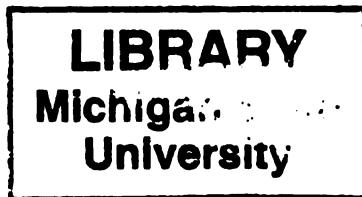


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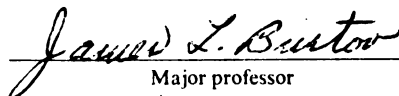
RELATIONSHIPS BETWEEN BENEFITS SOUGHT, RECREATION ACTIVITIES,
AND GROUP CHARACTERISTICS

presented by

Mary Stuart Wisnom

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Parks, Recreation, and
Tourism Resources


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**RELATIONSHIPS BETWEEN BENEFITS SOUGHT, RECREATION ACTIVITIES,
AND GROUP CHARACTERISTICS**

By

Mary Stuart Wisnom

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
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ABSTRACT

RELATIONSHIPS BETWEEN BENEFITS SOUGHT, RECREATION ACTIVITIES, AND GROUP CHARACTERISTICS

By

Mary Stuart Wisnom

In the last 10 years, the need for more research on the benefits of recreation has been recognized by professionals in the field and initial efforts have been taken to translate this research into useful guidelines for management. As agencies attempt to incorporate knowledge about the benefits associated with recreation into their decision making practices, a better understanding of how these benefits are related to recreation activities and user groups will be helpful. The objectives of this research are to test relationships between benefits sought by visitors during a recreation experience, recreation activities, and user group characteristics. The data comes from a 1996 on-site self-administered survey of visitors to a system of 13 parks surrounding the Detroit metropolitan region in Southeast Michigan.

The research questions were tested by comparing the importance ratings for six user perceived benefits of recreation: socializing, exercising, relaxing, excitement, learning, and enjoying nature. User group characteristics included size, gender, and age categories of the user groups. Subjects were also classified into activity groups based on the visitor's primary recreation activity participated in during the park visit: trail activities, general activities, golf, water-related activities, winter activities, touring facilities, and attending special events. One way analysis of variance was used to test for differences in participant

recreation benefit ratings across activity and user groups. Scheffe's test was employed to compare pairwise differences in benefit ratings. Linear regression analysis was used to estimate the ability of group characteristics and recreation activities to predict benefit ratings.

The importance of different benefits varied according to user group characteristics and primary activities. Socializing was rated more important by larger groups. Groups with women rated nature enjoyment as more important than groups without women. Male only groups rated excitement higher than groups with women. Those subjects visiting the park primarily for trail and winter activities tended to seek exercise and nature enjoyment in their recreation experience. Visitors engaged in general and water-related activities cited socializing, enjoying nature, and relaxing as most important. Groups touring facilities and attending special events were most likely to seek nature enjoyment, while those touring facilities, also rated socializing as important. Activity variables slightly outperform group characteristics in predicting benefit ratings, with the exception of socializing. To assist in the application of this material to recreation managers, benefit profiles were developed for each of the six benefits with discussion of marketing, management and planning applications. Suggestions are made for further research on the benefits of recreation.

DEDICATION

For their support and belief in me, I would like to dedicate this work to my father and mother.

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I am sincerely grateful to the many people that helped make the completion of this project possible. I would like to express a special thank you to all of my doctoral committee members: Dr. Daniel Stynes, my Dissertation Director, for his never ending support, wisdom, and commitment to the completion of this project; to Dr. Richard Paulsen for his encouragement; to Dr. Michael Chubb for his insight; and, finally, to Dr. James Bristor, my Doctoral Committee Chair, for his continued guidance and caring throughout my graduate education.

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CHAPTER 1

INTRODUCTION

As the recreation industry has grown into a multibillion dollar business (Bergstrom & Cordell, 1991), interest in all factors affecting the success of this industry has increased. Due to this growth and interest, a need for information about the recreation experience was recognized (Driver, 1990; Lewis and Kaiser, 1991; Schreyer and Driver, 1989, 1990; Schreyer, 1984), and recreation practitioners and academicians have increased their investigations of the many facets of the recreation experience (Harper, 1994).

Prior to the 1980's, recreation research concentrated on recreation activities, facilities, and user groups (Driver & Bruns, in press). With the growth of recreation knowledge in the 1980's, researchers began to change this focus to also include participant benefits (Driver & Bruns, in press; Schreyer & Driver, 1989; Styne & Driver, 1990). This change in focus can also be attributed to the increased pressure for public recreation managers to justify the receipt of public funding and the increased interest in marketing in the field of recreation as a whole.

The idea of considering the benefits associated with a product or service when developing management practices is not a new concept. In 1964, Russell Haley suggested that customers be segmented based on the benefits they seek in a product. This same concept was discussed by recreation managers and researchers as early as 1968 (Driver, 1993). However, our present knowledge concerning the benefits of recreation is limited (Allen, Wright, & Harwell, 1995; Colton & Jackson, 1995; Schreyer & Driver, 1989). While we know that recreation benefits exist, that there are many different kinds of

recreation benefits, and that different people seek different recreation benefits at different times, there is still a need for a more thorough understanding of the benefits of the recreation experience. Understanding which benefits are most common to a recreation participant, which benefits tend to be associated with which recreation activities and which recreation participants; can advance our understanding of the benefits of a recreation experience. By expanding our knowledge of the recreation experience, we can assist recreation managers in making more educated agency decisions.

In the past, most recreation management, planning, and marketing decisions were based primarily on managers perceptions of recreation activities, facilities, and user groups. Managers selected and offered what they considered to be “popular” activities, designed and managed what they perceived to be appropriate facilities, and attempted to serve a wide range of user groups with the programs and facilities provided. However more recently, some recreation practitioners have sought to better understand what their customers are seeking in a recreation experience and to utilize this information in management decisions. By incorporating this type of information, recreation managers can improve the provision of recreation services and the development of recreation facilities (Harper and Balmer, 1989). When faced with decisions regarding recreation service options, it is important to know not only what benefits people seek from the experience, but also the extent to which a particular recreation experience provides the benefits that people seek. If a recreation participant’s motivations are known, the process of selecting and predicting the services people will select is much easier (Harper and Balmer, 1989). For example, if your agency is aware that 80 percent of your customer

base is motivated to exercise during their free time, then your agency is likely to attract more customers if it selects programs that focus on exercise and wellness.

Since the mid 1980's, some managers have begun to implement a 'benefits approach' to recreation services, which requires management to question why an individual chooses to participate in a recreation experience and to evaluate the specific outcomes of that recreation experience. Stated specifically by Crompton and Lamb (1986, p. 10), "people spend their money, time and energy resources with the expectation of receiving benefits, not for the delivery of services themselves. Citizens don't buy programs or services, they buy the expectation of benefits." So it is to the advantage of the recreation manager to know and integrate benefit information into their agency decisions (Driver, 1995).

A benefits approach to recreation management has been described to include a three phase implementation strategy (Allen, 1997): Phase I - Benefit and Opportunity Identification, Phase II - Implementation, and Phase III - Evaluation and Documentation. In Phase I, the recreation agency must identify potential benefits sought by users, determine a core group of benefits which users seek and management can realistically provide, and develop a link between identified benefits and potential activity opportunities offered by the agency. The agency will then analyze and modify the agency mission and goals to reflect the benefits sought by the user and through the activities provided by the agency. In Phase II, the agency sites, areas, and services are modified to produce the targeted benefits. Monitoring instruments are developed and implemented to assess the benefit realization of users. Phase III includes the evaluation of modified recreation

services, sites and areas, documenting benefit achievement, and sharing the agency's findings with others interested in a benefits approach to recreation management.

It has taken almost 20 years for the acceptance and practice of this approach in the field of recreation and leisure services. Over the last several years, the terms most often used to describe this concept have been a Benefits Driven Approach to Leisure or Benefits Approach to Leisure (BAL) and Benefits Based Management (BBM). For the purpose of this dissertation, this concept will be identified as a 'benefits approach.'

Recreation activities, facilities, and user groups will always be central to recreation management (Peterson, 1996), however, the evolution to a benefits approach requires a better understanding of what benefits people gain from recreation and how these benefits may vary across activities, facilities, and user groups (Allen, 1996; Iso-Ahola, 1989). Schreyer and Driver (1989) stressed the need for benefits research to emphasize "both prediction and causal explanation: what types of recreation opportunities (and characteristics of particular opportunities) cause or facilitate particular types of benefits, to which types of users, and why?" (p. 388). By answering these questions, recreation managers and academicians will increase their knowledge of how to bridge the more traditional management approaches of the past to a benefits approach. With a benefits approach, recreation practitioners will continue to make decisions to provide activities for particular user groups, but with a knowledge of which benefits are being sought and received by the user. Conversely, as in Phase II of the benefits approach, recreation managers can translate a desire to provide a particular benefit into the activities and facilities most likely to produce this benefit and develop and direct programs toward users most likely to desire that benefit.

Literature and Events Associated with Recreation Benefits

While elements of recreation user benefits and their relationship to recreation activities and group characteristics were included in studies prior to the 1960's, the earliest notable work on recreation benefits was the 1962 Outdoor Recreation Resources Review Commission (ORRRC, Study Reports 5, 20, 22, & 27). The ORRRC Study Reports 5 & 20, define recreation groups using demographic, socioeconomic, social components, and activity participation variables. Reports 22 and 27 include information on the "benefits and values" of recreation and trends related to benefits. The material found in the ORRRC study reports was of value, however, was limited in its usefulness in that it was mostly descriptive and didn't identify specific relationships between benefits, activities, and user groups.

From 1960 to 1980, economic methods for measuring recreation supply and demand dominated the research agenda (Schreyer & Driver, 1989). During this time, questions about the benefits participants receive from recreation were largely absent (Stynes and Driver, 1990). The central management questions during this period were how much, what, and where to provide recreation. Research, which was mostly applied, was also directed by these questions. Toward the end of the 1960's, studies of user attitudes, motivations, and satisfaction began to provide information about the values associated with outdoor recreation use from which inferences about benefits could be made (Driver, Nash, & Haas, 1987). These types of research were more likely to discuss motivations, preferences, attitudes, and interests in broad terms, although user benefits were frequently a key dimension. This type of research continued into the 1980's, however, during this time many of the research projects were primarily concerned with

classifying recreation activities into groups. A number of variables have been used to classify recreation activities, including past leisure behavior (McKechnie, 1974), perceived similarities of leisure activities (Becker, 1976), frequency of participation and importance ratings (Gudykunst, Morram Kantor, & Parker, 1981; Romsa & Girling, 1976), activity preferences and participation (Chase & Cheek, 1979), and leisure satisfaction and attitudes (Ragheb, 1980).

During the 1980's there was increased emphasis placed on the benefits associated with a recreation experience and, in turn, a growth of knowledge related to the benefits of recreation. During this time, two comprehensive assessments of the benefits of outdoor recreation appeared. The first, entitled Social Benefits of Outdoor Recreation, edited by John R. Kelly (1981), includes nine chapters highlighting the personal and societal benefits of recreation and one chapter on economic valuation methods. The President's Commission on Americans Outdoors: A Literature Review (PCAO, 1986) had 11 chapters, two of which were centered on “values and benefits” and “motivations” of an outdoor recreation experience.

Increased interest in recreation user benefits was shown, when in May of 1984 and 1989, two separate workshops were held to establish the state of knowledge about the benefits of recreation. The 1984 workshop was held at Utah State University, Logan, Utah, with the primary tasks of: (1) discussing the potential of a change in recreation management from an activity approach to a benefits approach, (2) considering problems related to a benefits approach, and (3) identifying the most useful research strategies for investigating the benefits of recreation, most specifically wildland recreation (Schreyer, 1984). The primary tasks of the 1989 workshop, held at Snowbird, Utah, were: (1)

specifying the beneficial consequences of leisure, (2) measuring the magnitude and relative importance of those consequences, (3) identifying research needs, and (4) outlining alternative research designs for the benefits of recreation (Driver, Brown, & Peterson, 1991b). This workshop prompted the development of a text titled Benefits of Leisure (Driver, Brown, & Peterson, 1991a), which includes over 20 papers on the physiological, psychological, social, economic, and environmental benefits of leisure. While the material included in this text covered a wide range of benefits of recreation, in 1990, Stynes and Driver stated that:

our general conclusions about leisure benefits are not very different from ... the ORRRC studies. That is, most scientists believe there are important benefits of outdoor recreation and leisure. However, few would contend that we have adequate empirical evidence to scientifically confirm these hypotheses. In particular, our understanding of how different situational factors and contexts influence the nature and extent of benefits for different population subgroups is weak, as is our understanding of how leisure experiences interact with everything else in contributing to individual, family and social well being (p. 5).

The 1990's have sparked greater support for the benefits approach to recreation management, a greater need for literature related to this topic in order to implement this approach, and, hence, more research highlighting the benefits of recreation. In the 1990's, published research on the benefits of recreation has increased significantly. There have been more than 25 research articles on benefits published in the Journal of Leisure

Research. There were two textbooks published during the 1990's: **Benefits of Leisure** which summarize existing empirical research on the benefits of recreation and leisure (Driver, Brown and Peterson, 1991) and **Leisure Programming: A Service-Centered and Benefits Approach** which applies benefits research to recreation program development (Edginton, et al., 1998). More recently, Internet web pages (Academy of Leisure Sciences, 1999; Driver, 1999), a newsletter entitled, **What's Happening with Benefits Based Management** (Hoots, 1993/1996), and on-line bulletin boards (Benefits List, 1999) have been dedicated to disseminating information on the benefits of leisure and recreation. Recreation benefits have also been recently emphasized in other research journals and recreation publications (e.g. Leisure Sciences and Park and Recreation Magazine). The increase in popular literature related to the benefits of recreation over the last eight years indicates that the benefits approach has achieved some support in the recreation industry. If we are going to increase the effectiveness of a benefits approach to recreation management, more in-depth information is still needed.

Benefits of Public Recreation

The public recreation systems in the United States are based on the notion that access to basic beneficial recreation opportunities is the right of all citizens, not just a privilege for those who can afford to pay for services. This belief is held because it is generally acknowledged that there are a range of significant user benefits which result from participation in recreation. It is therefore believed to be in the public interest to provide recreation facilities and services that provide these benefits (Harper and Balmer, 1989).

In the past 20 years, public recreation agencies have faced increasing fiscal constraints (Allen, 1996; Allen, Stevens, & Harwell, 1996; Allen, Wright & Harwell, 1996; Graefe et al., 1981; Lewis and Kaiser, 1991). As a result, public recreation managers have had to work more efficiently. Recreation managers presently need techniques that can help them do a better job of managing their services and facilities with limited resources (Godbey, 1995; Westland, 1986). It was clear by the late 1980's that new information was required for public recreation service providers to verify their need for financial resources and to justify the existence of recreation services. At the same time, public recreation providers were being forced to raise more money through alternative sources (other than tax dollars) and, therefore, needed information to adequately compete with other recreation service providers, as well as other users of public funds. Some public recreation managers believe that a benefits approach to recreation management is one way to compete effectively (Allen, Stevens & Harwell, 1996; Bruns, 1993; Stein & Lee, 1995). If public recreation managers can prove that benefits are being received by the users and the community they serve, they can use this information to enhance their application for financial resources. Or if particular recreation services can be linked to benefits the agency seeks to fulfill, these services may have more acceptance within the community and within the agency's governing body. These ideas are all part of the process of a benefits approach to recreation management. It is apparent that in order to assist in integrating a benefits approach that recreation agencies and practitioners need a greater understanding of the benefits of recreation (Harper, 1994).

Statement of the Problem

Reduced financial resources have made it increasingly difficult to provide the recreation services and facilities necessary to satisfy the needs of the public recreation customer. Harper and Balmer (1989) predict fiscal constraints are likely to continue into the next century. To meet public demands and ensure the most productive development and utilization of facilities and services, recreation managers have to make sure their management choices are economically efficient, yet provide the greatest customer benefits now and for the future.

Although the amount of literature related to the benefits of recreation has increased in the 1990's, this type of literature is limited. Recreation management and planning has historically been centered around activity characteristics and user group characteristics (Harper, 1994). As agencies attempt to focus more attention on recreation benefits, a better understanding of how recreation benefits are related to activities and user groups will be needed.

Research Questions

Expanded information on the benefits of recreation is needed to assist with the implementation of a benefits approach to recreation management. Knowing that understanding recreation activities and user groups are also critical to recreation agency decision making and, ultimately, the success of a recreation agency, these two variables are integrated into this research. Specifically, this dissertation will identify the benefits park visitors seek for themselves from a recreation experience and determine how these benefits vary across recreation activities and user groups. Testing the relationships among these three variables (benefits sought, recreation activities and user groups) can offer

critical insight and practical assistance to recreation managers using a benefits approach to management. The four fundamental research questions directing this dissertation are:

- (1) Which benefits tend to be associated with which recreation activities?;
- (2) Do benefits vary with user group characteristics?;
- (3) Do different types of groups participate in distinct recreation activities?; and
- (4) How well do demographic variables and recreation activities predict benefits sought in a recreation experience?

The first two research questions are central to the advancement of a benefits approach to recreation management. Discovering these relationships can advance our understanding of recreation benefits. Public recreation managers have begun to recognize that if the basic principles of recreation user benefits are understood, they can be applied to all contexts of recreation delivery (Iso-Ahola, 1989). Recreation researchers have indicated that this understanding is fundamental to explaining and predicting recreation behaviors (Ingham, 1986; Iso-Ahola, 1988), devising and selecting management objectives and practices (Driver, 1986), organizing and conducting recreation inventories (Driver, 1986; Knopf et al., 1983), and developing visitor information and marketing plans (Driver, 1986). In essence, if recreation managers want to do a better job, they need to understand what recreation benefits are sought, by which customers, and through which recreation activities.

Defining the Benefits of Recreation

Several definitions of the term "recreation benefit" have been advanced (Schreyer, 1984). Two basic approaches may be identified. Recreation user benefits can be conceptualized as *benefits sought through* recreation experience or as *benefits received*

from the recreation experience. The benefits sought approach focuses attention on the motivations for pursuing a recreation activity. Benefits sought have also been described as stimuli, reasons, and purposes.

Psychologists tend to approach the topic of benefits sought from the perspective of motivations, an internal catalyst that arouses and directs human behavior (Iso-Ahola, 1989). People don't just choose to walk, play games or fish, they seek out some type of benefit. Most human actions are directed, and this inner motivation leads to actions that bring people closer to their goals (Gleitman, 1986; Losier, Bourque & Vallerand, 1992). Crandall (1980) used the benefit sought format in his definition of a benefit as "why people do specific activities; what personality needs might be fulfilled by leisure; (and) motivations of leisure..." (p. 45).

Although the majority of his research uses a psychological attitude approach, Driver (1990) prefers to define benefits as benefits received; outcomes, consequences or improved conditions which occur as a result of participating in a recreation activity. Other descriptors used to explain benefits received are gains, impacts, and results.

Each of these approaches to defining user benefits are important to understand since they offer insight for recreation managers regarding the whole recreation experience. Understanding what benefits recreation participants seek through a recreation experience can lead to an increased understanding of user motivations. Knowing what a user seeks in a recreation experience, recreation managers will be better able to anticipate and serve user needs, and enhance their ability to attract and retain customers. Recreation professionals can also use this information to discover the perceived value of their programs and to help in the planning and marketing of their products and services. By

understanding benefits received from a recreation experience, recreation professionals can systematically evaluate the impacts of their programs. Program evaluations are often needed to justify budgets or to compete successfully with other recreation programs.

The benefits of recreation can have a variety of recipients, including an individual, a family, a small group, a community, a society, an organization, a nation, or the world. The types of benefits that are hypothesized to result from recreation have not changed significantly over time (Stynes & Driver, 1990). Benefits are often categorized into: social benefits, economic benefits, environmental benefits and personal benefits (Academy of Leisure Sciences, 1999; Driver, 1986; Driver, Nash & Haas, 1987; Harper and Balmer, 1989; Stein and Lee, 1995).

Social benefits are typically advantages to groups of people such as a community, family, or an organization. Examples of social benefits include building strong communities, promoting cultural harmony, and increasing organizational wellness. An economic benefit is the profit (or cost) to the recreation provider, participant, or the surrounding community, that can be expressed in monetary terms, such as increased earnings, creating a more productive work force, or reducing the high cost of vandalism. An environmental benefit is the enhancement of natural resources through the preservation or maintenance of our land and wildlife resources, such as protecting an endangered species or allowing for the development of a park to improve the environmental health of a community. Finally, personal benefits encompass the physiological, psychological, sociological, and economic benefits which are pursued and received by an individual. Personal benefits can include increasing your level of fitness, being social, reducing stress, enjoying nature, seeking excitement, or learning a skill. While benefits sought and

received can be grouped into the four categories described, benefits sought are most often associated with personal benefits. For the purposes of this research project, the benefit type and approach used is personal benefits sought.

Group Characteristics

Recreation participants are often classified into some type of user group (Allen & Donnelly, 1985; Buchanan et al., 1981; Etzkorn, 1964; Field & O'Leary, 1973).

These user groups may be defined by a variety of characteristics, including demographic, socioeconomic, and geographic. The make-up of the group can influence the selection of recreation activities (Burch, 1969; McClaskie, Napier, & Christensen, 1986) and benefits sought through the recreation experience (Ajzen, 1991; Altman, 1981; Dunlap and Catton, 1979; Ewert, 1993; Unger, 1984).

Previous studies have shown that group characteristics influence an individual's recreation experience in a variety of ways. Some general findings include (1) social interaction between members of a recreation user group are often cited as an important element of the recreation experience (Coleman & Iso-Ahola, 1993; Crandall, 1979; Etzkorn, 1964), (2) a social group can be a motivator for recreation activities (Adams, 1979; Buchanan, et al., 1981; Burch, 1964; Burch 1969; Scott & Godbey, 1992), (3) a leisure situation that includes more than one participant can enhance the subjects experience (Kelly, 1978a, Unger, 1984), and more recently, (4) the make-up of a recreation user group can influence the benefits the group seeks in a recreation experience (Ajzen, 1991, Altman, 1981; Dunlap and Catton, 1979; Ewert, 1993; Floyd & Gramann, 1995; Heywood, 1987).

In past research, user groups have been defined by the size of the group (Adams, 1079; Ewert, 1993; Heywood, 1987; Unger, 1984), the familiarity of the group members (Heywood, 1987), the relationship of the group members (Buchanan et al., 1981), and the gender of the group members (Donald & Havighurst, 1959; Hawes, 1979; Pierce, 1980; Tinsley, Teaff, Colbs, & Kaufman, 1985). For the purposes of this research project, user groups will be defined based on size of group, the gender, and age of the participants.

Recreation Activities

Recreation has been defined as a “voluntary nonwork activity” (Kelly, 1990, p.27). Over the years, recreation activities have been associated with particular types of benefits. As early as 1964, touring and nature related activities were being linked to learning benefits (Etzkorn, 1964). More recently, canoeing and kayaking have been linked to rest and relaxation (Stein & Lee, 1995). There are literally thousands of recreation alternatives. The recreation activities selected for this research project include those outdoor recreation activities typically found in a general day use outdoor park setting.

Hypotheses

The specific null hypotheses to be tested in this dissertation are as follows:

- | | |
|---------------|--|
| Hypothesis 1: | Benefits sought during a park visit do not vary significantly with recreation activities . |
| Hypothesis 2: | Benefits sought do not vary significantly with the demographic makeup of the group visiting the park. |
| Hypothesis 3: | Participation in recreation activities does not vary significantly with the demographic makeup of the group visiting the park. |

In addition to the three null hypotheses, this research project will test the ability of the demographic makeup of the group and recreation activities to predict the importance

of benefits sought during the park visit. The research hypotheses for this dissertation will be tested using data from a 1995-96 park visitor survey at the Huron-Clinton Metropolitan Authority park system located in Southeast Michigan. Included in this report will be an overview of the benefits sought, recreation activity, and a demographic description of the park visitor.

Summary of the Content of the Dissertation

Chapter 1 provides the general background, reasons for, and hypotheses of the study. Chapter 2 contains a review of the literature related to the relationships of benefits sought, recreation activities, and group characteristics, an overview of the typical formats used in benefits research, and the selected format for this dissertation. Chapter 3 describes the methods employed to investigate the research questions of this dissertation, including the study population, sampling plan, a description of the survey questions and data analysis. Chapter 4 contains a profile of the sampled visitors and a summary of findings related to the research questions of this dissertation. Chapter 5 begins with benefit profiles describing each of the six benefits investigated in this dissertation, and ends with management recommendations and suggestions for further research on recreation benefits.

CHAPTER 2

REVIEW OF LITERATURE

Although a benefits approach to recreation management has only been practiced for a short time, research that can help in our understanding of recreation benefits, dates back to the early 1960's. This chapter provides a summary of research literature related to the relationships between benefits sought, recreation activities, and groups characteristics. The literature review is organized around the relationships among the three sets of variables tested in this dissertation: (1) benefits sought and recreation activities, (2) benefits sought and group characteristics, (3) recreation activities and group characteristics, and (4) benefits sought, recreation activities and group characteristics.

Research on the benefits sought through a recreation experience include in-depth studies of a single recreation activity and general multiple activity studies. Single activity studies generally provide a profile of the activity, the participants, and often highlight the benefits sought or received from the activity. For instance, research on running may describe the activity in terms of the average length and speed of the run, the demographic characteristics of the participant, and the primary benefit sought through the activity.

Multiple activity studies have a format that classifies or segments individuals or multiple activities based on benefits sought. Some segments are based on other variables, but these segments are often then described in terms of their differences in benefits or motivations. For instance, a research project that is attempting to segment recreation activities may categorize these recreation activities as trail and water-related activities and describe similarities among the participants, such as trail users seek excitement and those

participating in water-related activities seek relaxation. In each of the first four sections of this chapter, the two types of research are separately addressed. The fifth section of this chapter is a discussion of the two research formats and the advantages and disadvantages associated with each. This section will include the rationale used in selecting the format for this dissertation.

Six principal benefits stand out in the literature as being those most significant to an outdoor recreation experience: learning, socializing, exercising, enjoying nature, relaxing, and excitement (Driver, Brown, & Peterson, 1991; Schreyer & Driver, 1989; Wellman, Dawson, & Roggenbuch, 1982). This chapter will report on research related to these benefits. Selected research on recreation activities will cover traditional outdoor day use recreation activities. Group characteristics will include size and composition of the user group.

Benefits Sought and Recreation Activities

As the focus of recreation management has begun to shift from an activity approach to a benefit approach, it was only natural to find a large amount of the research concentrated on the relationships between benefits sought and recreation activities.

Learning is often cited as a motivation for recreation. Learning benefits of recreation include: (1) learning about specific recreation activities and developing skills, (2) learning about the natural or cultural environment, (3) becoming a more effective environmental decision maker, (4) developing pride in the community, (5) learning about the self, and (6) for children, cognitive, emotional, social, physical development, and problem solving (Barnett, 1991; Buhyoff & Brown, 1975; Driver, Nash, & Haas, 1987; Roggenbuck, Loomis, & Dagostino, 1991). The benefits of learning are sought through several types of

activities. Reported in single activity research, non-motor boating (Colton & Jackson, 1995; Graefe, 1977; Graefe, et al., 1981; Hollender, 1977; Knopf, et al., 1983), touring and nature-related activities (Etzkorn, 1964) were closely associated with learning. In multiple activity studies, learning was reportedly sought through sports in general (London et al., 1977), and golf specifically (Tinsley & Tinsley, 1988), special events (Tinsley & Kass, 1979; Tinsley & Tinsley, 1988), walking, hiking (Stein & Lee, 1995), fishing, and canoeing (Driver & Knopf, 1976).

Social interaction is among the most frequently reported reason for participation in recreation and leisure (Auld & Case, 1997; Iso-Ahola, 1980). Recreation has been demonstrated to be highly social in nature and to facilitate development of friendships and family relationships (Coleman & Iso-Ahola, 1993; Orthner & Mancini, 1980, 1991). It is not surprising that individuals have been shown to engage in recreation specifically for social reasons (Beard & Ragheb, 1983; Iso-Ahola & Allen, 1982; London, Crandall, & Fitzgibbons, 1977; Tinsley & Kass, 1978). Socializing was reported to be sought in several studies of river rafters (Graefe, 1977; Graefe et al., 1981; Knopf et al., 1983). In multiple activity studies, sports participants (London et al., 1977; Tinsley & Tinsley, 1988), picnickers (Driver & Cooksey, 1980; Tinsley & Johnson, 1984; Tinsley & Tinsley, 1988), swimmers (Driver & Cooksey, 1980), anglers (Driver & Knopf, 1976), golfers (Driver & Knopf, 1976), walkers, hikers, rafters (Stein & Lee, 1995), and those attending special events (Tinsley & Johnson, 1984; Tinsley & Tinsley, 1988) were most likely to seek social benefits.

The research on the physical health benefits of physical recreation and exercise is widely recognized. Although the virtues of exercise have been discussed for centuries, the

importance of physical exertion to vitality and endurance has been appreciated only since the middle of our 20th century (Paffenbarger, Hyde, & Dow, 1991). Today, more than ever, we find individuals spending their leisure time in pursuit of fitness. Fitness was shown to be sought through recreation sports (White, 1995), non-motor boating (Hollender, 1977; Knopf et al., 1983), and running (Clough, et al., 1989) in several single activity studies. Swimmers (Driver & Cooksey, 1988; Driver & Knopf, 1976), walkers (Market Opinion Research, 1986), bikers, nature observers, and individuals canoeing, kayaking, and driving for pleasure (Stein & Lee, 1995) were reported to seek exercise more than other recreation activities in studies that compared several activities.

Though some persons work outside, the only length of time that most of us spend outside is when we are participating in leisure and recreation (Rolston, 1991). When this is the case, one can not deny nature enjoyment is often an important motivator (Driver, Nash, & Haas, 1987). Enjoying nature was shown to be sought in studies of non-motor boating (Colton & Jackson, 1995; Hollender, 1977). Nature observation (Stein & Lee, 1995; Rossman & Ulehla, 1977), driving for pleasure, biking, kayaking, canoeing (Stein & Lee, 1995), trail, water and winter sports (Market Opinion Research, 1986) were all reported in multiple activity studies to attract participants who seek the benefit of enjoying nature and the outdoors.

Words and phrases such as, slow down, escape, or release stress often convey the need to relax. Frequently we pursue recreation just to rest and relax. Rest and relaxation were reportedly sought through swimming (Berger & Owen, 1992) and non-motor boating (Colton & Jackson, 1995; Hollender, 1977) in single activity studies. In multiple activity studies, relaxation was most often achieved through traditional trail activities such

as, jogging, biking, roller skating, also through participating in sports (Tinsley & Johnson, 1984), and being a sports spectator (Market Opinion Research, 1986). Fishing (Driver & Cooksey, 1980; Driver & Knopf, 1976), golfing (Driver & Knopf, 1976), swimming (Driver & Knopf, 1976; Tinsley & Johnson, 1984), nature observation, and water-related activities (Market Opinion Research, 1986) were also found to be associated with rest and relaxation.

Excitement and thrills are also sought through recreation, often seen as the opposite of rest and relaxation. Many so-called "adventure recreation" programs, such as mountain climbing and white water rafting, are premised on the notion that exposure to challenging situations can have beneficial consequences (Ewert, 1993). Challenge and excitement were reportedly sought in high altitude climbing (Ewert, 1994), non-motor boating (Colton & Jackson, 1995; Graefe, 1977; Hollender, 1977) and running (Clough, et al., 1989) in single activity studies. In studies that compared several recreation activities, excitement was most often associated with sports, winter and water activities, fishing (Market Opinion Research, 1986), nature observation, biking, canoeing, and kayaking (Stein & Lee, 1995).

These studies have advanced our knowledge of how specific benefits can be related to specific activities. Of the 21 studies reviewed that test these relationships, there are many similarities across each of the selected benefits sought. For example, each benefit was associated with at least two trail and three water-related activities. However, notable differences also occur. With only two exceptions, special events, walking, golf, and hiking, were found to be associated with learning and social benefits. (Walking was noted as also being linked to exercise and golf to relaxing.) Winter activities were only

linked to enjoying nature and excitement, picnicking was only associated with socializing, and spectator sports were only connected with relaxing. Scenic driving, touring, and nature observation were associated with learning, exercise, and, of course, enjoying nature.

Benefits Sought and Group Characteristics

Outdoor recreation groups have been defined in research using a variety of variables including, size of the party, primary gender of the group members, or whether the group consists of family or friends. A review of this research indicates that group size, gender, and composition of the group seem to influence the benefits sought in a recreation experience. Although authors have repeatedly noted the strength of these relationships, few studies have actually been completed and findings have not been consistent. The six research studies that center specifically on gender differences examined the individual characteristics of the recreation participants and drew general conclusions about gender differences.

As early as 1959, Donald and Havighurst utilized a questionnaire to estimate reasons for (benefits sought) participation in an individual's favorite leisure activity. The group studied was a sample of individuals over 16 years of age from a rural area in New Zealand and from Kansas City, Missouri. Each of the respondents was asked to indicate their two favorite leisure activities and to rank, in order of importance, their reasons for participating in these activities from a list of 12 pre-selected reasons. Reasons with a higher rank were "Just for the Pleasure of It," "Welcome Change from Work," "Gives New Experience" and "Contact with Friends." To find out whether these reasons were related in any systematic fashion to selected leisure activity categories, a chi-square

analysis was completed. Although it was not the objective of this research, this study was the first to point out the connection between the size of a user group and the goal of a social benefit from a recreation experience. Although the researchers wanted to focus on the relationships of recreation activities and the benefit sought through that activity, activities typically conducted in groups were placed in three categories (formal, informal and sports), each of which indicated the social benefit of “contact with friends” as most important. Hence, in this research project larger groups typically had a higher rating of importance for social benefits.

Adams (1979) found that whether or not a recreation participant is alone had an effect on the benefits sought by anglers. Those participants alone sought exercise and meeting new people, while those with family desired to spend time with other families (Adams, 1979). Heywood (1987) reported that river floaters in small groups desired quiet and escape while participating in their recreation experience, while those in larger groups desired adventure. Solo climbers sought escape in their climb of Mt. McKinley, whereas guided groups sought excitement and social benefits (Ewert, 1993). In a study of several activities, Unger (1984) found that individuals involved in recreation experiences where others were present perceived a better leisure experience than those who were alone.

Party composition also has been found to effect the benefit sought by recreation participants. In a study of river floaters, Heywood (1987) found that if some of the user group members were unknown to the participant, he/she was more likely to seek adventure. If the group members were known, escape and quiet were often preferred (Heywood, 1987). Buchanan, Christensen and Burdge (1981) tested if the party composition of either friends only, family only, or a combination of both friends and family

influenced the recreation benefit sought for anglers, swimmers, and power boaters. Those fishing in family groups sought social benefits and time for reflection, family/friend groups pursued escape and being with friends, and friends only groups sought reflection.

Swimmers in family groups pursued learning, risk and excitement, family/friend groups desired exercise, and friends groups sought being with friends and escaping one's family.

The composition of the user group did not alter the benefits sought by power boaters.

Although Tinsley and Tinsley (1988) reported a consistent lack of evidence that benefits sought vary by gender, several other studies have shown just the opposite. In investigating the individual differences of recreation participants, Donald and Havighurst (1959) reported that there were two differences in motivations between men and women. The reason "A Welcome Change from My Work" was given by 55% of the men and 41% of the women, while the reason "I Feel That I Am Being Creative" was expressed by 24% of the women and 6% of the men. There were no significant relationships between reasons and age or occupational status in this study. A study by Tinsley, Teaff, Colbs and Kaufman (1985) of older adults found that women (65 years or older) sought companionship and recognition more often than other benefits and men were more likely to seek power in a recreation experience.

Toth and Brown (1997) studied differences in fishing motivations between groups defined by race and gender. The most marked differences were present between racial groups, however, some gender differences were found. Exploratory factor analysis was used to group the reasons for fishing for men and women and slight differences were uncovered. For example, family recreation, escape and relaxation were sought by each gender group, being outdoors was included for women and not for men.

Both Hawes (1979) and Pierce (1980) found some gender differences when looking at the perceived benefits received from a recreation experience. In a nationwide study, Hawes (1979) measured the satisfactions derived from the subject's three favorite recreation activities. Both men and women rated "Peace of Mind" as most important. Women rated learning, "Get the Most Out of Life," and escape as the three next most important satisfactions. The men's ratings were different with "Get the Most Out of Life," excitement, enjoyment and nostalgia as the four next most important satisfactions.

Pierce (1980) surveyed urban residents to determine the extent to which they perceived receiving benefits from their free time activities. Both men and women rated relaxation as the most important reason for pursuing free time activities. However, as with Hawes (1979), the remainder of the benefits were ranked differently for men as compared to women. Women ranked learning, intimacy, and achievement as second through fourth in importance, while men rated power, learning and time filling as second through fourth in importance after relaxation.

The size, gender, and party composition of a recreation user group has been shown, on occasion, to affect the benefits that users or groups of users seek in a recreation experience. However, due to the limited number of studies and the lack of consistency in research formats, it is difficult to draw any overall conclusions about the relationship of these variables. In general, individuals recreating in small groups or alone sought escape, quiet, and exercise. Larger groups more often sought adventure, excitement, and social benefits. The gender and age make-up of participant groups does in some cases influence the benefits sought in a recreation experience. The lack of consistency in the findings compelled this researcher to delve more in-depth into these relationships. Thus, the size,

gender, and age configuration of recreation group members were selected as variables for this research project.

Recreation Activities and Group Characteristics

Relationships between recreation activities and user group characteristics have been widely studied, dating back to as early as the 1960's. The first two studies that looked at the relationships between of recreation activities and participant characteristics were published by William R. Burch, Jr. In both studies the research method is unclear, however, Burch describes the influence of the user group on the selection of the recreation activity. Camping groups were the focus of the first published study relating leisure activities and user groups. Burch (1964) set out to investigate two aspects of the outdoor recreation experience; recreation behavior and the recreationists' conception of the recreation land resource system. Burch suggested, at the conclusion of this study that, "a person's (recreation activity) decisions appear to be associated with the social groups with which one is affiliated" (p. 707). A few years later, Burch (1969) conducted research on a sample of wilderness and auto campers in a park area in Oregon. Burch investigated three hypotheses in this study, the third relating to what he termed "personal community." This hypothesis suggested that transactions with and socialization by one's workmates, parents, spouse, and friends will shape the nature of one's leisure participation. The findings of this study suggested that social groups are 'sources of meaning' for leisure activities. Burch indicated that "once a person has sorted out his range of leisure alternatives he tends to have a circle of friends which reinforces his remaining with this range" (p. 141).

After Burch's preliminary conclusions concerning the influence of the group on the selection of recreation activities, several other researchers set out to test these same

relationships. Studies testing relationships between recreation activities and user group characteristics generally compare several different recreation activities. Dottavio, O'Leary and Koth, (1980) found that group characteristics, including age and gender variables, enhance the predictability of frequency of participation in recreation activities. The researchers studied both social groups (i.e. family, friends) and socio-demographic groups (i.e. age, gender) and tested their strength of prediction of recreation participation. The dependent variable of recreation participation was frequency of participation in one of 12 outdoor recreation activities. The investigators found that when social group variables were combined with age and gender of a participant, there were increases (ranging from .001 - .1) in the ability to predict frequency of participation in 10 out of 11 outdoor recreation activities, including biking, hiking, hunting, picnicking, motor boating and sailing, water skiing, and swimming. (The ability to predict other boating activities showed no increase.)

Choi, Loomis & Ditton (1994) found that group composition affects the type of recreation participation. In this study, the four activities observed were going to a nearby beach park, touring a nearby waterfront shopping and historic district, fishing on a party boat, and visiting a marine theme park. Group composition and the option for an alternative activity appear to reflect the "family orientation" of certain activities, making them attractive to family groups. Party boat fishing, which is often considered less family oriented, was a more likely substitute for non-family types of activities.

Although more females are participating in outdoor pursuits than ever before (Henderson, 1992), several researchers have found that adult women tend to perceive less freedom in leisure pursuits than adult men (Jackson & Henderson, 1994; Larson, et al.,

1997; Phillip, 1997). Kelly (1980), found that gender was a better predictor of some outdoor recreation activities than others, specifically fishing, boating, and golf. Similar to the research projects investigating the relationships of gender and benefits sought, those examining gender and recreation activities also looked at the recreation participant as an individual and not a member of a user group.

The most comprehensive recent publication on participation patterns in certain types of outdoor recreation activities comes from the 1994-95 National Survey of Recreation and the Environment, published by the U.S. Forest Service (Wellner, 1997). According to this survey, the greatest differences in participation between men and women in traditional outdoor day use activities are in fresh water fishing, golf, and running, where men participate more often, and ice skating, walking, picnicking, and bird watching, where women participate more often. While participation in many activities generally declines with age, many activities appear among the top ten in all age groups. These include walking, birdwatching, sightseeing, attending outdoor sports events, hiking, swimming (pool and non pool), picnicking, motor boating, and camping. Participating in many activities decline with age, such as running, while some increase, such as motor boating (Unkel, 1981; Wellner, 1997). Young adults are more likely than older Americans to take part in sport and recreation activities. Although, Unkel (1981) reported that the presence of children in the family did not effect the type of recreation activity participation, it was also later reported that activities which tend to occur often in household with children are picnicking, swimming, sledding, and water skiing (Wellner, 1997).

Benefits Sought, Recreation Activities, and Group Characteristics

The remaining studies highlighted in this chapter contain the three variables of benefits sought, recreation activities and user group characteristics. As these are the focus of this dissertation, more details for these studies are provided. Allen and Donnelly (1985) studied a random sample of individuals from Laramie, Wyoming to test the relationships between participation in leisure activities, social units, and reasons for participating in activities. A modified item pool from Driver's Recreation Experience Preference (REP) scales was used to assess the subject's reasons for engaging in his/her most enjoyable recreation activities.

The research set out to determine relationships between the social units within which individuals participate in their two most enjoyable recreation activities and their reasons for participating in these activities. Outdoor activities predominated as the two most enjoyable activities with the majority of participation in the family/friends social group. The reasons of family togetherness, relation with nature, being with people, escaping the family, escaping physical pressure, and meeting new people were the primary discriminating variables in predicting the social unit of participation. However, these reasons were not, in general, viewed as the primary reasons for engaging in a participant's most enjoyable activity. The most important reasons were achievement, escape social pressures, exercise, rest, and learning. Allen and Donnelly (1985) concluded, "that the type and degree of social interaction desired vary with the social unit of participation, but the primary reasons for participation remain relatively stable regardless of the social unit of participation" (p. 422).

The summary report of the President's Commission of Americans Outdoors (Market Opinion Research, 1986) claims that five types of motivations drive American adults to participate in outdoor recreation: "Fitness," "Social," "Excitement," "Experience Self and Nature," and "Conformist/Space Cramped." Two other motivations were revealed, and were not strongly related to any one of the other five motivations, "For Change" and "To Learn." Outdoor recreation activities were combined into six major groups based on the subject's likeliness to participate in each of the activities: "Ball Games and Running," "Spectator Outings," "Fishing, Hunting and Horsepower," "Observing Nature," "Water and Golf," and "Winter Sports."

Benefit profiles were used to show the relationships of benefits sought, recreation activity groups, and demographic characteristics. The five motivational groups participate in different recreation activities and at different rates. The "Excitement" group made up 16% of the adult population. They are active participants in ball games, water and winter sports, fishing and hunting. Two-thirds of this group were males and this group had a median age of 32 years. The "Conformist/Space Cramped" group made up 33% of the adult population. These two groups were similar in that they like outdoor recreation as a chance to be alone and to study nature. They participate in spectator outings and all kinds of sports, but they are most likely to be involved in quiet in-the-woods-and-water sports. There is an equal number of males and females in this group and the median age is 35 years.

The "Fitness" group in this study comprises ten percent of adults. They are motivated to participate in outdoor activities for fitness (not social) reasons. A large portion of this group walk for pleasure. Fifty-six percent of this group are female, they

are highest on the socioeconomic scale in relationship to other motivational groups. Their median age is 46. Finally, the “Social” group was motivated by a concern for fitness and the desire for sociability in their outdoor recreation pursuits. They participate in a wide assortment of activities. Two-thirds are women and their median age is 49.

The profile format was found by this researcher to be easy to follow and includes much of the information necessary for a public recreation manager to use in his/her management practices. Each benefit profile was developed to include the pertinent findings of the research related to the recreation activities and user group characteristics of the individually profiled benefit. By placing this information together in one comprehensive summary, recreation managers can review the material easily and concentrate their efforts on those benefits they wish to provide to their user. (Similar benefit profiles will be used to summarize results in this dissertation.)

In the late 1960's, Driver began work on the development of psychometric instruments to identify and assess "the relative importance of benefit-implying reasons why recreationists select particular activities" (Driver, Tinsley , & Manfredro, 1991, p. 272). Driver's instrument was designed to investigate a subject's recent recreation experience. Administered in most cases as on-site surveys, the Recreation Experience Preference (REP) Scales were developed and refined from 1968 to about 1982. Currently, 43 REP scales and 19 domains (benefits sought) exist to measure the extent to which specific benefits are desired and expected from leisure activities. The current list of benefit domains used by Driver et al. (1991) include enjoy nature, physical fitness, reduce tension, escape physical stressors, outdoor learning, share similar values, independence, family relations, introspection, be with considerate people, achievement/stimulation, physical rest,

teach/lead others, risk taking, risk reduction, meet new people, creativity, nostalgia, and agreeable temperatures (Driver, Tinsley , & Manfred, 1991). Several of the benefits that Driver includes in his REP scales are used in this dissertation.

One of the more comprehensive research studies using the REP scales is reported in the Benefits of Leisure (Driver, Tinsley & Manfred, 1991). The study measured preferred benefits of participants in six activities along the Huron River in Ann Arbor, Michigan (the same general geographic region and type of park used in this dissertation). The activities were camping, picnicking, swimming, boating, sailing, and fishing, and the seven most important benefits overall were escape daily routine, physical rest, enjoy nature, escape physical pressures, tranquility, be with other people, and slow down mentally. Some variation in benefits sought was found between the activity groups with some of the lower ranked benefits. For example, picnickers ranked family togetherness as the fourth most important benefit, boaters ranked exercise as fourth and learning as the sixth most important benefit, and anglers ranked both learning and nostalgia as the seventh most important benefit. Rankings were based on mean ratings using a 6-point Likert importance scale, so differences in rankings could be caused by differences in mean ratings as small as .1.

Stein and Lee (1995) investigated the relationships between benefits desired by a recreation participant, the recreation activity, and setting characteristics. The study was conducted with visitors to a natural area in western Colorado in 1992-93. Data were gathered using on-site interviews and mail back questionnaires inquiring about the subjects' actual recreation experience. Cluster analysis was used to group visitors into one of four benefit "types" based on their desires for particular recreation benefits. Type 1

was most oriented toward independence and stress relief, Type 2 stressed similar values and learning new things, Type 3 ranked socialization highest, and Type 4 included a mixture of both types 1 and 3 with a strong desire for stress reduction/fitness and nature appreciation.

Relationships were found between the most satisfying activities and benefit types. Mountain biking was the most satisfying activity for individuals seeking stress relief and independence (Type 1). Hiking and walking were most satisfying for those interested in learning and sharing (Type 2). The social group (Type 3) also designated biking, walking and hiking, but sought rafting, driving for pleasure and sightseeing as well. Relative to the other groups, types 1 and 4 had a greater desire for more undisturbed, natural settings and less facility development.

As with much of the research that looked at only two of the variables tested in this dissertation, the research that has investigated the three variables of benefits sought, recreation activities, group characteristics have very distinct research designs making comparisons difficult. All are multiple activity studies. In the two earlier studies (Allen & Donnelly, 1985; Market Opinion Research, 1986), respondents describe a hypothetical situation, while the later two studies (Driver, et al., 1991; Stein & Lee, 1995), measure perceptions of actual recent recreation experiences.

Predicting Benefits Sought

No studies were found that compared the ability of different variables to predict benefits sought. Although some relationships were found, the real key to a successful benefits approach to recreation management will be in the ability of the recreation manager to predict what benefits users and potential users will be seeking.

Typically a new research topic will follow a predictable pattern. Early research on a topic will generally focus on defining, and then describing the variable. The next stage of research will be to test the relationships of the topic to other key variables. Later research frequently will test predictive models. Benefit research has not yet reached the predictive stage.

Single and Multiple Activity Research

Research may be divided into two types: single activity and multiple activity studies. Single activity studies allow the researcher to look closely into a particular recreation activity and uncover many facets of that activity. This type of in-depth information can be very useful to recreation agencies that provide one particular activity, however, public recreation agencies frequently provide a wide range of recreation services and activities. It would be more helpful, therefore, for public recreation managers to not only gather information on more than one activity, but also to compare and contrast the recreation benefits sought through different activities. The lack of consistency seen in single activity research makes comparisons between activities difficult.

Studying multiple activities within a single study allows for the comparison of a variety of recreation activities. This is the method selected for this dissertation. Public recreation managers typically offer a variety of programs, services, and facilities in an attempt to satisfy people with varying needs. So, for public recreation managers, a study which captures this variance can be very helpful. Due to the nature of this type of inquiry, however, researchers tend to select a technique of acquiring knowledge of recreation activities that may not be optimal for use by managers. Each of the single recreation activity studies reported in this chapter, have used subjects who were presently, or just

recently, engaged in the recreation activity of the study. In multiple activity studies, researchers don't typically use this approach. Multiple activity studies often measure attitudes and perceptions, independent of any particular visit or experience.

All but three of the multiple activity studies reviewed in this chapter (Buchanan, et al., 1981; Driver, Tinsley and Manfreda, 1991; Stein & Lee, 1995) used other approaches. The most common forms of inquiry use techniques which involve having a subject describe a variety of familiar or unfamiliar recreation activities (Hawes, 1979; Tinsley & Tinsley, 1988; London, Crandall, & Fitzgibbons, 1977; Unger, 1984; Williams, 1988), having a subject describe his/her favorite recreation activity (Allen & Donnelly, 1985; Beard and Ragheb, 1983; Donald & Havighurst, 1959; Driver & Knopf, 1976; Loundbury & Hoopes, 1988; Pierce, 1980), or having a subject describe an activity in which the subject has participated in the past (Ruckenstein & Marisi, 1983; Tinsley & Johnson, 1984; Tinsley & Kass, 1978, 1979; Tinsley, Teaff, Colbs, & Kaufman, 1985). A concern with these types of studies is that they are not situation specific. The subject reports motivation for and satisfaction with a hypothetical scenario.

Asking about the benefits sought by the user in a particular recreation experience should produce more realistic results. This method is effective in that it ensures actual experience and some familiarity with the activity. Also, by using this method, the subject does not have to rely on his/her recollection of an activity that may have occurred some time ago. Since this form of inquiry may ensure more valid and vivid recall, it was the method chosen in this dissertation.

Although relationships between benefits sought, recreation activities, and other group characteristics have been researched since the late 1950's, our knowledge of these

benefits is still limited. Most research has looked at the relationships of recreation activities to benefits sought and user group characteristics; presently patterns of similarities are beginning to emerge in these areas. Although authors of recreation literature are often reporting the influences of recreation activities and group characteristics on benefits sought, reaching relevant conclusions are difficult.

Two types of research dominate the benefits sought literature. Single activity research, although effective for in-depth inquiry of a recent recreation experience, unless common designs are used, does not allow for comparison across studies, and therefore, activities. Multiple activity research, although allowing comparisons among activities, typically has not featured recent recreation experiences. This dissertation is an attempt to further our knowledge of the relationships of benefits sought, recreation activities, and group characteristics. The methods selected will allow for comparisons across activities and focus on a respondent's recent recreation experience.

CHAPTER 3

METHODS

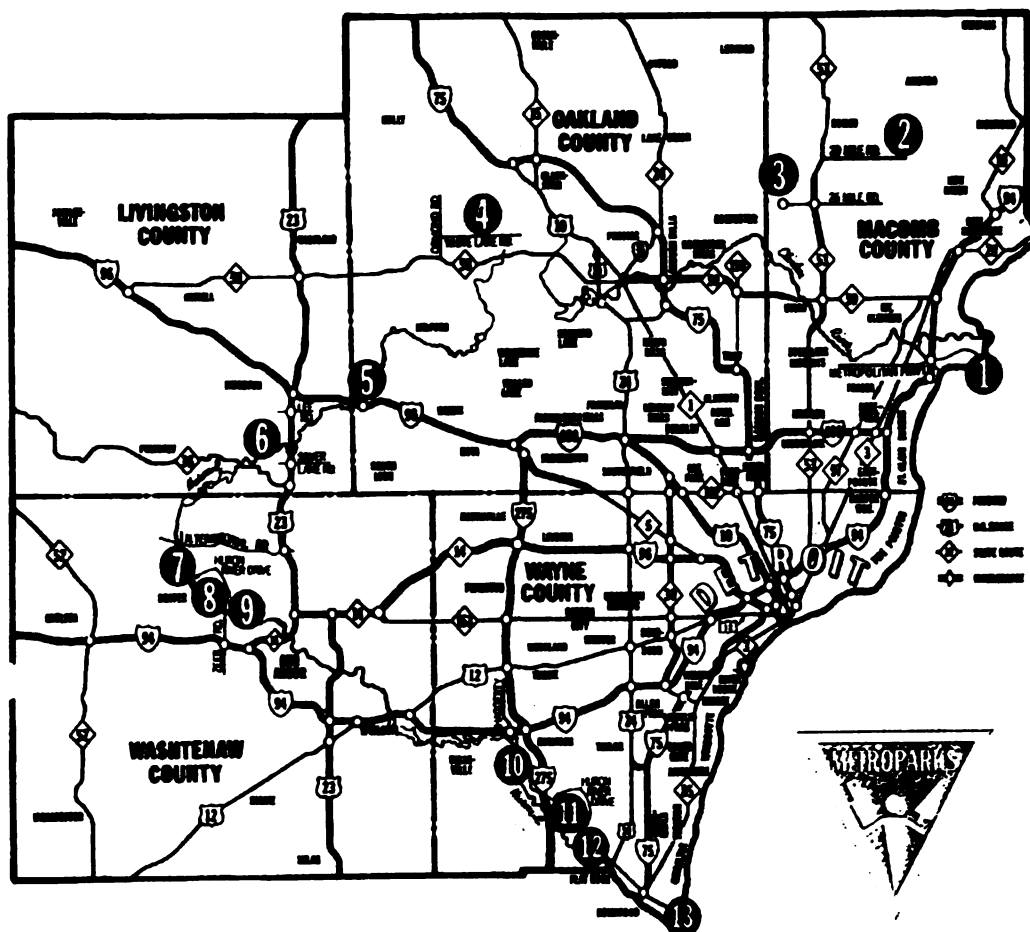
This chapter delineates the procedures followed in conducting the investigation of the relationships of benefits sought, recreation activities, and user group characteristics. The chapter is divided into six sections: (1) study project and sites, (2) study population and sampling plan, (3) response rates and representativeness of the HCMA Park User Study sample, (4) questionnaire design, (5) data analysis, and (6) limitations. The first three sections describe the data source, the HCMA Park User Study. Sections four and five detail the methods used to test the hypotheses. Limitations of the design are discussed at the end of this chapter.

Study Project and Sites

Data were gathered in a visitor survey at parks operated by the Huron-Clinton Metropolitan Authority (HCMA). HCMA is a regional park system (Lee, 1972) that includes 13 parks located in Southeast Michigan. The park user survey was conducted in 1995-95 by Michigan State University's Department of Park, Recreation and Tourism Resources under contract with HCMA. The overall purpose of the project was to generate information which could help HCMA evaluate current operations and to assist in making decisions for the HCMA park system's future. HCMA requested information about park visitors to assess their demographic and socioeconomic characteristics, use patterns, preferences for new or expanded park facilities and programs, and satisfaction with their visit to the park. Questions were included to test the hypotheses in this dissertation and to provide recommendations to HCMA to assist in implementing a

benefits approach to recreation management. Data were collected over an entire year, beginning December 1, 1995. For a full summary of the HCMA Park User Study, see Paulsen, Stynes, Nelson, Wisnom, & Elwert (1996).

HCMA parks are located in both urban and rural areas, surrounding the Detroit metropolitan region in Southeast Michigan. (See Figure 1.) The parks in this system were developed along either the Huron or Clinton Rivers, and each park includes a river, pond and/or lake. Although the parks contain many water-based recreation facilities, there are a wide variety of non-water based outdoor recreation opportunities available to those who visit the parks. The size of the parks range from 53 to 4,461 acres. Some of the parks in the HCMA park system provide only open/picnic areas, play areas, and natural trails, while other parks include more extensive developments such as beaches, marinas, golf courses, nature centers, swimming pools, and paved trails. The diversity of locations and facilities in the HCMA park system suggest a broad cross section of park users, recreation activities, and benefits sought. The findings of this research are generalizable to similar kinds of day use parks.



- | | | |
|---|--|---|
| 1. Metro Beach Metropark
770 Acres
On Lake St. Clair | 6. Haron Meadows Metropark
1,539 Acres
South of Brighton | 11. Willow Metropark
1,531 Acres
Between Belleville and Flat Rock |
| 2. Wolcott Mill Metropark
2,429 Acres
West of New Haven | 7. Hudson Mills Metropark
1,595 Acres
North of Dexter | 12. Oakwoods Metropark
1,716 Acres
Near Flat Rock |
| 3. Stony Creek Metropark
4,461 Acres
Surrounding Stony Creek Lake | 8. Dexter-Huron Metropark
123 Acres
Near Dexter | 13. Lake Erie Metropark
1,607 Acres
On Lake Erie |
| 4. Indian Springs Metropark
2,224 Acres
Northwest of Pontiac | 9. Delhi Metropark
53 Acres
Northwest of Ann Arbor | |
| 5. Kensington Metropark
4,337 Acres
Surrounding Kent Lake | 10. Lower Huron Metropark
1,256 Acres
Near Belleville | |

**HURON-CLINTON
METROPOLITAN AUTHORITY**
Administrative Offices
13000 High Ridge Drive • P.O. Box 3001
Brighton, Michigan 48116-8001
(810) 227-2757 OR 1-800-47-PARKS

Figure 1. HCMA Park Location Map

Study Population and Sampling Plan

The study population included all visitors to the HCMA parks from December 1, 1995 to November 30, 1996. During the study period, there were 2.7 million visitors to the 13 parks. A stratified random sample of visitors was taken at all 13 park locations. Visitors were sampled on 42 randomly selected dates throughout the one year period. Visitors to each of the 13 parks were sampled on 10 or 11 different days at each of the 13 parks during each of the four seasons. Approximately half of the dates were weekend days and half were weekdays. Separate sampling dates were selected for the five parks located in the north section of the region and the eight parks located in the south section of the region.

The data were gathered using an on-site self-administered survey. Park gate personnel were instructed to distribute surveys to selected visitors as they entered the park and to return the survey as they exited the park or via mail, using a business reply envelope. (For a detailed summary of the sampling process, see Paulsen, Stynes, Nelson, Wisnom, & Elwert, 1996, pp 4 - 16.)

Response Rates and Representativeness of the HCMA Park User Study Sample

The unit of analysis for any research project is what or whom is being studied. For this project, the user group (the group of individuals entering the park in the subject's vehicle) is the unit of analysis. The completion of the instrument was designated to an occupant of the vehicle sixteen years and older. Each of the questions pertain to the group as a whole. It is assumed that the subject's response reflects the recreation activities and benefits sought by all members of the user group.

Of 10,127 surveys distributed, 4,137 were returned yielding an overall response rate of 41%. One hundred and six surveys were incomplete and dropped from the analysis, yielding 4,031 useable returns. The full sample size yielded sampling errors of approximately 1% for binary variables (Babbie, 1992).

The response rate for the winter season was 54%, but the response rate decreased substantially in the spring and summer seasons, with a slight rebound in the fall. While there are some individual parks with a fairly consistent and high response rate throughout the study, most parks show a gradual decrease. The HCMA report (Paulsen, Stynes, Nelson, Wisnom, & Elwert, 1996, pp 14 - 18) presents a detailed description of response rates of the HCMA Park User Study.

The sharp drop in the summer response rate (31%), suggests that there may have been some distribution or collection problems during the summer period. The low response rate generated in this research indicates the possibility of under representation of some groups of park visitors, especially summer park visitors. The groups which appear to be under represented are minority groups and groups of lower education and income levels. These sample biases are more likely to affect estimates of distributions on particular variables (e.g. income and education) than tests of relationships between variables. Therefore, it is assumed that the sample generated is reasonably representative for the purposes of this dissertation.

Questionnaire Design

The HCMA Park User Survey data is used as a secondary data source for this dissertation. Three sets of variables were measured to test the study hypotheses;

- benefits sought during the park visit;

- primary activity participated in during the park visit; and
- group characteristics of park users.

These variables were measured using three separate survey questions. (See Appendix for the survey instrument.) The following three sections describe how each of the variables were measured.

Benefits Sought

To measure benefits sought during the visit, subjects were asked to indicate, from a list of six pre-defined benefit items, “how important to you are each of the following reasons for visiting this park today?” (See Figure 2.) The subjects were to choose the level of importance for each benefit on a 5-point Likert scale, ranging from “Extremely Important” to “Not Important.” For the purposes of this dissertation, “reasons for visiting this park” are interpreted as benefits sought. The six benefit sought items cover the most common categories of leisure benefits identified in the literature (Driver, Brown, & Peterson, 1991; Schreyer & Driver, 1989; Wellman, Dawson, & Roggenbuch, 1982): “Spend Time with Friends and Family,” “Get Some Exercise,” “Rest/relax,” “Excitement/thrills,” “Develop Skills/learning,” and “Enjoy Nature and the Outdoors.”

How important to you are each of the following reasons for visiting this park today? (Please circle one number for each reason.)					
Reason for Visiting	Extremely Important	Very Important	Important	Somewhat Important	Not Important
Spend time with friends and family	1	2	3	4	5
Get some exercise	1	2	3	4	5
Relax/rest	1	2	3	4	5
Excitement/thrills	1	2	3	4	5
Develop skills/learning	1	2	3	4	5
Enjoy nature and the outdoors	1	2	3	4	5

Figure 2. Benefit Sought Survey Question.

Group Characteristics

To determine the characteristics of the group visiting the park, respondents were asked to report the size of the party, and the gender and age categories of each of the individuals in the vehicle. (See Figure 3.) The “group” is defined as all persons entering the park in the same vehicle.

Including yourself, how many people in your vehicle are in EACH of the following age and gender groups?					
Children	Males	Females	Adults	Males	Females
Under 5 years of age	_____	_____	18 to 35 years old	_____	_____
5 to 12 years old	_____	_____	36 to 59 years old	_____	_____
13 to 17 years old	_____	_____	60 years of age and over	_____	_____

Figure 3. Group Characteristics Survey Question.

Visitor parties were categorized into adult only groups or groups with both adults and children. (Adults were defined as those individuals 18 years of age and older.) Visitor parties were classified into male only groups, female only groups, and groups which have both genders represented. Two group size categories were formed, those visiting the park alone and those in groups of more than one and less than ten. (Groups of more than ten, typically arriving by bus, were not sampled in the HCMA Park User Study.) Therefore, eight user groups were defined:

- male alone,
- female alone,
- group of male adults,
- group of female adults,
- group of mixed gender adults,
- group of male adult(s) and child(ren),
- group of female adult(s) and child(ren), and
- group of mixed gender adult(s) and child(ren).

Recreation Activities

Park visitors were asked to indicate which recreation activities they, or anyone in their vehicle, participated in during their visit to the park that day. Each subject was also asked, “Which of the above activities was the primary reason for visiting the park today?” (See Figure 4.) This “primary activity” is the variable used in this dissertation to define recreation activity groups. If the respondent didn’t come to the park for any particular reason, he/she was asked to indicate “none” on the survey. Ninety percent of the respondents indicated a primary activity.

General Activities ☐ Nature Observation/Photography ☐ Scenic Drive ☐ Picnic	Water- related Activities ☐ Sunbathe ☐ Boat - Non-motor ☐ Boat - Motor ☐ Fish from Boat ☐ Fish from Shore ☐ Waterslide ☐ Swim/Wade in Lake ☐ Swim/Wade in Pool (Including Wavepool)	Games and Sports ☐ Golf ☐ Play other Games/Sports ☐ Watch Games or Sports ☐ Use Playground Equip. Winter Activities ☐ Ice Fish ☐ Cross Country Ski ☐ Sled/Toboggan ☐ Ice Skate
Trail Activities ☐ Bicycle ☐ Walk or Hike ☐ Walk Pet(s) ☐ Run/Jog ☐ Rollerskate/In-line Skate/ Ski	Tour Facilities ☐ Visit Nature Center ☐ Visit Farm ☐ Visit Grist Mill	Events and Other Activities ☐ Attend a Special Event in the Park (please specify) _____ ☐ Other (please specify) _____
Which of the above activities was the primary reason for visiting the park today? _____ (If you didn't come to the park for any particular activity, write NONE.)		

Figure 4. Recreation Activity Survey Question

In order to have adequate sample sizes for sub-group analysis, activities were grouped into seven categories. These groups were loosely based on the type of park facility needed for the subject to participate: (1) trail activities, (2) general activities, (3) golf, (4) water-related activities, (5) winter activities, (6) touring facilities, and (7) special event activities. Table 1 includes a list of each activity and the category in which the

activity was placed. The number and percent of subjects represented in each activity category is also reported.

Table 1

Recreation Activity Groups.

Group	N	Percent	Group	N	Percent
Trail Activities			Winter Activities¹		
Walk or Hike	559	45	Ice Fish	59	33
Bicycle	241	20	Cross Country Ski	48	27
Roller/in-line Skate	202	16	Sled or Toboggan	41	23
Walk Pet	118	10	Ice Skate	29	17
Run or Jog	112	9	Total Winter Activities	177	100
Total Trail Activities	1232	100	Touring Facilities		
General Activities			Visit Nature Center	67	46
Nature Observation	203	30	Visit Farm	56	39
Picnic	198	29	Visit Grist Mill	21	15
Scenic Drive	180	26	Total Tour Activities	144	100
Use Playground Equipment	61	8	Special Event Activities		
Sunbathe	31	4	Attend a Special Event	99	100
Play Games/Sports	19	3	No Primary Activity		
Total General Activities	692	100		351	100
Golf	326	100	¹Winter activities were only included on the winter questionnaire.		
Water-related Activities					
Fish from Shore	78	31			
Swim or Wade in Lake	56	22			
Boat - Non-motor	53	21			
Fish from Boat	28	11			
Swim or Wade in Pool	19	8			
Boat - Motor	18	7			
Total Water Activities	252	100			

The trail activity category included walking/hiking, bicycling, roller/in-line skating, walking a pet, and running/jogging. Forty-five percent of the subjects in this category were walkers/hikers. Nature observation, picnic, scenic drive, using the playground equipment, sunbathing and playing games and sports (other than golf) were included in a general activity category, the largest number of subjects in this activity group came to the

park to observe nature (30%), picnic (29%), or a scenic drive (26%). Since golfers utilize a unique park facility, they were placed in a category by themselves. Ten percent of the total sample selected golf as their primary activity while visiting the park. Water-related activities included fishing (ice fishing was classified with winter activities), boating and swimming. Forty-two percent of this category were subjects that either fished from a boat or fished from shore. The winter activities were only available to subjects sampled during the winter season. Winter activities included ice fishing, cross country skiing, sledding, and ice skating. Visiting the Nature Center, Grist Mill, or Farm were labeled as touring facilities. And finally, those visiting the park for a special event were placed in a special event activities category.

Ten percent of all subjects (n=351) indicated that there was no one particular activity they could identify as their primary activity during their visit. Preliminary analyses were conducted to identify the composition of those indicating no primary activity. The group that indicated no primary activity was found to be most similar to the general activity group in terms of benefits sought and user characteristics. Because there was no clear picture of the recreation activities that these respondents were participating in during their park visit, this category was dropped from further analysis.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (Version 7.5) (SPSS, 1996). The sample was described using means, frequencies and percentages. Groups were defined based on activity and user group categories and the benefit rating was the dependent variable. One Way Analysis of Variance (ANOVA) was used to test for differences in benefit ratings across subgroups. The F test, which is the ratio of

between group variance to within group variance, was utilized. A statistically significant F test indicates (with some specified degree of confidence) that there is a difference among the subgroup means. Scheffe's test was employed to test for differences in means between individual subgroup pairs. The Scheffe test adjusts for a greater likelihood of Type I errors when making multiple pairwise tests.

Hypothesis 1: Benefits sought during a park visit do not vary significantly with recreation activities.

The recreation activity category was used as the independent variable and the six benefit sought categories were the dependent variables.

Hypothesis 2: Benefits sought do not vary significantly with the demographic makeup of the group visiting the park.

The user group category acted as the independent variable, while the six benefit sought categories were the dependent variables.

Hypothesis 3: Participation in recreation activities does not vary significantly with the demographic makeup of the group visiting the park.

The user group category was the independent variable, with the recreation activity categories as the dependent variables. To use ANOVA to test this hypothesis, dummy variables were developed for each of the seven primary activity categories (i.e. for each activity category, a code of one indicated the selected primary activity, a zero code meant the activity category was not selected as the primary activity).

Linear regression analysis was used to estimate the ability of group characteristics and recreation activity variables to explain differences in benefit ratings. Linear regression predicts the value of a dependent variable as a linear function of one or more independent variable(s). Separate equations were used to test the ability of each of the two

independent variables (user group characteristics and recreation activities) to predict each of the six dependent variables (benefits sought). The recreation activity and group characteristic variables were tested separately and also together to evaluate their relative performance in predicting benefits. The “coefficient of determination,” R^2 , identifies the percentage of variance in the dependent variable explained by the independent variables.

Limitations

A number of limitations should be noted in regards to this dissertation, most importantly, the constraints imposed by a general park visitor survey. First, when gathering information on benefits sought, subjects were asked the “reason for visiting the park today.” This reason was interpreted as the benefits sought in the recreation experience as a whole. Benefit data were collected using this question alone, another limitation dictated by the use of a park visitor survey. Using an alternative form of data collection could have allowed for more complex scales of measurement or even multiple approaches to measuring benefits. Second, in collecting information on the benefits sought from recreation activities, subjects were limited to the six pre-established categories. Third, a closed ended question was used for this inquiry, thus not allowing the subject to deviate from the six benefits listed. Other benefits that may have been sought by the subject were not measured and not reported. Lastly, there are numerous types of recreation activities which can fill an individual’s free time. The recreation activities selected for this dissertation are limited to outdoor recreation activities typically found in a general day use outdoor park setting.

It is assumed that the subject took into consideration each member of the group, when reporting benefits sought and the primary activity. Although the questions were

conveyed in the survey in this manner, some subjects may have indicated their individual preferences.

Activity categories were grouped based on the kinds of facilities required to participate in this type of activity, for example, water-related activities, trail activities and golf. This grouping method permits the results to be more directly linked to management decisions such as designing, developing or enhancing facilities or areas. This method of categorization could have altered the recreation activity variable to also include aspects of the park facility itself. Due to the aggregation of the recreation activities into broader categories, benefits may vary within the activity groups.

The low response rate generated in this research indicates the possibility of under representation of some groups of park visitors. The groups which appear to be under represented are minority groups and groups of lower education and income levels.

CHAPTER 4

RESULTS

The primary objective of this dissertation is to expand our knowledge and understanding of the relationships between benefits sought in a recreation experience, the primary recreation activity participant in during a park visit, and the user group visiting the park. An on site self-administered survey was used to gather the data for this research. Three sets of variables were used to test the study hypotheses: Benefits sought, recreation activities, and group characteristics.

Results are presented in seven sections. The first section contains a profile of visitors to the HCMA regional park system. The second section describes the variables used to test the three null hypotheses. Sample means, medians, and frequency distributions are presented for benefits sought. Frequencies and percents are presented for group characteristics and primary activities. Results of the hypothesis tests are presented in the remaining four sections: the relationships between benefits sought and primary recreation activity; benefits sought and group characteristics; primary recreation activity and group characteristics; and finally, the power of the two variables for predicting benefits sought.

Park Visitor Characteristics

Visitor characteristics are based on a sample of 4,031 visitors to the HCMA parks in 1995/96. Half of the sample were female and half were male (Table 2). Ninety-two percent of the visitors sampled were white. The average age of the visitors completing the survey was 44 years. Half of respondents were between the ages of 36 and 59 with 31%

between the ages of 18 - 35, (only the visitors 16 years of age or older were asked to complete the survey). Two thirds of visitors were married (Table 2).

Table 2

Demographic and Socioeconomic Characteristics of HCMA Park Visitors

Gender	Percent	N	Employment Status	Percent	N
Male	50%	1813	Employed full-time	57%	2090
Female	50%	1805	Retired	19%	698
Ethnicity			Homemaker	9%	327
White	92%	3414	Employed part-time	8%	297
Black	3%	91	Student	4%	147
Other ¹	5%	200	Unemployed	2%	61
Age Categories			Other	1%	54
Less than 18 years	1%	45	Household Income		
18 - 35 years	31%	1126	Less than \$25,000	11%	346
36 - 59 years	50%	1822	\$25,000 - 49,000	31%	940
60 years and older	18%	657	\$50,000 - 74,999	31%	955
Marital Status			\$75,000 and greater	27%	843
Married	67%	2566	County of Origin		
Unmarried ²	33%	1244	Wayne	27%	986
Education			Oakland	24%	902
Less than HS diploma	4%	138	Other	19%	704
High school diploma	17%	630	Macomb	15%	553
Tech/Vocational	7%	248	Livingston	8%	289
Some college	29%	1060	Washtenaw	7%	276
4 year college degree	25%	917			
Advanced degree	18%	660			

¹Includes Native American, Asian, Hispanic and Multi-racial.
²Includes single, divorced and widowed.

Twenty-nine percent of the respondents had completed some college and 25% had completed a four year academic degree. Fifty-seven percent were employed full-time and 19% were retired. Total yearly household income (before taxes) was obtained in four categories: 11% of respondents made under \$25,000, 31% of respondents were represented in each of the categories of \$25,000 to \$49,999 and \$50,000 to \$74,999, and 27% of respondents had a household income at or over \$75,000. The majority of park

visitors (81%) live within the five county region where the parks are located; Oakland, Livingston, Wayne, Washtenaw and Macomb counties (Table 2).

Park Visit Characteristics

Benefits Sought

Respondents rated each of six reasons for visiting the park on a Likert scale from 5 (Extremely Important) to 1 (Not Important). (Items were originally coded from one as “Extremely Important” and 5 as “Not Important” and were reverse coded so higher scores indicated a higher importance.) The reasons for visiting (or benefits sought) were, “Spend Time with Friends and Family,” “Get Some Exercise,” “Relax/rest,” “Excitement/thrills,” “Develop Skills/learning,” and “Enjoy Nature and the Outdoors.” (See Table 3.) These benefit sought categories will subsequently be referred to as socializing, exercising, relaxing, excitement, learning, and enjoying nature, respectively. Please note when reviewing and interpreting the results of this research, the labels chosen to be used in the remainder of this document are much broader than they are operationally defined in the questionnaire.

Table 3

Benefit Importance Ratings

Reasons for Visiting	Percent					Mean ¹	Median	N ²
	Extremely Important	Very Important	Important	Somewhat Important	Not Important			
Enjoy nature and the outdoors	52.9	29.1	13.7	2.5	1.7	4.29	4.1	3668
Get some exercise	39.8	27.3	18.3	6.8	7.8	3.84	3.6	3566
Relax/rest	32.1	29.4	22.8	8.0	7.7	3.70	3.4	3432
Spend time with friends/family	35.9	24.6	18.0	5.6	15.9	3.39	3.4	3369
Develop skills/learning	11.3	14.1	23.1	20.3	31.1	2.54	1.9	3204
Excitement/thrills	8.4	11.0	19.3	20.3	41.0	2.26	1.4	3175

¹Means based on scores of 5=Extremely Important, 4=Very Important, 3=Important, 2=Somewhat Important and 1=Not Important.

²Missing responses not included.

Enjoying nature was the most important reason for visiting a park, with a mean score of 4.3 and a median of 4.1 on a five point scale. Approximately 53% of respondents rated enjoying nature as “Extremely Important,” with less than 2% rating it as “Not Important.”

The mean ratings for exercising (3.8), relaxing (3.7), and socializing (3.6) fell between “Very Important” and “Important,” similar to median ratings. “Extremely Important” and “Very Important” received a similar number of responses with the benefit items exercising and relaxing (totaling 67% and 61% respectively). Eight percent of respondents rated exercising and relaxing as “Not Important.” Socializing had ratings of “Extremely Important” and “Very Important” similar to the other benefit sought categories, however, a much larger number (16%) of respondents selected “Not Important.” Scores for socializing were the most evenly distributed across the five response categories.

Average importance ratings for learning and excitement were between “Important” and “Somewhat Important” and medians were 1.9 and 1.4 respectively. Over half of the respondents rated learning and excitement as “Somewhat Important or “Not Important.” Not all subjects responded to each benefit item, so the total number of respondents (N) fluctuates from 3,175 to 3,668.

Recreation Activities

Respondent groups participated in an average of 2.5 different activities during their visit; 36% participated in only one activity. For 38% of visitor groups, a trail activity was their primary activity, followed by general activities (21%), and golf (10%) (Table 4).

Table 4

HCMA Visitors by Primary Activity¹

Type	N	Percent
Trail activities	1232	37.6
General activities	692	21.1
Golf	326	10.0
Water-related activities	252	7.7
Winter activities ²	177	5.4
Touring facilities	144	4.4
Special event activities	99	3.0
No primary activity	351	10.7
Total	3273	100

¹Rates of participation for individual activities are presented in Table 2.

²Winter activities were only included on the winter questionnaire.

Group Characteristics

The average size of respondent groups entering the park was 2.4 persons. Visitors were divided evenly between men and women. Thirty-nine percent of visitor groups consisted of two people. Twenty-eight percent visited the park alone. Forty-seven percent of the groups contained both males and females, 22% of parties were females only and 31% of groups were males only. Two-thirds of groups were all adults and 32% contained both adults and children (ages 17 and under).

For the purposes of this dissertation, respondent parties were placed into eight mutually exclusive types of groups (Table 5). The groups are based on the size of the group and the age and gender of group members. Approximately one third (30%) of all groups are adult only groups (more than one in the party) including both male(s) and female(s). Adult men traveling to the park alone make up 19% of all groups. Groups consisting of both genders with child(ren) make-up another 17% of all user groups. The group with the smallest representation are groups of female adults (4%).

Table 5

HCMA Visitors by Demographic Subgroups

Group Characteristics:¹	N	Percent
Male Alone	689	19%
Female Alone	332	9%
Group Male Adults	218	6%
Group Female Adults	149	4%
Group Mixed Gender Adults	1121	30%
Group Male Adult(s) & Child(ren)	214	6%
Group Female Adult(s) & Child(ren)	351	9%
Group Mixed Gender Adult(s) & Child(ren)	613	17%
Total	3687	100

¹Variables labeled "group" include parties of more than one and adults are those subjects 18 years of age or older.

Tests of the Four Research Hypotheses

As the sample size for the HCMA visitor survey was quite large (N=4,031), virtually all hypothesis tests on the full sample are statistically significant at the 99 percent confidence level. As the Scheffe test sample sizes are smaller, the statistical significance of these subgroup tests are more meaningful. The analysis will focus on the strength of the relationships in the sample, not just the tests of statistical significance, i.e. how different are the benefit ratings across visitor subgroups defined by recreation activities and group characteristics.

Benefits Sought and Recreation Activities

Hypothesis 1: Benefits sought do not vary significantly with recreation activities.

Hypothesis 1 was rejected. The importance of different benefits varied in relation to the primary activity. Means for each benefit item were significantly different at the .01 significance level for each of the seven activity groups (Table 6).

Table 6

Comparison of Benefit Ratings by Primary Activity

Primary Activity	Mean² and Scheffe test³					
	Get Some Exercise	Develop skills/learning	Excitement/thrills	Enjoy nature & the	Spend time with friends/family	Relax/rest
Trail activities	4.5 a	2.2 d	2.0 c	4.4 a,b	3.3 c	3.5 b,c
General activities	3.2 d	2.4 c,d	2.2 b,c	4.4 a,b	3.7 a,b,c	3.9 a,b
Golf activities	3.9 b	3.1 a,b	2.7 a,b	3.8 c	3.6 a,b,c	3.3 c
Water-related activities	3.1 d	2.6 c,d	2.6 a,b	4.1 b,c	4.0 a,b	4.0 a
Winter activities ¹	3.8 b,c	2.9 b,c	2.9 a	4.2 a,b	3.6 b,c	3.4 c
Touring facilities	3.4 c,d	3.4 a	2.3 b,d	4.5 a	4.1 a	3.6 a,b,c
Special Event activities	3.2 d	2.9 b,c	2.2 b,c	4.2 b	3.8 a,b,c	3.5 b,c
Overall Mean	3.8	3.5	2.3	4.3	3.6	3.7
F	143.841	29.67	20.659	18.774	13.549	13.18
N	2670	2400	2386	2699	2505	2537
Sign.	0.00	0.00	0.00	0.00	0.00	0.00

¹Winter activities were only included on the winter questionnaire.

²Mean scores are based on the ratings 5=extremely important, 4=very important, 3=important, 2=somewhat important, 1=not important

³ a,b,c, and d indicate subgroups where means are significantly different at a 95% confidence level, as determined by the Scheffe test.

Interpretation of the ANOVA/Scheffe Tables

The exercise benefit and Table 6 will be used to illustrate how the tables and statistical tests are interpreted. In Table 6, the primary activity categories (values of the independent variable) are found in rows and the benefits sought (dependent variables) in the columns. The F ratio of 143.841 is significant at the .001 level, indicating the seven means in the exercise column are not all equal in the population. The highest mean rating for exercise was by individuals engaged in trail activities (4.5). Golf (3.9) and winter activities (3.8) also had mean importance ratings for exercise at or above the overall mean. Ratings for the remaining four activities fell below the overall mean.

Letters following the individual ratings (a-d) indicate the results of the Scheffe test. Scheffe tests for differences in means between each pair of activities. The Scheffe test discloses which activities (or user groups in Tables 7 and 8) differ from one another in

terms of benefit ratings at the 95% confidence level. In general, the mean ratings in these tables must differ by at least .3 to be significantly different from one another.

For exercise, activities fall into four different subgroups labeled (a) - (d). Activities with the same letter do not differ significantly in their mean ratings, but are different from activities with a different letter. Thus, individuals participating in trail activities rated exercise significantly different than each of the other six primary activity categories, so only trail activities fall into group (a).

Visitors whose primary activity was golf did not differ in their ratings of exercise. Winter activities fall into both group (b) and (c), meaning the exercise ratings of winter activity visitors do not differ significantly from touring. The exercise rating for visitors touring facilities (c,d) are significantly different from golf and trail activities, but not winter (b,c), general (d), water-related (d), and special event activities (d). Other columns in Table 6 and Tables 7 and 8 are interpreted in a similar fashion.

Trail activities, such as running, biking and walking, have been commonly associated with exercise in previous research (Clough et al., 1989; Market Opinion Research, 1986; Stein & Lee, 1995). Several water-related activities also were found, in past research literature, to be linked to exercise (Driver & Cooksey, 1988; Driver and Knopf, 1976; Hollender, 1977; Knopf et al., 1983; Stein & Lee, 1995). However, in this research, exercise was rated as less important for water-related activities. A possible reason for this is that a large number (42%) of those groups included in the water-related activity category selected their primary activity to be fishing, and past research was focused primarily on swimming and boating.

As in past research (Etzkorn, 1964; Tinsley & Tinsley, 1988), **learning** was found to be a more important benefit for groups whose primary activity was touring (3.4) or golf (3.1). The ratings for these two groups were not significantly different from each other. Golfers rated learning significantly higher in importance than groups primarily engaged in winter activities (2.9) or those attending a special event (2.9). Visitors whose primary activity was water-related (2.6) or a general (2.4) activity rated learning similar to winter and special event groups. The trail activity group rated learning as the least important benefit (2.2), which is contrary to Stein and Lee's (1995) finding that walking and hiking were related to learning. This difference in findings may be attributed to the difference in settings for the two research projects. Stein and Lee completed their research in a remote natural area in Western Colorado. For this dissertation, the setting is more of a suburban park setting.

Excitement is rated the least important of the six benefits for all primary activity groups. The highest mean score for excitement (2.9) was lower than all the subgroup scores for exercise (3.8), socializing (3.6), enjoying nature (4.3), and relaxing (3.7). Subjects designating winter (2.9), golf (2.7), and water-related (2.6) activities as their primary activity rated excitement as more important than the other groups. Market Opinion Research (1986) also found golf (included in the sports category), water and winter activities to be the most exciting. Both golf and winter activity groups rated "Excitement/thrills" higher than the other activity groups, and, as may be expected, rated relaxing lowest. Touring groups had the next highest rating (2.3) for excitement, which was not significantly different from either golf or water-related activities. Trail groups rated excitement as the least important benefit, with a mean score of 2.0.

The majority of past benefit research has been completed in outdoor/natural settings. Therefore, almost every recreation activity has been associated with **enjoying nature**. HCMA visitors rated enjoying nature higher than any other benefit item. However, some significant differences existed between activity subgroups in their ratings of enjoying nature. Respondents who participated in touring (4.5), trail (4.4), general (4.4) and winter (4.2) activities rated enjoying nature as more important than other activity groups. Trail, general and winter groups were not significantly different from special event (4.2) and water-related (4.1) activities. Golfers (3.8) gave enjoying nature the lowest rating of any activity group. Their rating of 3.8 was significantly lower than all other activity groups with the exception of the water-related activity group.

Consistent with past research (Driver & Cooksey, 1980; Driver & Knopf, 1976; Graefe, 1977; Graefe et al., 1981; Knopf et al., 1983; London et al., 1977; Tinsley & Johnson, 1984; Tinsley & Tinsley, 1988; Stein & Lee, 1995), groups whose primary activity was touring (4.1), water-related (4.0), special event (3.8), general activities (3.7), or golf (3.6) rated **socializing** higher than the remaining activity groups. These five activity groups did not differ significantly from one another, but were different from winter (3.6) and trail (3.3) activity groups. General, golf, and special event activity groups also were found to be similar to winter and trail activity groups when rating the importance of socializing.

Relaxing had the lowest F-ratio ($F=13.18$) of the six benefits tested, indicating a weaker relationship with the primary activity groups than the other benefit sought categories. There was some variation in subgroup means based on the Scheffe test. Subjects who participated in water-related recreation (4.0), general activities (3.9), and

touring activities (3.6) rated relaxing as significantly more important than other groups engaged in activities. Those subjects who selected a general or touring activity as their primary activity were also found to be similar to trail (3.5) and special event (3.5) groups. Winter (3.4) and golf (3.3) activity groups rated “Relax/rest” as less important than all other groups, but, were found to not be significantly different than touring and trail activity groups.

In summary, those respondents visiting the HCMA park primarily for trail activities tended to be seeking exercise and nature enjoyment in their recreation experience and were least likely to be seeking learning or excitement. The primary benefits cited by visitors engaged in general and water-related activities were socializing, enjoying nature and relaxing. Golfers rated exercise as the most important benefit and excitement as least important. Winter activity participants were seeking the enjoyment of nature and exercise. Although subjects participating in winter activities rated excitement as the least important of the benefits they were pursuing, their rating for excitement was the highest of all activity groups. Those subjects coming to tour the nature center, farm or grist mill were most likely to seek nature enjoyment and socializing, and least likely to be seeking excitement. Finally, those who were attending a special event were seeking the enjoyment of nature and not likely to seek learning, excitement, or exercise.

Benefit Sought and Group Characteristics

Hypothesis 2: Benefits sought do not vary significantly with the demographic makeup of the group visiting the park.

Hypothesis 2 was rejected. The importance of different benefits varied according to group characteristics. Means for each benefit item were significantly different at the .01 significance level across the eight park visitor groups (Table 7).

Table 7

Comparison of Benefit Ratings by Group Characteristics

Group Characteristics: ¹	Mean ² and Scheffe test ³					
	Spend time	Develop skills/Excitement/	Get some	Enjoy nature	Relax/rest	
	with friends/family	learning	thrills	exercise & the outdoors		
Male Alone	2.4 d	2.4 b,c	2.1 c,d	3.9 a,b,c	4.1 b	3.6 a
Female Alone	2.6 d	2.4 b,c	1.9 d	4.2 a	4.5 a	3.8 a
Group Male Adults	3.7 c	3.1 a	2.9 a	3.8 b,c,d	4.2 b	3.5 a
Group Female Adults	4.0 a,b,c	2.3 c	2.1 c,d	4.1 a,b	4.4 a,b	3.7 a
Group Mixed Gender Adults	3.8 b,c	2.2 c	2.1 c,d	4.0 a,b,c	4.4 a,b	3.8 a
Group Male Adult(s) & Child(ren)	4.0 a,b,c	2.9 a	2.6 a,b	3.5 d	4.2 b	3.6 a
Group Female Adult(s) & Child(ren)	4.2 a,b	3.0 a	2.4 b,c	3.5 d	4.3 a,b	3.5 a
Group Mixed Gender Adult(s) & Child(ren)	4.3 a	2.8 a,b	2.4 b,c	3.6 c,d	4.3 a,b	3.7 a
Overall Mean	3.6	3.5	2.3	3.8	4.3	3.7
F	143.876	25.265	16.324	14.868	7.104	3.637
N	3151	2994	2971	3323	3417	3201
Sign.	0.00	0.00	0.00	0.00	0.00	0.00

¹Variables labeled "group" include parties of more than one and adults are those subjects 18 years of age or older.

²Mean scores are based on the ratings 5=extremely important, 4=very important, 3=important, 2=somewhat important, 1=not important

³a,b,c, and d indicate subgroups where means are significantly different at a 95% confidence level, as determined by the Scheffe test.

As expected, **socializing** (Spend Time with Friends and Family) was more important to larger groups, particularly those that included children. Groups of adults and children and the all female adult groups had an average rating for social benefits as "Very Important" or higher, while all male adult groups (3.7) and mixed gender adult groups (3.8) rated social benefits lower in importance. As might be expected, individuals entering the park alone rated socializing significantly less important than the other groups. Socializing was the benefit sought category with the highest F-ratio ($F=143.876$), indicating the greatest amount of variance between groups relative to the variation within groups.

"Learning/developing Skills" was rated highest by groups of male adults (3.1) and groups of adult(s) and child(ren) (female - 3.0, male - 2.9, mixed gender - 2.8). Males and

females alone (2.4), female adult groups (2.3), and mixed gender adult groups (2.2) rated learning as less important.

Male groups rated **excitement** as more important than female or mixed gender groups (male adults - 2.9, male adult(s) and child(ren) - 2.6). All groups of adults and children were found to be not significantly different (male - 2.6, female and mixed gender - 2.4). Males alone, groups of female adults and mixed gender adults rated excitement the same at 2.1 and were not significantly different from females alone (1.9).

Whether or not children were present in the group is the most important predictor of variations in ratings of **exercise**. All adult groups rated exercise higher than groups consisting of both adult(s) and child(ren). Adults alone or in groups generally did not differ in their ratings of the importance of exercise, except for male only adult groups (mean scores ranging from 3.9 - 4.2). Groups of male adults (3.8) and all groups with children rated exercise as less important than all other groups. Mean ratings of exercise for groups with children were either 3.5 or 3.6, denoting the average score fell approximately half way between “Important (3)” and “Very Important (4).”

All demographic groups rated “**Enjoying Nature and the Outdoors**” as important. The presence of a female in the user group seemed to be the distinguishing factor in the importance rating of this perceived benefit. Groups with female members rated this benefit as significantly more important (4.3 - 4.5) than all male groups (4.1 - 4.2).

All the importance ratings for **relaxing** fell somewhere between a rating of “Very Important (4)” and “Important (3).” Although the ANOVA test found a statistically significant difference in ratings of “Relax/rest” across types of user groups, the Scheffe test showed no significant pairwise differences.

Of the group demographic characteristics that had the most influence on the ratings of benefits sought in a recreation experience, size of the group was most notable with socializing. In addition, whether or not there are child(ren) in a group was a critical factor with regards to the importance ratings of exercise. Also, groups with women tended to rate nature enjoyment as more important than groups without women. Similar to Hawes (1979), male-only groups gave higher importance ratings for excitement.

Recreation Activities and Group Characteristics

Hypothesis 3: Participation in recreation activities do not vary significantly with the demographic makeup of the group visiting the park.

Hypothesis 3 was rejected. Ratings of participation for six of the primary activity categories were significantly different across the eight demographic groups at a $<.01$ level of significance. The special event activities category was significantly different at the .014 level, due largely to a smaller number of respondents (Table 8). The number of respondents in each activity group category ranged from 1152 (trail activities) to 99 (special event activities). The greatest between group variance relative to within group variance was observed in the golf activity category ($F=81.801$) and the least difference was in the special event activity category ($F=2.52$). To use One Way ANOVA to test Hypothesis 3, dummy variables were developed for each primary activity category. Codes of 1 = "primary activity selected" and 0 = "primary activity not selected" were used. The means for the dummy variables can be interpreted as the percent of each group participating in the activity, e.g. 19% of male only groups listed golf as their primary activity. To assist with the interpretation of this table, means are reported as a percent, each row totaling 100%.

Table 8

Comparison of Activity Ratings by Group Characteristics

Group Characteristics: ¹	Percent ² & Scheffe test ³						
	Golf Activities	Trail Activities	Touring Facilities	Winter Activities	General Activities	Water-Activities	Special Event Activities
Male Alone	19% b	47% b	0% c	7% b	17% c,d	7% a,b	2% a
Female Alone	5% c,d	67% a	3% b,c	2% b	19% b,c,d	2% b	2% a
Group Male Adults	57% a	15% c	0% c	6% b	8% d	13% a	1% a
Group Female Adults	6% c,d	55% a,b	6% b,c	3% b	19% b,c,d	7% a,b	4% a
Group Mixed Gender Adults	6% c,d	54% a,b	2% b,c	2% b	25% a,b,c	6% a,b	4% a
Group Male Adult(s) & Child(ren)	14% b,c	25% c	7% b,c	19% a	21% a,b,c,d	11% a,b	3% a
Group Female Adult(s) & Child(ren)	2% d	23% c	17% a	5% b	33% a,b	15% a	5% a
Group Mixed Gender Adult(s) & Child(ren)	2% d	29% c	8% b	10% b	35% a	8% a,b	4% a
Overall Percent	11%	42%	5%	6%	24%	9%	3%
F	81.801	39.811	22.476	13.671	11.740	6.066	2.520
N	296	1152	127	159	646	232	99
Sign.	0.00	0.00	0.00	0.00	0.00	0.00	0.014

¹Variables labeled "group" include parties of more than one and adults are those subjects 18 years of age or older.

²Means are based on dummy variable codings of 1=primary activity selected & 0=not selected, expressed as a percent.

³a,b,c, and d indicate subgroups where means are significantly different at a 95% confidence level, as determined by the Scheffe test.

As in earlier studies (Wellner, 1997), groups of male adults were most likely to be **golfers**. More than half (57%) of HCMA groups consisting of male adults visited the park primarily to golf. Males visiting the park alone (19%) and groups of male adult(s) with child(ren) (14%) were next most likely to be golfing. Female adult groups (6%), groups of mixed gender adults (6%) or females alone (5%) were significantly less likely to select golf as their primary activity. Finally, female and mixed gender groups of adults with children were least likely to select golf as their primary activity (2%).

Adult groups with females present were most likely to select **trail activities** as their primary activity (67% of females alone, 55% of groups of female adults, and 45% of groups of mixed gender adults). Each of these groups were identified by the Scheffe test as being not significantly different from one another. Groups of females, mixed gender adults and men alone (47%) had similar propensities to engage in trail activities. Groups of male adults and all groups of child(ren) and adult(s) were not significantly different from one another and least likely to select a trail activity as their primary activity.

Groups of female adult(s) and child(ren) were most likely to be **touring facilities**, such as visiting the nature center, farm or grist mill (17%). Their rate of participation was significantly higher than all other groups. Mixed gender adult(s) and child(ren) (8%) were less likely to be touring, followed by groups of male adult(s) and child(ren) (7%), groups of female adults (6%), females alone (3%) and mixed gender adults (2%). These five groups were not significantly different from each other in their propensity to visit the park for a touring activity. Not one group of adult males alone or in groups selected touring activities as their primary activity.

Nineteen percent of groups of male adult(s) and child(ren) selected **winter activities** as their primary activity. According to the Scheffe test their participation rate was significantly higher than all other user groups. Participation rates in winter activities for all remaining types of groups were less than 10%.

The larger size groups were more likely to select a **general activity**, which included activities such as picnicking, nature observation, scenic driving, using playground equipment, sunbathing, and playing games and sports. The group most likely to select general activities as their primary activity were groups of adult(s) and child(ren) and mixed gender adults (21%, 35% respectively). Females alone (19%) and females in groups (19%) were the next group most likely to select general activities. Those least likely to select general activities were males alone (17%) and males in groups (8%). With the exception of the group with the highest percent (groups of mixed gender adult(s) and child(ren)) and the lowest percent (groups of male adults), participation rates in general activities were not significantly different across demographic groups.

A wide variety of groups participated in **water-related activities** (fishing, boating or swimming). There was little variation in rates of participation between user groups. Groups of female adult(s) and child(ren) (15%) and groups of men (13%) were most likely to select water-related activities. Females alone (2%) were the least likely to select water-related activities as their primary activity.

Only a small percentage of visitor groups selected **special event activities** as their primary activity (with a range from 1% to 5%). And although the ANOVA test found a significant difference in ratings across types of user groups, the Scheffe test showed no significant pairwise differences, indicating a weak relationship, partly due to a small sample size.

In summary, gender best explains differences in participation in trail, golf and touring activities. Male groups are more likely to be golfing and female groups are more likely to be using trails. Group size predicts participation in general activities, as larger groups are more likely than smaller groups to select a general activity as their primary activity. Groups with children are more likely to participate in touring activities (e.g. visiting nature centers) than those without children. Women visiting the park alone were not likely to participate in water-related activities, while groups of male adult(s) and child(ren) were the most likely to be visiting the park for a winter activity.

Predicting Benefits Sought by Recreation Activities and Group Characteristics

Linear regression procedures were used to test the relative ability of the primary activity and group characteristics to predict benefit ratings. Activity and group characteristics were converted to dummy variables and entered as sets of independent variables for predicting each of the six benefit ratings. The adjusted R^2 is used as an

indicator of the explanatory or predictive power of each set of variables. Group and activity variables each explain between 75 and 90 percent of the variation in visitor benefit ratings across the six benefits (Table 9).

Table 9

Variance in Benefits Sought Explained by Activity and Group Variables

Variable(s)	Adjusted R²					
	Excitement/ thrills	Develop Skills/ learning	Get some exercise	Spend time with friends/family	Relax/Rest	Enjoy nature and the outdoors
Group Characteristics	0.896	0.875	0.759	0.802	0.784	0.784
Activity Groups	0.897	0.880	0.812	0.751	0.794	0.791
Group Characteristics and Activity Groups	0.901	0.885	0.813	0.811	0.797	0.796

Due to considerable intercorrelation between the activity variables and the group characteristic variables, entering both sets of variables yields little improvement in predictive power. Activities better predict the importance of exercising, while user groups better predict “Spending time with Friends and Family.” Otherwise, activity variables only slightly outperform group characteristics in explaining the importance of each of the remaining benefits (Table 9).

CHAPTER 5

SUMMARY AND CONCLUSIONS

This research has shown for the HCMA park users, that benefits sought vary across recreation activities and user groups. However, while some activities are carried out for quite different benefits, others provide similar kinds of benefits. Benefits sought on a particular park visit will depend somewhat on the group make-up. Group variables are more important in predicting social benefits, while particular activities tend to be more directly associated with exercise, learning, enjoying nature, relaxing, or excitement. This information can be used to enhance recreation marketing, management, and planning efforts.

Benefit Profiles

The summary and conclusions will be presented in a “benefit profile” format. Each profile will highlight the activity and user groups most and least likely to seek the highlighted benefit. This chapter concludes with a discussion of the uses of these benefit profiles in the marketing, management and planning efforts of the recreation professional in general, for Huron Clinton Metropolitan Authority (HCMA) specifically, and recommendations for further research.

Enjoy Nature and The Outdoors

Enjoying nature was rated higher in importance by respondents than any other reason for visiting the park (Figure 5). All activity groups rated enjoying nature as the most important benefit, with the exception of golfers and trail users, who rated enjoying nature as the second most important reason for their park visit.

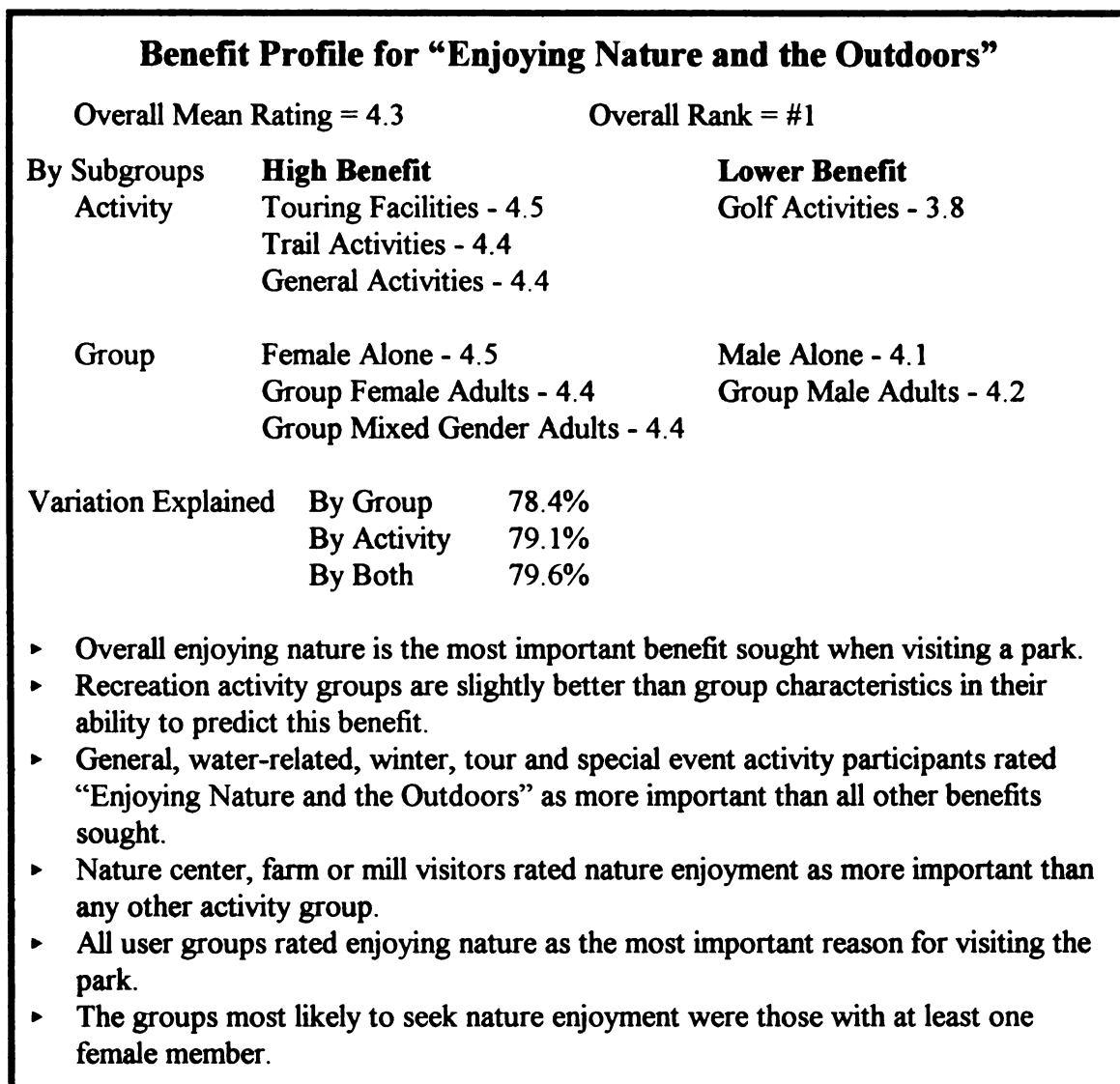


Figure 5. Benefit Profile for Enjoying Nature and the Outdoors.

Activity groups explained approximately 79% of the variation in benefit ratings, about the same as user group characteristics (78%). Those individuals whose primary activity was touring a nature center, farm or mill rated enjoying nature as more important than all other activity groups. Although these activities are, for the most part, indoor activities, and one might question the rating of this “outdoor” nature benefit. Visitors who tour these facilities may have a desire to learn while touring, in order to enhance their nature experience. General and trail activity groups also rated enjoying nature as very important. A possible explanation for this is that these activity groups, which include hikers, bikers, runners, in-line skaters, picnickers, nature observers and scenic drivers, tend to participate in their activities in the “natural” areas of the park. Golfers, who play in more manicured areas of the parks, assigned the lowest rating to this benefit.

Each of the eight user groups rated enjoying nature as the most important benefit associated with their visit to the park. Groups of mixed gender and a mixture of children and adults rated both enjoying nature and socializing as the most important reasons for visiting the park. The presence of a female in the user group was the most important factor in predicting the enjoyment of nature. Groups with a female present rated enjoying nature as more important than any of the groups without a female and females visiting the park alone gave enjoying nature the highest rating of the eight groups. Males visiting the park either alone or in groups of adults or with children rated enjoying nature as least important.

Get Some Exercise

Getting exercise was the second most important reason for respondents visiting the park (Figure 6). Activity groups performed better than user groups in predicting the ratings for exercise, explaining 81% of the variance. The two activity groups that rated exercising as most important were trail users and golfers. Trail users rated exercise as significantly more important than all other activity groups. Golfer ratings of exercise, although slightly higher, were not significantly different than those participating in winter activities (e.g. ice skaters, ice anglers, cross country skiers, and sledders).

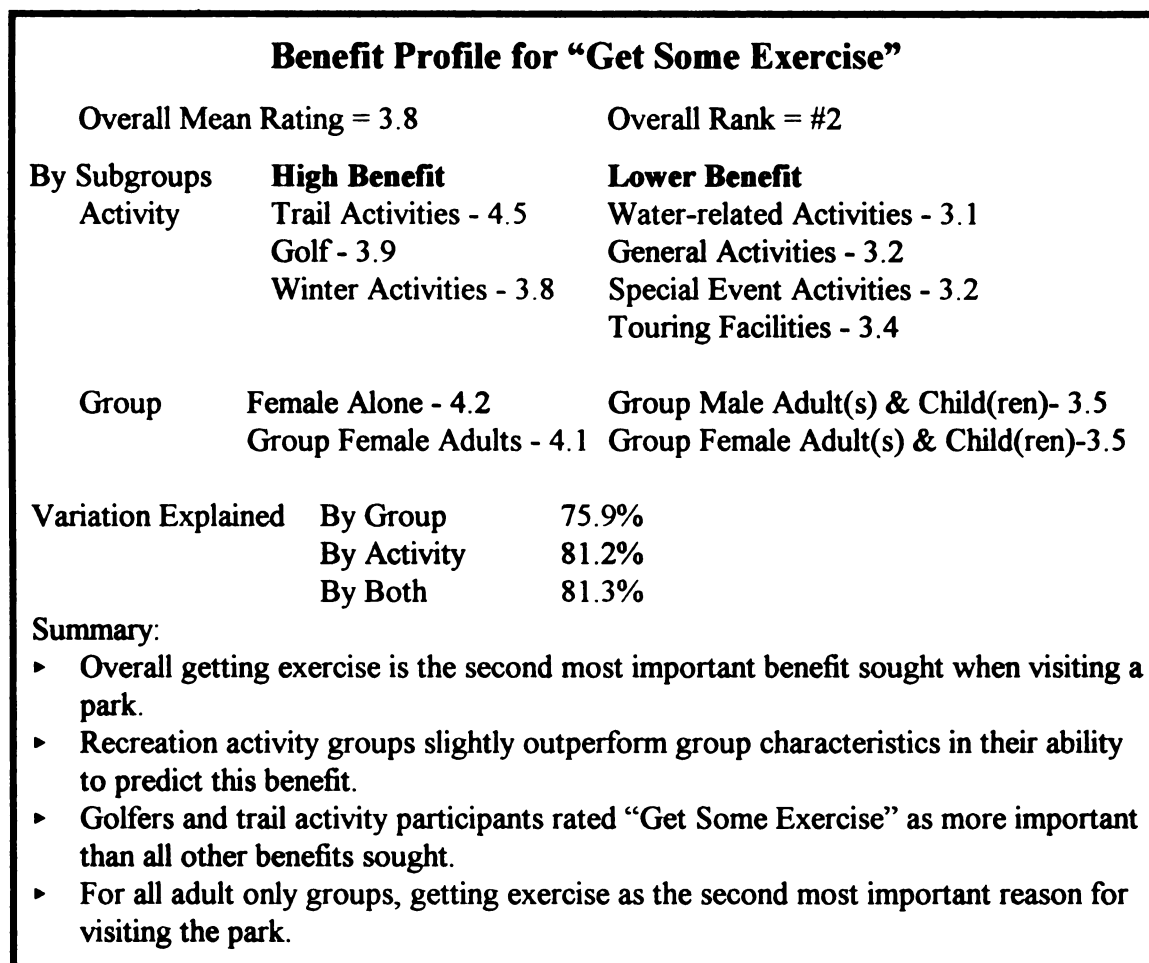


Figure 6. Benefit Profile for Get Some Exercise.

All other activity groups rated exercise as the fourth most important reason for visiting the park and were found through the Scheffe test to not be significantly different from one another. With these groups (general, water-related, touring and special event) exercise was less important than socializing, enjoying nature and relaxing, but more important than developing skills and excitement.

All adult only groups, regardless of gender, rated exercise as the second most important benefit. Females alone or in groups rated exercising as more important than all other groups, followed by groups of mixed gender adults, males visiting the park alone and groups of men. With the exception of groups of male adults, all adult groups were found to be not significantly different in their importance ratings of exercise.

In summary, trail, golf and adult groups were most likely to rate exercise as important. Adults were more likely to select trail activities as their primary activity than groups of adult(s) and child(ren), in all cases with the exception of groups of male adults. The majority of groups of male adults were golfing.

Relax and Rest

Relaxing was rated below exercise as the third most important reason for respondent groups visiting the park (Figure 7). Subjects participating in water-related activities, such as fishing, boating and swimming, rated relaxing as more important than other activity groups, followed closely by general activity participants and those touring facilities. These three groups were found to not significantly different from one another in the ratings of "Relax/rest." Winter activity participants and golfers were least likely to be seeking a relaxing visit to the park. Activity groups explain 79% of the variance in ratings of relaxing.

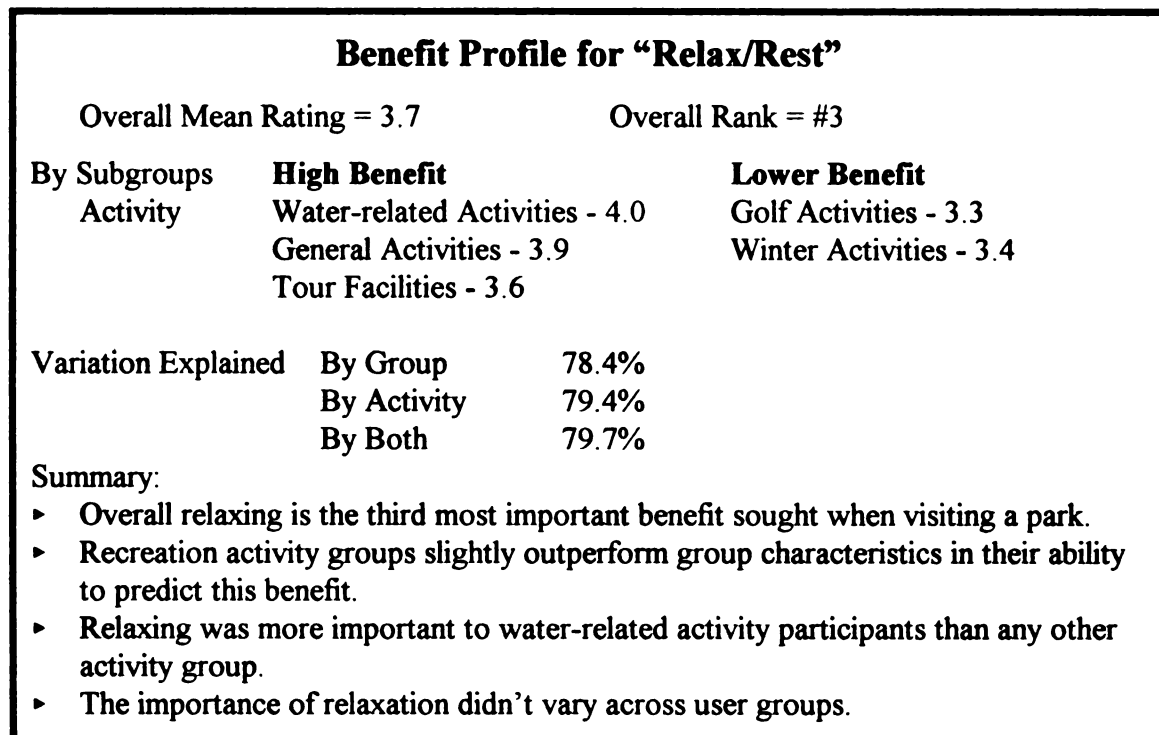


Figure 7. Benefit Profile for Relax/Rest.

Spend Time with Friends and Family

“Spend Time with Friends/Family” is the fourth most important reason for respondents visiting the park. Group characteristics explain 80% of the variance in importance ratings for socializing and activity groups predict 75%. The larger the group and the more mixed in gender and age, the more important socializing becomes. Groups of more than one rated spending time with others as one of the top three reasons for visiting the park. Groups of female adults and adult(s) and child(ren) selected this benefit as most important and were found to be significantly different from each other. Individuals visiting the park alone don’t rate socializing as high in importance as other groups (Figure 8).

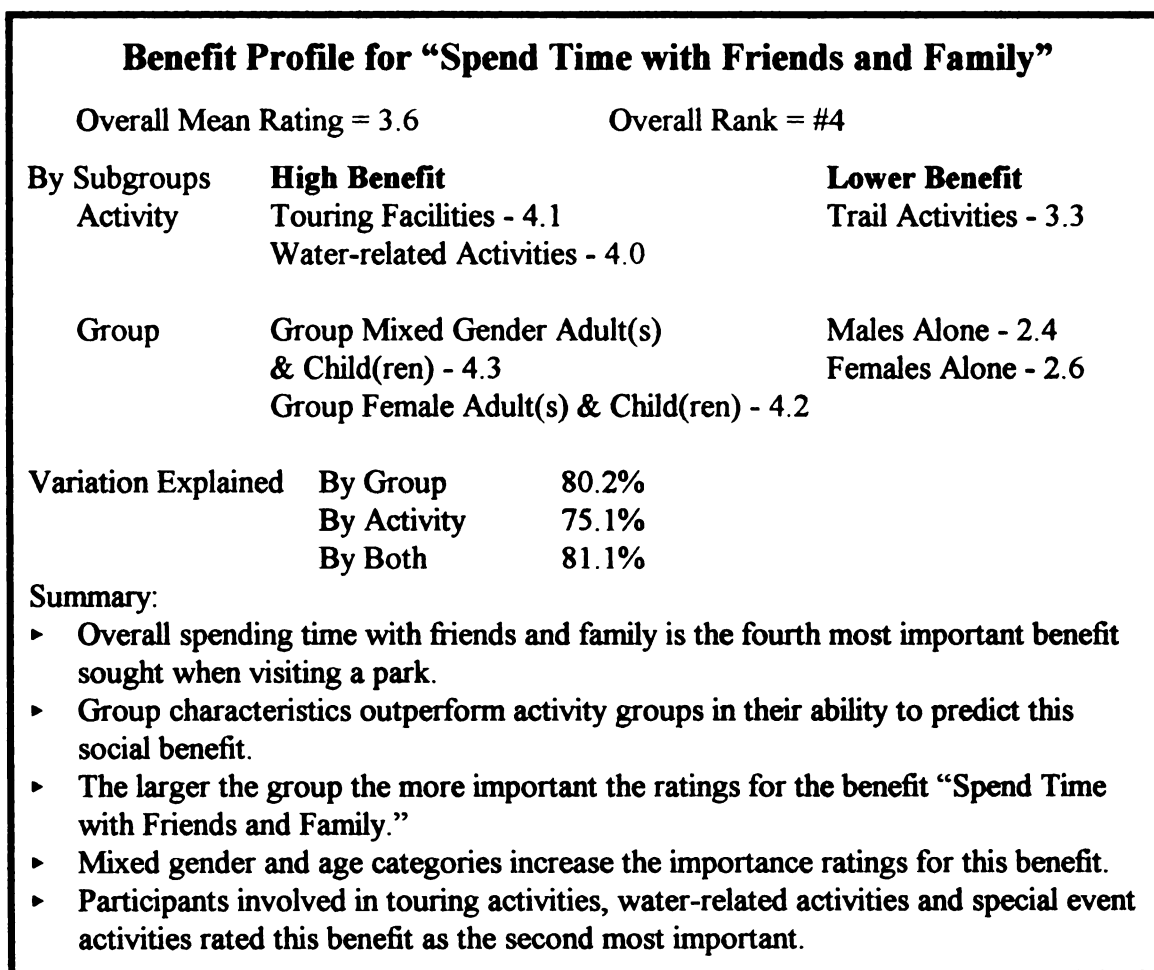


Figure 8. Benefit Profile for Spend Time with Friends and Family.

Socializing was seen as most important by respondents participating in touring activities, followed by water-related activities and special events. Each of these activity groups selected this benefit as the second most important benefit, behind enjoying nature. Trail activity participants were least likely to rate this benefit as important. These findings are consistent with the fact that those activities most likely to be associated with socialization (touring, water-related and special event), were also most likely to have larger numbers of participants.

Develop Skills and Learning

Learning and excitement were both consistently rated as less important than the other benefit sought categories by every respondent activity and user group. Both learning and excitement benefit ratings were more predictable based on the higher adjusted R^2 ratings. Activity groups (88%) are only slightly better predictors of learning benefit ratings than group characteristics (87.5%) (Figure 9).

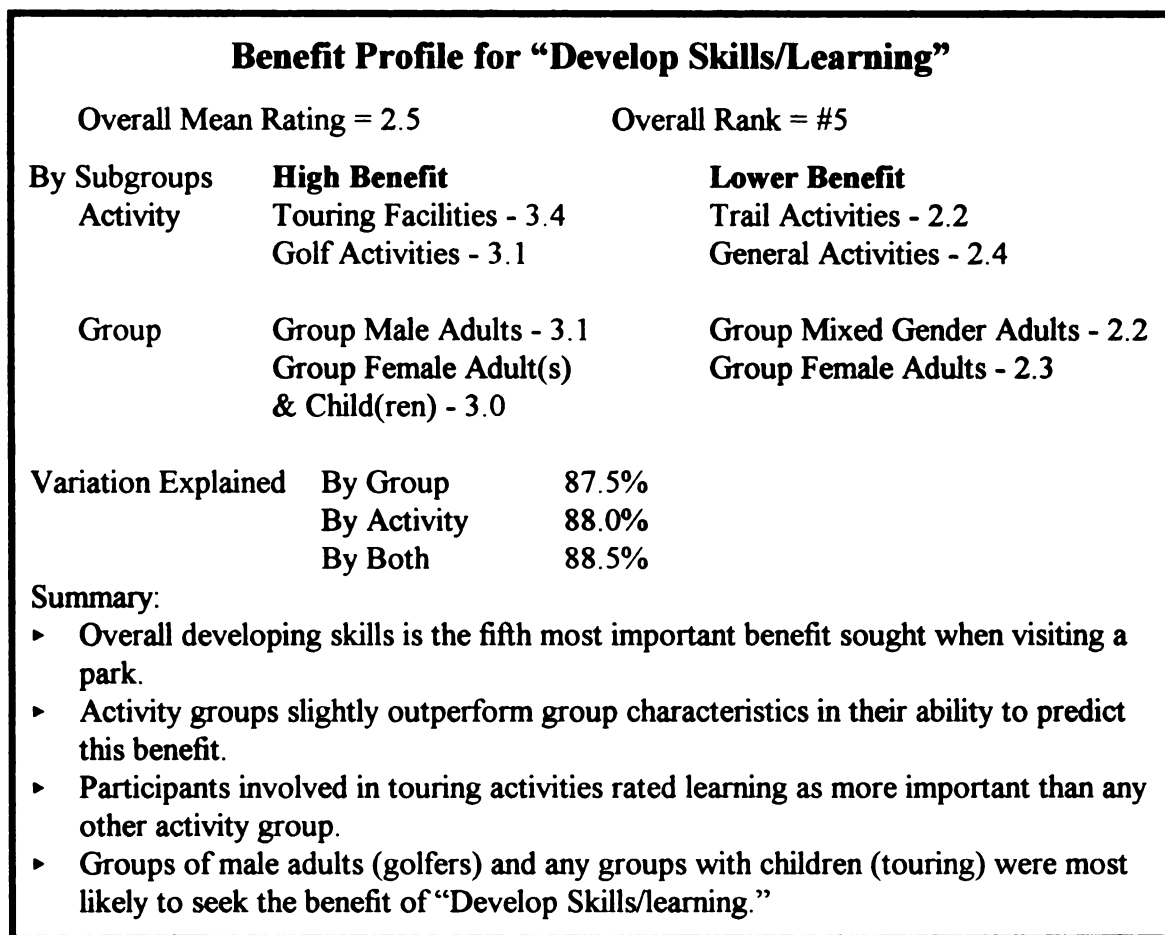


Figure 9. Benefit Profile for Develop Skills/Learning.

For each of the primary activity groups, learning was rated as the fifth most important benefit sought. (Excitement was also fifth for water-related and winter activity groups.) The groups that rated learning as most important were those subjects touring

nature center, farm or mill facilities. Golfers rated learning the second highest importance rating. Those touring facilities were not significantly different than golfers in their importance ratings for learning. Trail users were least likely to rate learning as important.

For each of the user groups, learning was also rated as the fifth most important benefit sought. Groups of male adults were most likely to rate learning as important and groups of mixed gender adults were least likely. Since the majority of male adult groups participated in golf, and no male adult groups participated in touring activities, the learning (developing skills) benefit was most likely sought by male golfers. Others seeking learning are groups with child(ren).

Excitement and Thrills

Excitement is the benefit rated the least important by all respondents. User group variables and activity variables each alone, and together, explain 90% of the variation in visitor ratings of excitement (Figure 10). The factor most influential in predicting ratings of excitement seems to be gender. Men, in adult only or adult(s) and child(ren) groups, rate excitement as more important than other groups.

Benefit Profile for “Excitement/Thrills”		
Overall Mean Rating = 2.3		Overall Rank = #6
By Subgroups	Higher Benefit	Lower Benefit
Activity	Winter Activities - 2.9	Trail Activities - 2.0
	Golf Activities - 2.7	General Activities - 2.2
	Water-related Activities - 2.6	Special Event Activities - 2.2
Group	Group Male Adults - 2.9	Female Alone - 1.9
	Group Male Adult(s) & Child(ren) - 2.6	
Variation Explained	By Group	89.6%
	By Activity	89.7%
	By Both	90.1%
Summary:		
▶ This potential benefit was rated as least important by all park visitors. ▶ Activity groups slightly outperform group characteristics in their ability to predict this benefit. ▶ Participants involved in golf, water-related and winter activities rated learning as more important than any other activity group. ▶ Groups most likely to seek excitement were all male groups; either alone, in groups of adults or adult(s) and child(ren).		

Figure 10. Benefit Profile for Excitement/Thrills.

Golfers and visitors participating in water-related and winter activities rate excitement as highest of the seven activity groups. Visitors coming to use trails, attend special events or to participate in general activities were least likely to seek out excitement in their visit to the park.

Conclusions

In reviewing the benefit profiles several overall conclusions can be drawn. First, activity variables slightly outperform group characteristics in predicting benefit ratings, with the exception of socializing. Second, enjoying nature was rated most important by all activity and user groups with three exceptions, trail users, and golfers rated exercise as

most important and socializing was rated as important as enjoying nature to groups of mixed gender adult(s) and child(ren). Third, when comparing mean ratings, the four benefits that were rated highest in importance were enjoying nature, exercising, relaxing, and socializing. Learning and excitement tend to be secondary benefits in that all activity and user groups rated each of the four other benefits higher than either learning or excitement, with only two exceptions. Touring facility groups rated exercise as important as learning and males visiting the park alone rated socializing as important as learning. Excitement was rated as the least important benefit by all activity and user groups with two exceptions, winter and water-related activity groups rated learning as important as excitement. Finally, different user group characteristics tend to influence the importance of different benefits. Group size is most influential with regards to socializing, the presence of children with regards to exercising, and gender with regards to enjoying nature and excitement.

These benefit profiles allow recreation managers to review characteristics of particular benefits in a comprehensive, yet simple format. Management questions regarding the relationships of a benefit sought, recreation activity, or user group characteristics, can be answered using these profiles.

Recreation Management Applications Using Benefit Profiles

In the past, recreation professionals have often approached the planning, marketing and management of public parks based on activities or facilities they felt were appropriate for the population being served. More recent literature has suggested that recreation professionals should focus more on the motivations of the recreation participant or benefits of participation in recreation activities.

There are patterns in the HCMA data that can help recreation professionals better understand the benefits sought by their customers, that are obtained through the recreation activities and facilities provided. Larry Allen (1996) has suggested a three phase benefits approach to recreation management. The results of this research can assist recreation agencies in a majority of the efforts involved in Phase I, Benefit and Opportunity Identification, of this process. Once the agency mission and goals are adjusted, the implementation phase (Phase II) of a benefits approach can begin. Phase II includes modifying recreation sites, areas and services to meet the target benefits of your user population. There are several other ways the benefit profiles may be used in particular management decisions. Recreation professionals can use the benefit profiles for explaining and predicting recreation behaviors, devising and selecting management objectives and practices, organizing and conducting recreation facility inventories, reviewing options for developing new facilities, and developing visitor information and marketing plans. For example, a park system may have just acquired a set sum of money to expand its facilities or program offerings. The agency's primary options include, a new trail, increasing the number of special event activities, or developing a nature center. After reviewing the goals of the agency and its targeted user groups and the benefits they seek, the park system may desire to provide an additional area in the park for exercise, in this case a trail is the most natural choice. If the park wants to increase the social aspect of the park experience, then the nature center or special events should be investigated.

There are a variety of management decisions that can be supported by the benefit information reported in this research project. Learning customer motivations (benefits sought) and characteristics makes the process of serving the customer more

straightforward. With this knowledge, it is easier to understand and even predict the actions of the customer and potential customer. A possible scenario may be that an agency has just learned from a recent visitor survey that the population currently served is made up of 80% adults only groups and 20% groups of adults with children. If the mission of the agency is focused on the promotion of family interaction and socializing, a future objective of the agency may be to implement facilities and programs to increase the percent of groups with children entering the park. This study provides some direction as to which activities or facilities have the best chance of attracting this type of market and what this market is seeking in a recreation experience.

Marketing decisions can also be enhanced using the results of this research. Benefit profiles summarize the activities and types of user groups most likely to seek out particular benefits from a park visit. Knowing which benefits their customers are most likely seeking, can provide direction to a marketing campaign. For example, assume that a park presently has two main facilities, a general open area for picnicking and sunbathing and a river with a canoe livery. This study indicates that enjoying nature and the outdoors is a benefit that many park visitors are seeking, so the marketing plan should highlight this aspect. We also know that individuals involved in water-related and general activities are likely to seek relaxation in their park visit, so this too should be highlighted in marketing materials. Based on this study, individuals most likely to seek out these types of park facilities are larger groups of both adults and children, so this is the population that should be targeted.

There has been considerable interest in translating research into useful guidelines for management. A benefits approach to recreation management is a theme that has

received some attention (Allen, Stevens & Harwell, 1996; Bruns, 1993; Stein & Lee, 1995). However, the lack of sufficient knowledge on benefits remains an obstacle to implementing this approach. Recreation management and planning has historically been centered around activities and user groups (Harper, 1994). As agency managers attempt to give more attention to benefits, a better understanding of how benefits are related to activities and user groups will be helpful. This research shows that benefits can be related to more traditional activity and demographic subgroups. With this information, the benefits approach can more readily build upon existing management and planning models, versus requiring an entirely new philosophy and approach.

Sample HCMA Management Recommendations

There are several ways that recreation benefit information may be used by a recreation agency. The two most common uses are (1) as a tool to assist in management decisions to enhance the likelihood of customers receiving the benefits they seek and (2) as a promotional vehicle to attract customers. This section of the dissertation will focus on actions HCMA has taken since the completion of the HCMA Park User Study in 1996, to enhance the Metropark visitor's experience and recommendations to further improve both marketing and management decisions for the HCMA regional park system.

Management Decisions

The benefit receiving the highest average importance rating from HCMA park visitors is "Enjoying Nature and the Outdoors." HCMA's administration should be encouraged by this finding, knowing that this benefit is presently the foundation of the HCMA mission statement which drives the direction and decisions of the agency. Specifically stated, "this Metropark system is dedicated to providing natural resources and

park facilities for enjoyment today and preservation for tomorrow” (Huron Clinton Metropolitan Authority, 1995, p. 1).

HCMA already recognizes the importance that customer’s place on enjoying nature in management decisions. As part of the 1995-96 Park User Study, an Importance/Performance Analysis (Martilla and James, 1977) was completed. Importance/Performance Analysis (I/P) is a technique used to guide management decision making, by cross referencing a customer’s rating of the importance placed on a selected characteristic and a satisfaction, or agency performance, rating of the same characteristic. In this study, park visitors indicated that the “Overall Beauty of the Park” was very important to their overall enjoyment of their visit, and also gave a high rating for the beauty of the park (Paulsen, et al., 1996). Using the I/P technique, scenic beauty fell in a quadrant Martilla and James (1977) label as “Keep up the Good Work” (Paulsen, et. al., 1996).

Since the study, HCMA has made several decisions to augment the scenic beauty of the parks and to possibly enrich the visitor’s enjoyment of his/her natural environment. These decisions include:

- The addition of an unpaved interpretive trail and implemented interpretive presentations for families visiting the wave pool at Lake Erie Metropark.
- The development of a “Nature Links” program for Metropark golf courses, which places interpretive signs throughout the courses highlighting bird species, wetland habitats, etc.
- The implementation of hunter safety programs at various Metroparks.

There are several additional steps that HCMA could take to maintain the scenic beauty of the Metroparks and to further enhance the customer’s nature experience:

- New facility development projects need not detract from the natural beauty of the parks. Visitors that rated enjoying nature as most important were those participating in trail, general, tour, and winter activities, so “natural” facility development should be emphasized in these areas of the Metroparks.
- Consideration should be given to developing and/or maintaining native plant species and habitats, to controlling litter and debris, to maintaining habitat appropriate biological carrying capacity to prevent the over browsing of deer, and other environmental problems.
- Programs similar to “Nature Links,” can be implemented in other facility areas in the Metroparks. Interpretive signs could also be developed to change with the four seasons, highlighting the flora, fauna, and wildlife most prevalent in each season.
- To enhance the trail users nature experience, it is suggested that the design of the trails specifically designated for nature enjoyment, not be paved, be wooded and natural, provide educational opportunities using interpretive communication techniques, and have benches periodically placed for nature observation.

It is clear, through the policies and practices of HCMA, that the importance of nature enjoyment is recognized and emphasized. This same consideration, however, is not as clear with the benefit of exercise. “Get Some Exercise” is the benefit rated as second most important to HCMA park visitors. Trail users and golfers rated exercising as more important than enjoying nature. Presently, HCMA has at least one trail at each of their Metroparks, and 10 of the 13 parks have golf courses. Trail users are the largest group of visitors to the Metroparks, with 38% of park visitors selecting a trail activity as their primary activity. Golfers make up another 10% of park visitors. Knowing that such a large group of park visitors may be visiting the park for the benefit of exercise, HCMA management would be wise to place more emphasis on this benefit in management and marketing solutions. One example of this change could be for HCMA to incorporate, into their mission, a statement reflecting the exercising needs of park visitors.

Trail users, golfers and winter activity participants are the activity groups most likely seeking the benefit of exercise, therefore, emphasis on these activity groups would provide the greatest impact in management decisions. There appear to be two distinct subgroups of trail users, those who seek exercise and those who seek nature enjoyment. Because of the demand for use of trails in the Metroparks, many trails are over crowded during peak visitor times. In addition, user conflicts occur between individuals seeking exercise on a trail and those seeking nature enjoyment. In 1995-96, when asked what new facilities park visitors would like to see developed at their park, the three most selected facilities were hike-only trails (31%), bike trails (23%), and in-line skate trails (21%) (Paulsen, et al., 1996). Recognizing this need, HCMA has since established several “Wheels Only” and “Feet Only” trails in the Metroparks. HCMA has also linked three park trails (Willow, Oakwoods and Lower Huron) to establish a trail for visitors desiring to exercise at distances up to 20 miles. Presently, HCMA is working in partnership with the Department of Natural Resources and Oakland County Parks to join the exercise trail at Kensington Metropark with a trail at Lyon Oaks County Park. Once this project is completed trail enthusiasts will have a distance of 10.2 miles available for their enjoyment and use.

To enhance the experience of trail users seeking exercise:

- Distance markers and signs could be placed along paved trails with fitness information specifically designed for each of the trail user groups (walker, biker, in-line skater, jogger). Informational signs may include the location of appropriate paths, calories burned based on distance and activity, and health and wellness tips.
- Partnerships with area fitness centers can be developed to increase the number of fitness focused events in the Metroparks, including fun runs, in-line skating clinics, and bicycle races.

- “March for Parks” activities, trail clean-ups, and other similar activities can not only promote fitness, but also increase visitor ownership and decrease inappropriate behavior in the parks.

Golfers and those visiting the park for winter activities, such as sledding, ice skating, cross country skiing, and ice fishing, also rated exercise as very important. In my opinion, it is the actual act of “getting out of the house” or “getting away from work” that makes these two activity groups place such an emphasis on exercise. By HCMA increasing the number of golf courses over the last 3 years and choosing to keep each of the 13 Metroparks open during the winter, in 1995, HCMA is allowing these groups access to facilities necessary to get the exercise they desire. However, more can be done for these activity groups to facilitate their exercise regime. To contribute to a golfers exercise experience:

- HCMA can encourage walking the courses by designating specific times on the golf courses for walkers only. (Presently, HCMA allows both walking and using a golf cart on the courses.)
- HCMA could develop and distribute to golfers a brochure highlighting a variety of warm up and regular exercises specifically designed to improve their golf game.
- Golf clinics could include tips to enhancing your game using exercise.
- Like many golf courses with the desire to return to the traditions of golf, HCMA could designate a few of their courses as walk only courses. (Presently, HCMA is in the process of developing an educational facility for golfers, with the Michigan Golf Foundation at Huron Meadows Metropark, which will include a “walk only” nine-hole executive course.)

Winter activity participants also rate exercising as very important. Due to the limited number of outdoor ‘exercise-related’ recreation activities available to the residents of Michigan in the winter months, the fact that these parks are open and offer a wide variety of winter activities, is one possible reason for this benefit’s popularity. Over the last several years, Southeast Michigan has experienced a decrease in the amount of

snowfall, an increase in cold weather ‘snowless’ days, and the increase in warmer weather winter days. Each of these changes is influencing winter activity participation throughout the state, as well as at the Metroparks. Providing traditional outdoor winter activities with Michigan’s uncertain weather may require artificial snow and ice. Due to HCMA’s emphasis on a natural experience, implementing this type of equipment may be an option, but only if it can be implemented while still maintaining the scenic beauty of the parks. If these weather changes continue, HCMA may need to come to the realization that getting exercise through winter activities may be less and less likely and may be replaced with activities more likely to be sought in the fall and spring.

Other recommendations for HCMA managers include:

- The addition of other winter activity facilities and programs, such as snowshoe trails, ski and snowshoe rentals and races.
- Adding ice rinks, sledding hills, and cross country ski trails to those parks that do not presently have them.

HCMA would be wise not to ignore social nature of their parks. “Spending Time with Friends and Family” was also rated as very important to HCMA park visitors.

Activity groups that rated exercise as highest in importance (trail, golf, and winter activity groups) were those that rate socializing lowest in importance. Those activity groups that consider socializing to be most important are those participating in water-related, general, tour, and special event activities. Water-related activities include fishing, swimming, and boating. General activities include picnicking, nature observation, sunbathing, playing games and sports, using playground equipment, and scenic driving. The facilities associated with these types of activities are typically outdoor open areas where groups of visitors are likely to gather. In 1997, Metro Beach Metropark opened an indoor facility to

house some of the social events for this park. (Some of the dance and concert programs at Metro Beach Metropark have been in ongoing since the 1950's.) To increase the visitor's opportunity to socialize during water-related and general activity participation, HCMA may choose to develop or increase the number of gathering areas for visitors around popular park locations. Gathering areas could include benches, picnic tables, canopies, and popular game and sports facilities.

Touring facilities and special events are natural settings for social interaction. The Nature Centers, Farm, and Grist Mill are already popular gathering spots for Metropark visitors. To increase visitors to these facilities, and thus enhance the social experience for the customer, HCMA may want to alternate the facility exhibits more often to increase the number of repeat visitors to the facilities. The Metroparks house some of the largest outdoor events in Southeast Michigan, including boat shows, car shows, and concerts. These events are always great way to encourage social interaction; however, increasing HCMA's smaller events such as fishing tournaments, nature or arts and crafts programs may bring smaller groups of families and friends together.

Marketing

HCMA currently promotes the Metroparks using a variety of means, including public service announcements, radio advertisements, cable television announcements, and a quarterly newsletter that is distributed to over 60,000 patrons of the Metroparks. HCMA produces a large map of the Metroparks, that includes a listing of the facilities available at each park, and an individual brochure for each of the Metroparks listing its unique features. HCMA has a brochure highlighting the opportunities for golf in the Metropark system. In-house, HCMA develops and distributes to area schools,

announcements of educational programs specifically designed for them. Now that HCMA is aware of the benefits their customers are seeking, these promotional materials can be updated to reflect the benefits sought by the visitors of the Metroparks.

The goal of any marketing plan is to increase customer awareness of your agency and to prompt consumers to action. The actions HCMA may be seeking through their marketing plan include increasing the number of day visitors to the Metroparks, selling tickets to a special event, increasing the number of corporate events at the parks, or surpassing last years yearly park permit sales. Whatever the action, it is easier to prompt a customer to action using benefit information than by highlighting features or facilities of the park. By spotlighting benefits in marketing efforts, the agency to will be emphasizing the motivations that drive customers to action.

As with HCMA management decisions, enjoying nature is the focus of many of the promotional materials developed for, or by, HCMA. Exercise should also be emphasized in these materials, especially those aimed at trail, golf, and winter activity participants. “Enjoying Nature and the Outdoors” and “Spending Time with Friends and Family” were rated as important by each of the water-related, general, touring, and special event activity groups, therefore, this should be the focus of marketing materials targeted to attract individuals to these activities. With the information generated by this dissertation, HCMA now knows what benefits each activity group seeks during their park visit. This information will be very helpful to those responsible for marketing the Metroparks. When developing the promotional materials for a particular facility or program, the benefit sought by those activity groups should be emphasized.

This dissertation revealed that all user groups place great importance on the benefit of enjoying nature, however, groups with adult women place the greatest emphasis on this benefit. Adults, alone or in groups, feel exercising is important in their park visit, with the one exception, groups of male adults, who place less importance on exercise. All groups of both adult(s) and child(ren) and adult female groups feel that “Spending Time with Friends and Family” to be more important than other groups. HCMA can use this information to better understand the needs of, or benefits sought by, their visitor population. Knowing the needs of your customers is the first step to a successful marketing plan. The next step is to use this information to entice your target market to action. For example, if the a goal of HCMA is to attract more adults visiting the park alone, marketing materials should focus on exercise and enjoying nature.

HCMA should review their current marketing strategies to ensure the message relayed is appropriate. A benefit approach to marketing allows HCMA to be more strategic and aggressive in their marketing plan. To continue to attract visitors to the Metroparks, it is recommended that enjoying nature, exercising, and socializing be accentuated in both the written materials and graphics incorporated into the current promotional materials generated for HCMA. To draw new target markets to the Metroparks, it is recommended that HCMA investigate the benefits these new markets seek and then decide what programs, facilities, and marketing strategies would best attract these markets.

Recommendations for Future Research

Earlier discussions in this study suggested an increase of multiple activity studies to enhance our ability to compare activities, as well as studies that focus on recently experienced recreation activities. To achieve this, a park user questionnaire was implemented and this task was accomplished. However, this format also has its limitations. Fitting a study of recreation benefits into a general applied visitor survey design constrains the depth of measures that can be made. In addition, due to the structure of the HCMA Park User Survey, limits were placed on the number of benefits that could be measured. Future research of this type should include other benefits (e.g. escape, challenge, etc.). It is also suggested that the “Enjoyment of Nature and the Outdoors” benefit be separated into fun/enjoyment and nature appreciation, and “Learning/skill Development” category be two separate items. In the HCMA data there seems to be two distinct benefits being measured in one category. For example, it is assumed that male adult golfers were rating the “Developing Skills” portion of this benefit as important and groups of touring adults and children were rating the “Learning” portion of the benefit as important. Although the two benefits are similar, managers may view fulfillment of each of the benefits in different ways (e.g. a clinic for golfers to develop their skills and a learning center for those touring facilities).

The data collected for this research project came from one regional public park system. A desirable future direction for benefits research is to vary the research setting to different kind of parks and recreation agencies. If these same research questions were posed in a variety of recreation settings, both public and private, we would have a more

complete understanding of recreation participants in general and a better understanding of how benefits vary by settings.

Unexplainable variations in benefits sought within activity and user groups were still present in the findings of this dissertation. To help explain these variations, research may need to focus on the decision making process of the user or why people seek particular benefits. Such research might study individual variations as opposed to the variations of group means employed in this dissertation.

Recreation managers may also wish to know whether individuals consciously seek specific benefits or do they visit recreation areas out of habit or convenience. In this study, the average number of visits to the parks the year prior to this study was 9.4 visits; ten percent of the visitors made more than 20 visits a year. Another possibility is that some individuals are not seeking a particular benefit but instead are avoiding other elements of their lives. Qualitative research methods should be employed to answer some of these questions.

As other researchers have recommended, we need to look not only at benefits sought, but also benefits received, as a way to better evaluate recreation programs, facilities, and services. This suggestion was frequently mentioned in the Benefits of Leisure text (Driver, Brown, & Peterson, 1991). By studying both “sides” of the recreation experience, practitioners will be able to assess not only what the customer desires, but whether or not this desire is met by the recreation experience, and how well the recreation agency has performed in satisfying these desires. Studying both the benefits sought and benefits received in a recreation experience will likely require pre- and post-

test designs to first learn what benefits the recreation participant seeks from an experience and then to measure the extent to which that benefit was received.

Benefits received, or outcomes, have received greater emphasis in studying the physiological and stress reducing benefits of exercise and physical activity (Sefton & Mummery, 1995). This may be due to the relative ease of measuring these types of benefits. For example, it is much easier to measure an individual's blood pressure and heart rate after a four mile walk than it is to measure the amount of enjoyment an individual receives from the natural surroundings during the same experience. Many reported recreation benefits are more subjective and, therefore, more difficult to measure. There is no guarantee that an individual's subjective perceptions will be consistent with more objective measures, e.g. one may run to improve health, but in reality, be damaging one's knees and putting undue stress on the heart. However, if one believes something to be a benefit, then it may serve that purpose. Researchers and practitioners need to answer the question, "Can we just measure perceptions or do we need objective measures?"

In the last 10 years, there has been a growing recognition of the need for more research and information on the benefits of recreation. This dissertation, and other similar research projects, have begun to address this need. However, research on the benefits of recreation is still in the early stages, and although good progress has been made recently, many more well developed and focused research projects will need to be completed before we fully appreciate and understand the benefits of a recreation experience.

APPENDIX

APPENDIX

Huron-Clinton Metroparks User Survey

The Huron-Clinton Metropolitan Authority (HCMA) and Michigan State University would like your help. Please take about 10 minutes to tell us about your experiences in the park today. By completing and returning the questionnaire, you can help the Metroparks better serve you and other park visitors. Participation in the survey is voluntary and your responses are completely anonymous.

Please complete the survey at your convenience during your visit today, seal it in the envelope provided and drop it in one of the red drop boxes located at each park exit. If you are unable to return it as you leave, please mail it in the business reply envelope. If you have any questions about the survey, contact me at (517) 353-5190.

Dr. Richard Paulsen, Project Director
Department of Park, Recreation and Tourism Resources
Michigan State University

INFORMATION ABOUT YOUR VISIT TODAY

1. In the box at the right,

- a) Circle the hour you arrived in the park today.
b) Circle the hour you will leave the park today.

Morning (AM)	7	8	9	10	11	12
Afternoon (PM)	1	2	3	4	5	
Evening (PM)	6	7	8	9	10	11

2. Including yourself, how many people in your vehicle are in EACH of the following age and gender groups?

Children	Males	Females	Adults	Males	Females
Under 5 years of age	_____	_____	18 to 35 years old	_____	_____
5 to 12 years old	_____	_____	36 to 59 years old	_____	_____
13 to 17 years old	_____	_____	60 years of age and over	_____	_____

3. What type of motor vehicle permit did you use to enter the park today?

- ☐ Daily Permit ☐ Annual Sticker

4. Did you purchase an annual motor vehicle permit for the Huron-Clinton Metroparks in 1995?

- ☐ No ☐ Yes → If yes, approximately how many days was it used in 1995? _____ days

5. Check each activity that you or anyone in your vehicle are doing today in this Metropark.

- | | | |
|--|---|--|
| <p>General Activities</p> <p>☐ Nature Observation/Photography</p> <p>☐ Scenic Drive</p> <p>☐ Picnic</p> <p>Trail Activities</p> <p>☐ Bicycle</p> <p>☐ Walk or Hike</p> <p>☐ Walk Pet(s)</p> <p>☐ Run/Jog</p> <p>☐ Rollerskate/In-line Skate or Ski</p> <p>Tour Facilities</p> <p>☐ Visit Nature Center</p> <p>☐ Visit Farm</p> <p>☐ Visit Grist Mill</p> | <p>Water- related Activities</p> <p>☐ Sunbathe</p> <p>☐ Boat - Non-motor</p> <p>☐ Boat - Motor</p> <p>☐ Fish from Boat</p> <p>☐ Fish from Shore</p> <p>☐ Waterslide</p> <p>☐ Swim/Wade in Lake</p> <p>☐ Swim/Wade in Pool</p> <p>(Including Wavepool)</p> <p>Events and Other Activities</p> <p>☐ Attend a Special Event in the Park (please specify) _____</p> <p>☐ Other (please specify) _____</p> | <p>Games and Sports</p> <p>☐ Golf</p> <p>☐ Play other Games or Sports</p> <p>☐ Watch Games or Sports</p> <p>☐ Use Playground Equipment/Tot Lot</p> <p>Winter Activities</p> <p>☐ Ice Fish</p> <p>☐ Cross Country Ski</p> <p>☐ Sled/Toboggan</p> <p>☐ Ice Skate</p> |
|--|---|--|

6. Which of the above activities was the primary reason for visiting the park today? _____
(If you didn't come to the park for any particular activity, write NONE.)

7. In choosing a park for your trip today, how important are each of the following park characteristics.
(Please circle one number for each characteristic.)

Park Characteristic	Extremely Important	Very Important	Important	Somewhat Important	Not Important
Overall beauty of the park	1	2	3	4	5
Facilities clean and in working order	1	2	3	4	5
Availability of facilities (tables, courts, etc.)	1	2	3	4	5
Friendliness & courteousness of park staff	1	2	3	4	5
Safety and security	1	2	3	4	5
Price of admission to the area	1	2	3	4	5
Quality of food at concessions	1	2	3	4	5
Close to home	1	2	3	4	5
Not crowded	1	2	3	4	5

8. How important to you are each of the following reasons for visiting this Metropark today?
(Please circle one number for each reason.)

Reason for Visiting	Extremely Important	Very Important	Important	Somewhat Important	Not Important
Spend time with friends and family	1	2	3	4	5
Get some exercise	1	2	3	4	5
Relax/rest	1	2	3	4	5
Excitement/thrills	1	2	3	4	5
Develop skills/learning	1	2	3	4	5
Enjoy nature and the outdoors	1	2	3	4	5

YOUR OPINIONS ABOUT NEW FACILITIES AND PROGRAMS

9. Which of the following facilities would you like to see developed or expanded at this Metropark?
(Check up to three facilities that you would prefer.)

- | | | |
|--|--|---|
| ☐ Outdoor Ice Rink (Winter) | ☐ Disc Golf Course | ☐ Hiking Only Trails |
| ☐ Enclosed, Year-round Golf Driving Range | ☐ Volleyball Courts | ☐ Children's Play Area |
| ☐ Separate In-line Skate/Ski Trails | ☐ Soccer Fields | ☐ Bicycle Trails |
| ☐ In-line Hockey Areas | ☐ Tennis Courts | ☐ Marina |
| ☐ Water Play Facilities | ☐ Golf Course | ☐ Other (please specify) _____ |

10. Which of the following programs or special events would you like to see offered or expanded at this Metropark? (Check up to three programs that would be of interest to you.)

- | | | |
|---|---|---|
| ☐ Nature Programs | ☐ Car Shows | ☐ Golf Tournaments |
| ☐ Dance Programs | ☐ Boat Shows | ☐ Fishing Tournaments |
| ☐ History Programs | ☐ Arts & Crafts Shows | ☐ Water Safety Programs |
| ☐ Music Concerts | ☐ Hunter Safety Programs | ☐ Other (please specify) _____ |

YOUR FAMILIARITY WITH AND USE OF HURON-CLINTON METROPARKS

11. Were you aware that every Wednesday admission is free to any Metropark?

- ☐ No ☐ Yes → If yes, did you take advantage of this free day in 1995?
- ☐ No ☐ No, have annual permit ☐ Yes

YOUR FAMILIARITY WITH AND USE OF HURON-CLINTON METROPARKS (cont.)

12. This park is one of 13 Metroparks in Southeast Michigan. (See the enclosed map for park locations.) Use the following chart to tell us which of these parks you are aware of and how many times you have visited each park in the past year.

In Column A, check ☒ beside each Metropark that you are familiar with.

In Column B, estimate the NUMBER of times you have visited each Metropark in the past 12 months.

Huron-Clinton Metroparks	A Check if familiar with the Metropark	B NUMBER of times you have visited the Metropark in the past 12 months.
Metro Beach (1)		
Wolcott Mill (2)		
Stony Creek (3)		
Indian Springs (4)		
Kensington (5)		
Huron Meadows (6)		
Hudson Mills (7)		
Dexter-Huron (8)		
Delhi (9)		
Lower Huron (10)		
Willow (11)		
Oakwoods (12)		
Lake Erie (13)		

13. When did you first visit an HCMA Metropark?

☐ Today ☐ Within the past year ☐ Within the past 5 years ☐ More than 5 years ago

14. How do you get information about the Metroparks, including facilities, programs and special events?

(Check all that apply)

☐ TV/Radio ☐ Word of Mouth (friends/family) ☐ Park Brochure or Map
☐ Road Sign/Billboard ☐ Newspaper/Magazine ☐ Park Newsletter
☐ Other (list): _____

15. **HOW SATISFIED ARE YOU WITH YOUR VISIT TODAY?** Please rate our performance on each of the following characteristics. (Please circle one number for each park characteristic.)

Park Characteristic	Very					Don't Know
	Excellent	Good	Good	Fair	Poor	
Overall beauty of the park	1	2	3	4	5	☐
Facilities clean and in working order	1	2	3	4	5	☐
Availability of facilities (tables, courts, etc.)	1	2	3	4	5	☐
Friendliness & courteousness of park staff	1	2	3	4	5	☐
Safety and security	1	2	3	4	5	☐
Price of admission to the park	1	2	3	4	5	☐
Quality of food at concessions	1	2	3	4	5	☐
Lack of crowding at the park	1	2	3	4	5	☐
Overall satisfaction with your visit today	1	2	3	4	5	☐

16. **COMMENTS** What did you particularly like or dislike about your visit to this Metropark today?

SOME INFORMATION ABOUT YOU. To better understand our visitors, please tell us a little about you and your family. If you would rather not answer a particular question, leave it blank. All responses are completely anonymous.

17. What is your home zip code? _____

18. What is your age? _____

19. Are you (check one): ☐ Female ☐ Male

20. What is your current employment status? (Check one)

- | | | |
|---|------------------------------------|---|
| ☐ Employed Full-time | ☐ Student | ☐ Other (please specify) _____ |
| ☐ Employed Part-time | ☐ Retired | |
| ☐ Unemployed | ☐ Homemaker | |

21. How many people in your household are employed ? Full-time _____ Part-time _____

22. What is your current marital status? (Check one)

- ☐ Single/never married ☐ Married ☐ Divorced/Separated ☐ Widowed

23. How many children (18 years old or younger) live in your household? _____

How many adults (over 18 years of age) live in your household? _____

24. What is the highest level of education you have completed? (Check one)

- | | |
|---|--|
| ☐ Less than a high school diploma | ☐ Some college |
| ☐ High school diploma | ☐ 4-year college degree |
| ☐ Technical/Vocational degree beyond high school | ☐ Advanced degree |

25. What was your total household income before taxes in 1995? (Please approximate this number if this survey is being completed in 1995.)

- | | | |
|---|---|---|
| ☐ Under \$25,000 | ☐ \$50,000 to \$74,999 | |
| ☐ \$25,000 to \$49,999 | ☐ \$75,000 or more | ☐ Choose not to answer |

26. Which category best describes your race or ethnic background? (Check one)

- | | | |
|--|---|--|
| ☐ White | ☐ Arab/Chaldean | ☐ Multi-Racial |
| ☐ Hispanic/Latino | ☐ Native American | ☐ Other (list): _____ |
| ☐ Black | ☐ Asian/Pacific Islander | |

27. **FINAL COMMENTS.** Please write any additional comments you may have concerning this or other Metroparks.

Return your completed survey by placing it in the envelope, sealing it and dropping it in one of the red drop boxes located at the park exit as you leave the park.

THANK YOU FOR HELPING US WITH THIS SURVEY.

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