracts a great number of participants and carries impressive economic influence. Third, even if opportunities for recreation seem sufficient, some people or communities will still face inequity of accessibility and quality (Floyd, Taylor, & Whitt-Glover, 2009).

Benefits and Opportunities

The reports discussed above also provide information in terms of enhancing outdoor recreation participation. First, human ecological systems (Bronfenbrenner, 1977; Gobster, 2005) can become protective factors facilitating outdoor recreation participation. According to the Outdoor Foundation, parents are the most influential factor in children’s participation, compared to other factors such as
school and peers. In addition, participation in certain gateway activities, such as fishing, hiking, jogging, camping, and mountain biking, may lead to learning fundamental skills in outdoor recreation and further participation (The Outdoor Foundation, 2009). Outdoor recreation enables participants to discover intrinsic rewards such as pleasure, interest and skill development, encouraging them to pursue more challenges (Csikszentmihalyi, 1990).

Studies in outdoor recreation show that both the environment, whether urban parks or backcountry (Henderson & Bialeschki, 2005; Ho, Payne, Orsega-Smith, & Godbey, 2003), and organized programs provide numerous health benefits through careful consideration of participant needs (Hattie, Marsh, Neill, & Richards, 1997; McAvoy, 2001). Therefore, the health benefits and opportunities offered by outdoor recreation should be further discussed.

**Urban and Neighborhood Parks**

The presence of a city park or trail can be beneficial to the overall health of residents. Orsega-Smith, Mowen, Payne, and Godbey (2004) found that the interaction of stress and park use is associated with body mass index (BMI) and systolic blood pressure. For people with high stress levels, awareness of the healthy benefits of a park may direct them toward healthier behaviors (Walker, 2009). Moreover, the presence of neighborhood parks is also related to the level of physical activity for children (Floyd, Spengler, Maddock, Gobster, & Suau, 2008b).

Urban and neighborhood parks facilitate psychological and social health. According to Tinsley, Tinsley, and Croskeys (2002), urban parks promote positive outcomes rooted in catharsis, pleasure seeking, exercising, gaining a sense of familiarity, interacting with others, self-enhancement, and altruism for senior adults. Similar psycho-social benefits have also been determined, stemming from experiences in solitude and an improved appreciation of nature (Hung & Crompton, 2006). For female users, a safe park provides social and emotional support, leading to increased physical activities. In addition, an urban park allows females the choice to connect with or be away from family to care for themselves (Krenichyn, 2004).

Besides psycho-social benefits, urban parks also serve environmental and educational purposes. For example, park users gain knowledge about wildlife and have more positive environmental attitudes than non-users (Randler, Höllwarth, & Schaal, 2007). Wolch and Zhang (2004) suggest that attitudes toward nature are linked with time spent in a natural environment such as an urban beach. Individual, social, and environmental factors all affect frequencies and intensities of park use and physical activities there. For individual factors, people with high stress levels tend to stay longer than their counterparts with low stress levels (Orsega-Smith et al., 2004). Age and gender also influence the intensity of physical activities (Floyd et al., 2008a). Gender accounts for varied perceptions on the importance of specific characteristics of a park. For example, females consider a traditional park landscape, the presence safety and maintenance facilities, and ethnicity sensitivity (e.g. bi-lingual signs) as critical indicators for park use (Ho et al., 2005). Environmental factors such as shade, type or structure of activities (Floyd et al., 2008a), temperature (Gobster, 2005) are associated with levels of physical activities. These criteria provide park managers and designers solid evidence of how to build and integrate a park into a neighborhood effectively and efficiently (Godbey, Caldwell, Floyd, & Payne, 2005).

**Nature**

Incorporating natural elements into a recreational environment can be mentally restorative for human beings. Two primary theories, Attention Restoration Theory (ART; Kaplan, 2001) and Psycho-evolutionary Theory (PET; Ulrich, Simons, & Miles, 2003), have been applied broadly to examine positive impacts of greenness on residents, park users, and patients. ART emphasizes that direct attention is
a limited resource used to process information and other cognitive works. A prolonged use of direct attention leads to fatigue; thus, a restorative experience is needed to regain capacity (Kaplan, 1995). Nature is mentally restorative because of four characteristics: being away, fascination, extent, and compatibility. The assumption is that an individual visiting nature is able to escape from needs requiring direct attention. Nature itself is interesting and thus does not require effort to attract attention. In addition, a restorative environment must contain the individual and fit his behaviors (Kaplan, 1995; Scopelliti & Giuliani, 2004). PET emphasizes the effect of nature on stress reduction. This theory has been established on the assumption that human beings have a genetic tendency to affiliate with nature, while they do not have such a connection with urban environments, which are full of stimulation and uncontrollable issues that cause stress (Ulrich, 1984; Ulrich et al., 2003).

By employing these two theories, scholars use actual (e.g., through a window or in the physical environment) or simulated (e.g., slides) natural scenes to examine people’s responses. General benefits, including attention restoration and stress reduction, have been supported (Berto, 2005; Chang, Chen, Hammitt, & Machnik, 2007; Kaplan, 2001; Hartig, Mang, & Evans, 1991; Ulrich, 1984). Viewing natural scenes also indicated improvement in physiological responses such as muscle tension, brain waves, pulse, and heart rate (Chang et al., 2007; Ulrich, 1984) and cognitive performances (Berto, 2005; Bodin & Hartig, 2003; Hartig et al., 1991). With regard to psychological and social benefits, viewing natural scenes enhances psychological well-being (Kaplan, 2001), satisfaction with neighborhoods (Coley, Sullivan, & Kuo, 1997; Kaplan, 2001), and emotional regulation (Korpela, Hartig, Kaiser, & Fuhrer, 2001) and reduces aggression (Kuo & Sullivan, 2001) and anger (Kweon, Ulrich, Walker, & Tassinary, 2008). In addition, greenness is also associated with alleviation of symptoms of attention deficit disorder or ADD (Faber Taylor, Kuo, & Sullivan, 2001) and achievement of transcendent experiences (Williams & Harvey, 2001).

Reviewing studies regarding environmental psychology and behavior prompts several inspirations. First, aside from the restorative effects of nature, Kaplan (2001) suggests that nature-based activities such as hiking or biking are associated with effective functioning, and gardening provides opportunities to interact with neighbors. Faber Taylor et al. (2001), moreover, find that a green play setting may encourage a more positive influence on the severity of ADD than an indoor setting. Parents in this study reported greater student involvement in school work and activities requiring high levels of attention such as fishing after green play. In addition, nature-based activity may have therapeutic effects (Ewert, Hollenhorst, McAvoy, & Russell, 2003). Nature provides an unfamiliar and isolated environment that challenges its users, forcing them to master skills and work together to satisfy a variety of needs. During this process, users may gain a variety of positive outcomes such as improved fitness, intrapersonal and interpersonal skills, and hardiness. These outcomes may be great assets when facing adversity and stress in reality as well as provide meaningful experience and build life-long interest (Delle Fave et al., 2003; Ewert & Hollenhorst, 1989).

Second, as nature presents its effects on mental restoration, how to incorporate natural elements into recreation areas may need to be considered. For example, a savannah or traditional park landscape is highly preferred because of its levels of tranquility (Herzog & Chernick, 2000). Tranquility refers to openness of space and a well-maintained environment, providing a sense of safety. In fact, a study conducted by Ho and colleagues shows that females view a traditional park landscape and logistics as important characteristics that attract them to urban parks (Ho et al., 2005). Also, other
natural elements can carry great significance to human beings. The presence of trees may offer both a sense of peace (Kaplan, 2001) and a location for social gathering (Coley et al., 1997). In addition, a water scene is considered highly mentally restorative (Felsten, 2009; Purcell, Peron, & Berto, 2001). In fact, natural settings with trees and water are the most favored facilities for senior park users regardless of ethnicity (Tinsley et al., 2002).

Third, objective measures are often introduced into these studies, providing solid evidence of the effect of nature instead of merely offering subjective perceptions. In Ulrich’s study (1981), he examined whether natural scenes ease arousal or heart rates by performing EEGs and EKGs. In another study, Ulrich (1984) found that a patient in a room with a window viewing nature used fewer painkillers than a patient in a room with an urban view. Physiological response is also used to examine Attention Restoration Theory. As mentioned above, Chang and colleagues (2007) tested the effects of nature scenes on muscle tension (i.e., electromyography, electroencephalography, and pulse). In addition, scholars also test memory, reaction time (Berman, Jonides, & Kaplan, 2008), and proofreading performance (Hartig et al., 1991). As Ulrich (1981) asserts, objective measures are more likely to draw attention from the government and public. The study conducted by Orsega-Smith et al. (2004) may be a good model for considering how to introduce objective measures in research on outdoor recreation.

Organized Activities/Program

From the mid-1990s to the early 2000s, a number of meta-analysis studies were conducted to summarize the outcomes and attributes of outdoor adventure programs (Cason & Gillis, 1994; Hans, 2000; Hattie et al., 1997; Wilson & Lipsey, 2000). These studies collected comprehensive empirical evidence and related outcomes to components of programs (Cason & Gillis, 1994). In addition, effect size can be an alternative to disclose program effects failed to be detected by significance tests due to challenges such as sample sizes.

Most outcomes in these studies focus on psychological and social health aspects such as personality, self-concept, interpersonal skills, leadership, behavioral correction, and academic attainment and achievement. Nonetheless, these studies also present issues with assessing outdoor adventure programs. First, even though the effect size of a follow-up phase can be impressive, relatively few programs incorporate one (Hattie et al., 1997). Moreover, few outdoor education programs use standard tests for evaluation, increasing the difficulty of obtaining solid evidence on the effects (Neill & Richards, 1998).

The components of programs and characteristics of participants and their outcome associations are also investigated in these meta-analyses. Length, duration, goals, and types of outdoor adventure programs, as well as age, gender, and population all influence outcome. Hattie and his colleagues (1997) suggest that long-term and Outward Bound programs are more effective than others. Hans (2000) suggests that using outdoor programs as therapeutic intervention may be effective with regard to participants’ locus of control when compared to other programs. In addition, Wilson and Lipsey (2000) claim that the intensity of physical activities and therapeutic components are effective ways to reduce delinquent behaviors.

Besides the investigation of program components conducted by meta-analyses, a number of articles attempt to clarify the relationship between individual characteristics and the mechanisms of outdoor programs with regard to outcomes (Sibthorp, 2003; Sibthorp, Paisley, & Gookin, 2007). In a study examining associations between the Outward Bound model and self-efficacy, two course components, personal empowerment and learning relevance, account for changes in self-efficacy (Sibthorp, 2003). In a study exploring the National Outdoor Leadership School, personal empowerment
and previous outdoor experience proved relevant to six outcomes regarding interpersonal skills, metacognitive skills, environmental awareness, and outdoor skills. Other personal characteristics such as gender and age also predict changes in outcomes. In another study, Russell & Phillips-Miller (2002) summarize a number of components in wilderness therapy that promote behavioral correction of youth. A trusting relationship with caring adults, a positive peer dynamic, time for reflection, and opportunities to be challenged are considered important. In general, future research may focus on identifying the characteristics of participants and programs, understanding the impacts of these variables, and conceptualizing the associations between process and outcomes.

Outdoor adventure programs can provide diverse opportunities for people to enhance their health (Ewert & McAvoy, 2000). These populations include people with disabilities and specialized groups such as all female, youth, and senior programs. In a study by Thomas (2004), an outdoor experiential program served as adjunct therapy for people with acquired brain injuries to improve their quality of life. Participants who finished a series of interventions perceived a higher and more prolonged improvement in quality of life than the comparison group. In addition, outdoor adventure programs focus on the positivity instead of the deficiency of the participants; therefore, concepts such as positive psychology (Sheard & Golby, 2006) and positive youth development (Larson, 2000; Sklars, Anderson, & Autry, 2007) easily fit into the curriculum and help participants build resilience and social capital.

**Conclusions and Suggestions**

This study discusses the benefits and opportunities of outdoor recreation environments and activities promoting human health. Nature and outdoor recreation do not only take place in backcountry environments, which may be difficult for some populations to access, but also in urban and residential areas. To include diverse populations in outdoor recreation, practitioners should consider multiple factors affecting land use, such as trail accessibility for populations with disabilities, safety devices (e.g., light, emergency radio), shady places in hot areas, and visual/audio assistance in multiple languages. In addition, green spaces and natural scenery should be considered to help the public restore mental health, especially given that the amount of stress and attention exhaustion that frequently occur in urban settings and at hospitals.

In addition to more discussions regarding factors enhancing park use, the recent research trend in outdoor recreation pays significant attention to exploring program components that facilitate desired outcomes. The research indicates that learning is effective when participants are able to control their environment and transfer learning outcomes back to real life. How instructors create and facilitate this empowered learning atmosphere should be further investigated; Russell & Phillips-Miller’s study (2002) offers a reference for discussing the mechanisms of outdoor adventure programs. Although this study has introduced factors regarding increasing park use and enhancing health, as a whole, the academic field should synthesize these factors into reports ready for practical uses.

The theories of outdoor recreation programs that highlight the importance of natural scenes to human health, such as attention restoration theory and psychoevolutionary theory, need to be considered. To apply these theories to the field, scholars should focus on human-nature interaction. As previous studies (Kaplan, 2001) have shown the benefits of nature-based activities (i.e., personal recreation), future studies may also consider how organized programs incorporate nature into their course components and explore its impact.

Finally, the outcomes of outdoor recreation should be continuously explored. Currently, outcomes measured by brain activity and other physical indices are relatively less used in the field of leisure and recreation when compared to

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subjective outcomes, such as perception and attitudes. Including both types of outcomes in studies would better serve to persuade and inform the general public and policy makers about the effectiveness of outdoor recreation.
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Depending upon the definition of outdoor recreation, the NSRE 2000 and ORP 2008 have different bases to estimate populations. For example, walking and sight-seeing are included in the NSRE but not in the ORP. The NSRE has a broader scope of definition.
Applying the Health Belief Model to Physical Activity Engagement Among Older Adults

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Applying the Health Belief Model to Physical Activity Engagement Among Older Adults

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Abstract
We are currently undergoing one of the largest population swings in history, as over 79 million people will turn 65 years by 2012. This steadily growing population will soon be the largest demographic in North America and also one of the most inactive. Currently, over two-thirds are not meeting the recommended daily levels of physical activity and consequently developing chronic illnesses brought on by a sedentary lifestyle. As health and exercise practitioners, it is easy to rely on traditional methods of intervention; however, it is imperative that we consider the role that individual values and beliefs play on engagement and adherence, far before the “first step” is even taken. By applying the Health Belief Model to current research around older adults and physical activity engagement, we can better understand and identify health behaviours associated with the older adult population and develop strong intervention strategies for the future.

Keywords: Health Belief Model, Older Adult, Physical Activity, Engagement

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Introduction

As noted by the United States Census Bureau, 12.9% of the American population is currently 65 years or older with over 79 million “baby boomers” reaching this pivotal age by 2011 (Author Unknown, 2011). As we move through this major population swing, there is growing evidence that this demographic will have a considerable effect on existing systems, most notably health care, as chronic, and potentially preventable, diseases require more and more additional resources. As one can attest, we are frequently informed that the prevention of disease can literally begin with the first step. However, King (2001) noted only a small minority of the older adult population is meeting the recommended levels of physical activity. Furthermore, Goggin and Morrow Jr. (2001) found that many older adults, although aware of the impact of physical activity on their own health, did not participate in sufficient physical activity to see any significant positive health and quality-of-life benefits. Although there is a great deal of information on the effects of physical activity and programming interventions, it could be concluded that there may be strong benefits to correlating the existing information with a more holistic look at older adult’s health behaviors and its application to physical activity engagement.

Benefits of Physical Activity In Older Adults

The benefits of physical activity for older adults are well recognized and have shown to improve the physical, functional and psychological health of this population, as well as maintain the important roles of independence and vitality. Micheli (1995) suggested there are two main therapeutic outcomes of physical activity for older adults: 1) direct medical benefits, such as aiding in the control of hypertension, and 2) preventive medicine (i.e. prevention of cardiovascular disease).

More specifically, moderate physical activity has shown to greatly improve physiological functioning by increasing heart vitality, decreasing hypertension, and reducing arteriosclerosis as well as rates of cardiovascular disease (Seguin & Nelson, 2003). It has also shown to increase muscle function, by enhancing strength and power, augmenting tendon and ligament flexibility (Micheli, 1995), and significantly minimizing or even reversing sarcopenia (Avila-Funes & Garcia-Mayo, 2004). Physical activity has also proven psychological and cognitive benefits for older adults including augmented reasoning, working memory and reaction time (Louise-Smith & Hartley, 1989), decreases in levels of anxiety and depression (King, Carr, Taylor & Haskell, 1993) and improved executive control through the enhancement of prefrontal and temporal grey matter (Erikson & Kramer, 2009).

More specifically, both aerobic and resistance training have shown to have a positive effect on an older adult’s muscle mass as well as positively change body composition (Hunter, McCarthy & Bamman, 2004). These types of activities have also shown to improve balance and coordination, reduce rates of osteoporotic fractures (Seguin & Nelson, 2003), enhance gait velocity and power, and increase spontaneous physical activity levels (Sharkey, 2002). Moreover, moderate forms of aerobic exercise have also shown to increase levels of cardiorespiratory fitness (Nakamura, Tanaka, Tabushita, Sakai & Shigematsu, 2005), improve neurophysiologist-
tical functioning (Colcombe & Kramer, 2003), and reduce brain tissue loss (Raz, Webb, Cohen, McAuley & Kramer, 2002) Aerobic exercise has shown to have positive effects on reducing rates of smoking and alcohol consumption by older adults (Micheli, 1995).

Based on the volume of information surrounding the benefits of physical activity, one could surmise that the advantages alone would compel an individual to become more physically active; however, an individual’s value and belief system has shown to have a significant impact on the identification and evaluation of individual risk factors as well as the readiness to take action.

**The Health Belief Model**

The Health Belief Model, constructed by social psychologists Hochbaum, Rosenstock and Kegels in the 1950s to explore tuberculosis screening rates, was developed to better predict and explain individual health behaviors. Over time, this model has been applied to a wide range of health issues, including breast cancer screening in older women and sexual health behaviors in adolescents (Glanz, Rimer & Lewis, 2002). More specifically, this paradigm looks deeper into the relationship between an individual’s confidence to take action (self-efficacy) if they perceive themselves to be susceptible to a condition, the identification of the potential severity of a sequelae, and evaluation of perceived benefits versus barriers (Glanz et al, 2002).

When applied to physical activity engagement of older adults, this model can help explain the likelihood of an individual engaging in physical activity, based on the perceived threats brought about by inactivity and the individual’s conclusion that the potential benefits could far outweigh the risks (Gould & Weinberg, 1999).

The six concepts of the HBM as outlined by Glanz, Marcus-Lewis & Rimer (1997) include:

- Perceived Susceptibility
- Perceived Severity
- Perceived Benefits
- Perceived Barriers
- Self-Efficacy
- Cues to Action

**Perceived Susceptibility**

The concept of perceived susceptibility involves one’s own opinion of the probability of developing a condition (Glanz et al, 2002). A study by Khattah, Abolofotouh, Alkija, al-Humaidi & al–Wahat (1999), asked 280 older males and females to assess their risk of developing cardiovascular disease after completing their annual physicals. It was found that very few surveyed perceived their own behavior to be harmful; however, their own doctors had identified numerous risk factors, including high fat intake, obesity and/or low levels of physical activity, as potential causes of disease in those individuals. Interestingly, a study by Richmond, McCracken & Broad (1996) concluded that many older adults relying on information sources other than medical professionals, including relatives/friends and books/magazines, greatly underestimated their own susceptibility to osteoporosis and dementia as well as the significance of regular exercise. Moreover, in a study of 112 older adults, many reported a high frequency of health-promoting actions (i.e. eating well, regular medical check-ups, etc.) as they saw themselves vulnerable to serious disease; however, it was noted that they were also
less likely to use chronic, mild symptoms as illness warnings (Prohaska, Leventhal, Leventhal & Keller, 1985).

**Perceived Severity**

Beliefs concerning the significance of contracting an illness or condition and the subsequent medical consequences (i.e. pain, disability and death) and the social costs (the effect on an individual’s work, family and social relationships) were identified as perceived severity (Glanz et al., 2002). A study of older adult’s risks and attitudes toward cardiovascular disease was developed by Silgay, Muir, Coulter, Thorogood & Roe (1993). It was concluded that those identified within the surveyed group as leading a sedentary lifestyle showed a marked disparity between their own health choices and the likelihood of acquiring the disease. Furthermore, a survey of older adults with chronic conditions heavily supported the concept that an individual’s psychological status, perceived severity of illness and vulnerability to complications heavily influenced rates of medication self-behaviors. (Connelly, 1993).

Stretcher & Rosenstock (1997) identified that there is a close correlation between perceived susceptibility and perceived severity and labeled it perceived threat. Based on this idea, Glanz et al (2002) recommended that the application of the Health Belief Model should first define the population at risk, personalize this risk (based on individual behavior and characteristics) and show that there is reliability between the perceived risk and actual risk as well as the negative consequences associated with the acquirement of the condition. This is strongly supported by the need to first define individual health behaviors and risk factors within a population (Martin, 2010), and develop intervention strategies based on an individual’s perceived susceptibility and severity of developing a condition (Martin, Haskard-Zolnierel, & D’imatteo, 2010). However, it should be noted that there is a lack of current research further exploring this relationship. Recommendations for future research could include investigating the impact of educating older adults on the physiology of aging and its impact on individual beliefs of susceptibility and severity. Furthermore, it could be suggested that studies examining the belief of one’s perceived susceptibility versus actual risk of disease acquirement would be beneficial in future intervention strategies.

**Perceived Benefits**

Perceived benefits can be defined as one’s belief that undertaking a recommended action could decrease the risk or severity of potential illness or disease (Glanz, et al., 2002). Kelly, Zyzanski & Alemagno (1991) examined 215 patients in a health promotion trial and found that perceived benefits were a strong predictor of health behavior change, more explicitly in the areas of smoking, stress management, diet and exercise. Additionally, older adults taking part in a new physical activity program noted many positive benefits, including a strong sense of accomplishment and enjoyment as well as enhancement to physical performance. More specifically, it was noted that there was a correlation between identified positive effects and adherence rates (Bloch, 2004). Furthermore, a study conducted by Ferrini, Edlstein & Barrett-Connor (1994), found that those aged 50 – 69 years who engaged in regular physical activity reported significant benefits to their positive health behavior and were more likely to spend
money on healthy items like nutritious food and exercise programs. As research has proven, the benefits to both functional fitness and psychological health in older adults are numerous; however, the benefits of engaging in physical activity must have clear positive effects and should easily be defined by specific actions (Glanz et al, 2002).

Paterson, Jones & Rice (2007) noted that physical activity and exercise recommendations should focus on activity specificity and type and be dependent on an individual’s functional capacity and independence. However, Van der Bij & Laurant (2002) noted that there also needed to be a diverse range of individual and specific interventions for older adults to first become involved, and subsequently maintain engagement. Further research should be conducted to determine long-term success rates over a range of diverse interventions, including large scale therapeutic programs and smaller, more self-directed initiatives.

Perceived Barriers

The perceived barriers, or one’s belief around the tangible and psychological costs of the advised action, are noted to be the strongest predictor to changes in health behavior (Glanz et al, 2002). Moreover, Niven (1994) found that the negative aspects associated with taking an advised action have shown to significantly impede an individual’s rate of engagement. A survey of 409 randomly selected 65 – 84 year olds were asked to define barriers to their involvement in any form of physical activity. Although many reported knowing about the benefits of physical activity, those studied specifically identified pain (related to an existing condition), lack of interest, and facility accessibility as major barriers to participation (Crombie, Irvine, Williams, McGinnis, Slane, Alder & McMurdo (2004). Furthermore, Jancey, Clarke, Howat, Maycock & Lee (2009), found that many older adults expressed a need for more individualized program interventions.

Practical applications of the Health Belief Model in the reduction of identified barriers, as noted by Glanz et al (2002), include targeted intervention, preferred incentives and correction of misinformation. As noted by Cress, Buchner, Prohaska, Rimmer, Brown, Macera, DePietro & Chodzko (2006), best practices in the engagement of older adults should include multidimensional programming (including aerobic, resistance, and balance and flexibility training), a strong framework for behavior change (social support and self-efficacy), choice in programming options, individualized goal setting, positive reinforcement, and management of risk (positive risk/benefit ratio). In addition, Brawley, Rejeski & King (2003) found that diversity in programming environments could also increase participation rates within this population.

More specifically, Focht, Rejecki, Ambrosius, Katula & Messier (2005) identified that control beliefs and pain management were key areas that influenced older adult participation, however, they also noted that specific interventions based on these factors could target self-efficacy and pain management to increase participation in these identified older adults. A current example, based on this application, is the CHAMPS II program, developed to better engage older adults in regular physical activity. Within this programming framework, participants were involved in choice-based physical activity programming that took into account pre-
existing conditions, current abilities, preferred activity preferences and overall health and wellness. In addition, participants were also educated in physical activity safety, the role of self-efficacy, and how to best overcome barriers. Upon evaluation of this program, it was shown that there were meaningful increases in the rates of regular physical activity and noteworthy changes to current lifestyle behaviors (Stewart, Verbrincouer, McLellan, Gillis, Rush, Mills, King, Ritter, Brown & Bortz, 2001).

When exploring accessibility issues, strong evidence shows that community or home-based exercise programs for older adults continue to be very successful (Jones & Nies, 1996). King, Haskell, Taylor, Kraemer & DeBusk (1990) identified these types of programs as reducing transportation barriers and subsequently increasing fitness levels. More specifically, Cheadle, Eggeer, LoGerfo, Schwartz & Harris (2009) looked further into community-based intervention and promotion strategies based on the Southeast Seattle Senior Physical Activity Network (SESPAN). It was noted that, with appropriate support and resources, community-based physical activity reduced accessibility issues and aided in the creation of diverse programming opportunities for older adults within their own neighborhoods.

As illustrated above, reducing identified barriers to participation, through specific and individualized solutions have shown to have a strong correlation with the engagement of older adults in physical activity (Resnick, 2000). Based on this information, research utilizing the concepts within the Health Belief Model could help to better identify, and continually reevaluate, program interventions aimed to engage older adults on a short-term, and more importantly, a long-term basis. It could also be beneficial to explore the relationship of identified health behaviors and changes to activity preferences as they age.

In addition, the Health Belief Model could also be used to explore the relationship between physical activity rates and individuals with multiple conditions and/or pain management issues. As one might predict, there could be a strong relationship between preferred incentives (perhaps both intrinsic and extrinsic) and the reduction of barriers in older adults; however, this area has yet to be studied longitudinally. Moreover, information is also needed to better understand engagement and adherence rates in physical activity programming based in the home, community, and in a facility, as well as the role that technology could play in the future within these environments.

**Self-Efficacy**

For a behavior change to be successful, an individual must have confidence in one’s own ability to overcome perceived barriers and have a strong belief that a specific action will result in a positive outcome (Martin, Haskard-Zolnierek & Matteo, 2010). A strong sense of self-efficacy makes one more likely to initiate a course of action and influence the degree of effort expended and sustained over time (Glanz et al, 2002). Additionally, Resnick, Palmer, Jenkins & Spellbring (2000) remarked that age and gender as well as current mental and physical health have a marked effect on self-efficacy and could significantly impact potential interventions.

Conn (1998) remarked that self-efficacy had a strong effect on older adults’ participation
rates in physical activity, especially those who participated in sustained and lifelong exercise pursuits. This is supported by Woodward & Barry (2001), who additionally found self-efficacy was significantly important in the early (adoption) phase of an exercise program. A survey conducted with 135 men aged 55 years or older, found that those with strong self-efficacy assessed their lifestyles as more healthy and was shown to be a key component to increasing older men’s perceptions of their own health and well-being (Loeb, 2004). Although there is little research around the impact of self-efficacy on physical activity rates among older adults, it does have large programming implications around the provision of appropriate training and guidance, demonstration of desired behaviour, and goal setting (Glanz et al, 2002).

Specifically, it has been shown that positive health interventions, focusing on improving self-efficacy, strengthen positive benefits seen in older adults (Resnik, 2002). As Goggin & Morrow (2001) identified, intervention strategies utilized to increase self-efficacy must be directed at the specific needs and knowledge base of older adults as well as assess an individual’s knowledge and state of readiness. Furthermore, Sevick, Dunn, Morrow, Marcus, Chen & Blair (2000) recommend that participants be taught behavioral-based skills to better integrate moderate intensity physical activity into their daily lives.

By applying the Health Belief Model to self-efficacy and physical activity rates, it would be clear that there is a strong impact, not only in the initiation of physical activity, but also in long-term adherence rates of older adults. However, there is a strong need to further research the impact of self-efficacy on training and guidance methods, goal setting practices and individualized training programs.

**Cues to Action**

Perhaps the newest addition to the Health Belief Model, cues to action focuses on the readiness of an individual to take action, specifically based on factors that can be internally or externally driven. These cues could include bodily events, mass media, or environmental causes. Practical application of this concept includes pertinent how-to information and population-based health promotion (Glanz et al, 2002). Brawley, Rejeski & King (2003) found specific population-based strategies were shown to be extremely beneficial and, as Goggin & Morrow (2001) noted, should be structured differently when applied to varying age groups and for the different sexes.

Potentially due to the rather new introduction of this concept, long-term impact of population-based health promotion on engagement rates has not been studied extensively. Research around this area, as well as the impact of technology on health promotion as the older adult population becomes more proficient in this area, truly deserves an in depth review.

**Conclusion**

The role of individual values and beliefs have a marked impact on physical activity engagement and adherence rates, and are solid predictors of current and future health behaviors in older adults. As there is little research on the strong relationship between the Health Belief Model and older adult physical activity engagement, the potential for further study could prove to be instrumental in better understanding and identify health behaviors associated with
this population and have marked effects on future interventions.
References


