DIFFUSION OF PHYSICAL AND SOCIAL INCLUSION WITHIN LOCAL PUBLIC PARK AND RECREATION AGENCIES IN MICHIGAN

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ABSTRACT

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In local public park and recreation agencies in Michigan, innovations occur on a daily basis. Yet, some innovations are implemented at faster rates than others. Physical inclusion and social inclusion are two innovations that have been implemented at different rates. *Physical inclusion* is the removal of architectural barriers to help people with disabilities freely access a recreation activity. *Social inclusion* is providing opportunities that encourage social interactions between people with and without disabilities so that they may participate freely in a recreation activity. Although both are central parts involving people with disabilities into community endeavors, physical inclusion has been implemented at a faster rate than social inclusion. This study used the diffusion of innovation theory to interpret the implementation of these innovations. Specifically, this study analyzed attributes of both innovations. Study results indicated that the relative advantage, complexity, compatibility, visibility, image, and results demonstrability of physical inclusion were significantly different from social inclusion. This has led to a conclusion that one of the methods of increasing the rate of implementation of social inclusion is to promote these attributes.

I would like to dedicate this thesis to everyone involved in my personal milieu. Your endeavors have advertently and/or inadvertently affected the road that I have chosen.

For those whose deeds directly affected my state ... of being, mind, and spirit ... special thanks to you. I would not be here without your energy.

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CHAPTER I

INTRODUCTION

Frame of Reference

Why do some innovations, regardless of how beneficial or how superior to prior products or processes they may be, get implemented and others rejected? This intriguing question is the basis for this research. Studies on various innovations, their processes of diffusion, environment, and origins have continued to emerge since the 1920s and 1930s (Rogers, 1983). Numerous models and theories attempting to explain this phenomenon have been recognized since the early 21st century. In addition to the various models and theories, innovation studies range from a variety of fields, for example, marketing, sociology, economics, anthropology, geography, and public administration. The field of parks and recreation has also delved into studying innovations.

Within the field of parks and recreation, a variety of innovation studies have been done from better understanding snowmobile users (Stynes & Szcodronski, 1980) to better understanding why a wave pool would be adopted as opposed to rejected (Sherman & Havitz, 1991; Crompton & Havitz, 1987). Articles have also been written concerning outsourcing and its possible contributions to recreation agencies (Edginton & Jiang, 2000). There have been many more studies concerning a variety of innovations in parks and recreation. These studies have come about, in part, because of continuous needs, demands, and opportunities experienced by the parks and recreation field.

Towards the end of the 20th century and into the 21st century, another innovation arose, inclusion of people with disabilities into park and recreation services and programs. Inclusion is a need, demand, and opportunity for park and recreation providers in the public sector which has come about from a variety of sources.

The sources stem from the necessities of the community by the citizens of the area. It has been estimated that 9,938,444 people reside in Michigan (U.S. Census 2000, 2000) from which approximately 1.7 million have been found to have disabilities[1] (Michigan Commission on Disability Concerns, 2001). Laws such as the Americans with Disabilities Act of 1990 (ADA) and Individuals with Disabilities Education Act of 1990 (IDEA) and advocate groups such as The Arc Michigan and the Michigan Developmental Disabilities Council (MDDC) have also stressed the need and demand of inclusion (U.S. Department of Justice, 2002; U.S. Department of Education, 2001; The Arc Michigan, 2001; Michigan Developmental Disabilities Council, 2001).

Professional associations such as the National Therapeutic Recreation Society (NTRS), the National Recreation and Parks Association (NRPA), and the Michigan Recreation and Park Association (MRPA) have also discussed the need, demand, and opportunities of inclusion in the parks and recreation field (National Therapeutic Recreation Society, 2001; National Recreation and Park Association, 2001; Michigan Recreation and Park Association, 2001). This list is

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1 Official number of people with disabilities in Michigan from the 2000 U.S. Census is not currently (February 24, 2002) available. In addition, estimating the number of people with disabilities is difficult if valid and reliable estimates are required. This is due to a variety of reasons (see Appendix A).

not exhaustive. Many other agencies, institutions, organizations, and individuals have been instrumental in expressing various issues of inclusion.

Prior to these more recent efforts, the focus, when working with people with disabilities, was mainstreaming and integration. Bullock and Mahon (2000) have noted, "Mainstreaming proponents usually argue that a participant must earn his opportunity to be placed in a regular recreation setting by keeping up with the class and showing appropriate behavior" (p. 54). Whereas, "*Integration* is the placement of someone who has a disability with her peers in the regular setting" (Bullock & Mahon, 2000, p. 54). Bullock and Mahon (2000) further explained that these methods of selective placement made participants feel as though they were different and not capable. " . . . Inclusion is the best of both worlds. Inclusion provides opportunities for a participant to choose to be with her peers in the regular setting and also provides the supports and accommodations needed to ensure personally satisfying and valued participation" (Bullock & Mahon, 2000, p. 54).

Legislation prior to 1990 that assisted with inclusion, mainstreaming and integration included the Architectural Barriers Act of 1968, the Rehabilitation Act of 1973, the Education of All Handicapped Children Act of 1975, the Voting Accessibility for the Elderly and Handicapped Act of 1984, the Air Carrier Access Act of 1986, the Developmental Disabilities and Bill of Rights Act Amendment of 1987, and the Technology-Related Assistance for Individuals for Disabilities Act of 1988 (U.S. Access Board, 2001; Bullock & Mahon, 2000), but these legislative efforts concentrated more on physical aspect of inclusion, mainstreaming or

integration or social aspects of inclusion, mainstreaming or integration only in federally funded facilities. Newer efforts, with the help of the ADA and the growing number of agencies promoting full inclusion, have stimulated a need for full inclusion in all major service providing sectors, public (federal, state, and local) and private. This includes both physical and social inclusion (U.S. Department of Justice, 2002).

Despite recent efforts, the literature notes difficulties in the diffusion of full inclusion. Full inclusion, or simply *inclusion*, " . . . is a process that enables an individual to be a part of his environment by making choices, being supported in what he does on a daily basis, having friends, and being valued" (Bullock & Mahon, 2000, pg. 58). In other words, *inclusion* is the process of creating an atmosphere that allows people of all abilities to come together to fully enjoy (physically, psychologically, socially, emotionally, and spiritually) various products or services that are provided by park and recreation service providers. In particular, the literature has pointed to a lack of efforts being made in the social aspect of inclusion (Bullock & Mahon, 2000; Schleien, 1997), but has noted that greater strides have been made in the physical elements of inclusion (Bullock & Mahon, 2000). Although both physical and social inclusion are important aspects when involving people with disabilities into community endeavors, physical inclusion has been implemented at a faster rate than social inclusion (Bullock & Mahon, 2000).

Various authors have proposed internal and external factors for a lack of social inclusion diffusion. Although several explanations have been provided, few

efforts have been made to understand agency perspectives (see Dattilo, 1994; Schleien, Ray, & Green, 1997; National Therapeutic Recreation Society, 1999; Bullock & Mahon, 2000).

Innovations, in this study, are new ideas, practices, or objects that have been perceived as new by an individual or other unit of adoption (Rogers, 1983). Inclusion is currently an issue of debate by many scholars and has yet to be implemented in various agencies as it is thought to be a much more innovative approach to providing park and recreation services to people with disabilities (Bullock & Mahon, 2000; Schleien, Ray, & Green, 1997). To understand the process in which most innovations are used or implemented in an organization, numerous issues concerning both internal organizational environments or milieus and external organizational environments must be understood.

The process of innovation diffusion is relatively complex in organizations (March, 1988). The diffusion of innovation theory has helped put this concept into perspective (Rogers, 1995; Tannon & Rogers, 1975; Ash, 1997). According to the diffusion of innovation theory, *diffusion* is the process by which innovations are communicated through channels over time among members of a social system (Rogers, 1983, 1995). One influencing or encouraging factor in the adoption of an innovation is its attributes (Rogers, 1983, 1995). Although there are many influencing attributes (Zaltman, Duncan, & Holbeck, 1973; Fliegel & Kivlin, 1966; Dearing, Meyer, & Kazmierczak, 1994; Rogers, 1983, 1995), the attributes that have been found to be most influential include relative advantage, compatibility, triability, observability, and complexity (Rogers, 1983, 1995).

Moore & Benbasat (1991) noted that image was a subcomponent of relative advantage and that observability was broken down into visibility and result demonstrability.

Given the difficulties with the diffusion of social inclusion and the success of the diffusion of physical inclusion, this study compares the differences and similarities between them in local public park and recreation agencies in Michigan. Furthermore, the implementation of social and physical inclusion is compared as the adoption is legally mandated through the ADA for the specific population in this study. The basis for the comparison is the diffusion of innovation theory which indicates that perceptions of different innovation attributes are positively and negatively correlated to the diffusion of innovations. Moreover, the comparison is used to test the diffusion of innovation theory.

Problem Statement

The fundamental problem driving this study involves current difficulties with the diffusion of social inclusion within local public park and recreation agencies. Although several explanations have been provided, few efforts have been made to understand agency perspectives (see Dattilo, 1994; Schleien, Ray, & Green, 1997; National Therapeutic Recreation Society, 1999; Bullock & Mahon, 2000) and none, as reviewed by the investigator, have been made using the diffusion of innovation theory.

Study Purpose

The purpose of this study is to test the diffusion of innovation theory as one possible explanation for the differences and similarities between the diffusion of social and physical inclusion within local public park and recreation agencies in Michigan.

Study Hypothesis

There are a variety of attributes of innovations that are positively and negatively associated with the implementation of an innovation (Rogers, 1995; Moore & Benbasat, 1991). These attributes are used to compare the implementation of physical and social aspects of inclusion. The attributes include relative advantage, triability, compatibility, image, visibility, results demonstrability and complexity (Rogers, 1995; Moore & Benbasat, 1991). The first six attributes have been noted to being positively related, and the last one, to be negatively related. Given that physical aspects of inclusion have been implemented more rapidly and extensively than social aspects, the following hypotheses are tested.

H_{01}: $\mu_{\text{Physical Inclusion relative advantage}} = \mu_{\text{Social Inclusion relative advantage}}$

H_{A1}: $\mu_{\text{Physical Inclusion relative advantage}} > \mu_{\text{Social Inclusion relative advantage}}$

H_{02}: $\mu_{\text{Physical Inclusion compatibility}} = \mu_{\text{Social Inclusion compatibility}}$

H_{A2}: $\mu_{\text{Physical Inclusion compatibility}} > \mu_{\text{Social Inclusion compatibility}}$

H_{03}: $\mu_{\text{Physical Inclusion visibility}} = \mu_{\text{Social Inclusion visibility}}$

H_{A3}: $\mu_{\text{Physical Inclusion visibility}} > \mu_{\text{Social Inclusion visibility}}$

H_{04}: $\mu_{\text{Physical Inclusion triability}} = \mu_{\text{Social Inclusion triability}}$

H_{A4}: $\mu_{\text{Physical Inclusion triability}} > \mu_{\text{Social Inclusion triability}}$

H_{05}: $\mu_{\text{Physical Inclusion imagibility}} = \mu_{\text{Social Inclusion imagibility}}$

H_{A5}: $\mu_{\text{Physical Inclusion imagibility}} > \mu_{\text{Social Inclusion imagibility}}$

H_{06}: $\mu_{\text{Physical Inclusion results demonstrability}} = \mu_{\text{Social Inclusion results demonstrability}}$

H_{A6}: $\mu_{\text{Physical Inclusion results demonstrability}} > \mu_{\text{Social Inclusion results demonstrability}}$

H_{07}: $\mu_{\text{Physical Inclusion complexity}} = \mu_{\text{Social Inclusion complexity}}$

H_{A7}: $\mu_{\text{Physical Inclusion complexity}} < \mu_{\text{Social Inclusion complexity}}$

Definition of Terms

Attributes of innovations. Seven attributes are used in this study. These attributes were modified by Moore and Benbasat from Rogers' (1983) original attributes of innovations.

- *Compatibility* – the degree to which using an innovation is perceived as being consistent with the existing values, needs, and past experiences of potential adopters (Moore & Benbasat, 1991)
- *Complexity* – the degree to which using an innovation is perceived as being difficult to use (Moore & Benbasat, 1991)

- *Image* – the degree to which using an innovation enhances one's image or status within the organization (Moore & Benbasat, 1991)
- *Relative Advantage* – the degree to which using an innovation is perceived as being better than using its precursor (Moore & Benbasat, 1991)
- *Result Demonstrability* – the degree to which results of implementing an innovation are demonstrable to others (modified from Moore & Benbasat, 1991)
- *Triability* – the degree to which it is possible to try implementing the innovation (modified from Moore & Benbasat, 1991)
- *Visibility* – the degree to which using the results of an innovation are visible to others (modified from Moore & Benbasat, 1991)

Other terms. Various other terms are used throughout this study that need clarification.

- *Adoption* – a decision to make full use of an innovation as the best course of action available (Rogers, 1983)
- *Diffusion* - the process by which (1) an innovation (2) is communicated through certain channels (3) over time (4) among the members of a social system (Rogers, 1983)
- *Implementation* – the decision to put an innovation into use (Rogers, 1983)
- *Inclusion* – the process of creating an atmosphere that allows people of all abilities to come together to fully enjoy (physically, psychologically,

socially, and emotionally) various products or services that are provided by park and recreation service providers

- *Innovation* – an idea, practice, or object that is perceived as new by an individual or other unit of adoption (Rogers, 1983); it also implies bringing something new into use (Mohr, 1969)
- *Invention* – Implies bringing something new into being or creation (Mohr, 1969). This is in contrast to *innovation*, which is bringing something new into use
- *Physical Inclusion* – the removal of architectural barriers to help people with disabilities freely access a recreation activity
- *Social Inclusion* – is providing opportunities that encourage social interactions between people with and without disabilities so that they may participate freely in a recreation activity

Limitations

This study will focus on managers to obtain organizational information. This limitation may affect the quality of the information received. As noted by Mayer and Davidson (2000), "simple aggregation of individual responses [when analyzing organizations] may not always be appropriate because innovation may be the product of smaller groups within the organization whose perceptions and actions are critical" (p. 427). Therefore, information from managers alone may not provide a complete picture of the agencies in this study.

Delimitations

This study will be delimited to Michigan local public park and recreation agencies. This will not include special districts or school districts. Information will be obtained from top-level managers in these agencies.

Assumptions

Three major assumptions are made in this study. First, this study assumes that the managers studied will have accurate (or valid) knowledge of the park and recreation agency they manage and of the system in which the agency exists. Second, it assumes that the manager's perceptions of the agency will be aligned with the views of the agency. The final assumption made is that physical inclusion is implemented more frequently than social inclusion in local public park and recreation agencies.

CHAPTER II

REVIEW OF LITERATURE

The review of literature considers studies on the (1) diffusion of innovation theory, (2) recreation innovations, (3) local public park and recreation agencies, (4) local public park and recreation managers, and (5) inclusion in community recreation.

Diffusion of Innovation Theory

The diffusion of innovation theory recognizes diffusion as the process by which (1) innovations are (2) communicated through channels (3) over time (4) among members of a social system (Rogers, 1995; Tannon & Rogers, 1975).

Innovations. Innovations are an integral part of local public park and recreation agencies and their management. Crompton (1999) has recognized that a crisis created by the expectations that an agency should do more with fewer tax resources has resulted in managers acquiring a new entrepreneurial mindset and have since been developing many different innovative funding and operating methods. Whether the innovation is a new skateboard park, a new form of planning, like strategic planning, in order to respond to higher demands for quality services with fewer funds, or the implementation of a performance based budget to improve a prior line-item budget, innovations are everywhere and continue to affect park and recreation managers and the overall field.

> *Innovation* is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a

> different service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced. Entrepreneurs need to search purposefully for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation. And they need to know and to apply the principles of successful innovation (Drucker, 1985, p. 19).

Innovation, as defined by Rogers (1995), is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. Other definitions of an innovation have been proposed (see Grady & Chi, 1994), but this study will use Rogers' definition as it is widely recognized within the diffusion of innovation paradigm.

Triability (the degree to which it is possible to try implementing the innovation), visibility (the degree to which using the results of an innovation are visible to others), image (the degree to which using an innovation enhances one's image or status within the organization), compatibility (the degree to which using an innovation is perceived as being consistent with the existing values, needs, and past experiences of potential adopters), relative advantage (the degree to which using an innovation is perceived as being better than using its precursor), and complexity (the degree to which using an innovation is perceived as being difficult to use) are attributes of innovations that have encouraged and discouraged adoption of the innovation (Tannon & Rogers, 1975; Rogers, 1983,1995; Moore & Benbasat, 1991).

Three categories of innovations have also been noted (Damanpour & Gopalakrishnan, 1999). They include technical versus administrative, product versus process, and radical versus incremental.

> *Technical innovations* pertain to products, services, and production process technology; that is, they can be the adoption of an idea for a new product or a new service or the introduction of a new element in an organization's production process or service operation . . . *Administrative innovations* involve organizational structure and administrative processes; that is, they can be the adoption of new ways to recruit personnel, allocate resources, give rewards, and structure tasks or units . . . *Product innovation* is defined as a new product or service introduced to meet an external user or market need, and *process innovation* is defined as new elements introduced into an organization's production or service operations . . . *Radical innovations* produce fundamental changes in the activities of the organization and represent clear departure from existing practices, whereas *incremental innovations* result in a lesser degree of departure (Damanpour & Gopalakrishnan, 1999, pp. 62,65).

Communicated through channels. Communication is the process by which messages are transmitted from a source to a receiver, with a viewpoint of modifying the receiver's behavior . . . communication *channel* is the means by which the message gets from the source to the receiver (Rogers, 1983, 1995).

In the parks and recreation field, channels of communicating information have been managed by marketing and human relations personnel. Understanding potential sources for communication channels can be used when introducing a new innovation into an organization. Copper (1983) recognized this when he discussed the methods by which personal computers were first introduced into the San Diego County Department of Parks and Recreation.

Over time. Innovations that occur in the parks and recreation field occur over time. Studies by Crompton and Havitz (1987) and Sherman and Havitz (1991) have recognized that the process of innovation-diffusion with wavepools occurred over time. Similarly, Copper (1983) recognized that the process of introducing personal computers into his recreation department required time. Although there have not been many studies in the recreation field dealing exclusively with the concept of time, authors from a variety of fields have done research or noted research on time and other elements of the innovation diffusion process (Poole, Van de Ven, Dooley & Holmes, 2000; Rogers, 1983, 1995; King & Anderson, 1995; Zaltman et al., 1973; Huber & Van de Ven, 1995). In this study, time was taken into account, but not studied directly (i.e., this research did not try to find relationships between time and the implementation of an innovation within the park and recreation agencies).

Among members of a social system. In addition to the innovation, the concept of time, and the channels of communication, the members of a social system play an important role in the diffusion of innovations. Within local public park and recreation agencies, the members may include users, managers, service providers, elected officials, citizens, citizen groups, and boards. Authors have identified different roles these members play (van der Smissen, Moiseichik, Hartenburg, & Twardzik, 1999; Crompton, 1999). Two roles that have been found to influence the diffusion of innovations are those of change agents and opinion leaders (Zaltman & Duncan, 1977; Rogers, 1983, 1995; Valente & Davis, 1999).

A *change agent*, as defined by Zaltman and Duncan (1977), is any individual or group operating to change the status quo in a system such that the individual or individuals involved must relearn how to perform their role(s). Change agents commonly use opinion leaders to help them in their quest for change (Valente & Davis, 1999). *Opinion leaders*, according to Valente and Davis (1999), are individuals who are more central to a community and thus perhaps more influential. Rogers (1983, 1995) has noted that the success or failure of diffusion programs rests in part on the role of opinion leaders and their relationships with change agents. Although this research does not study this concept directly (i.e., network analysis and other methods of directly studying change agents and opinion leadership), it uses members of a social system to gather information about perceptions of innovations.

Factors affecting the adoption and implementation of innovations within organizations. In addition to the factors already mentioned, there are additional factors that have been found to affect the adoption and implementation of innovations within organizations. Some of these factors include general barriers or hindrances (Wise, 1999), agency characteristics (Berry, 1994), agency leadership roles (Berry & Wechsler, 1995) and characteristics (Rogers, 1983), and characteristics of external factors such as those of the larger organizational structure (for example, counties, municipalities, and townships) (Feller & Menzel, 1977). Feller and Menzel (1977) have also noted resources, citizen demands, supplier activities, administrative/managerial pressures, intergovernmental relations, knowledge infrastructure, and technological change as the main factors that influence diffusion of innovations in the public sector.

Critiques of using attributes to better understand change in organizations. Despite the various research efforts towards attributes of innovations, several criticisms have been proposed. Downs and Mohr (Downs & Mohr, 1976, 1979; Downs, 1978; Mohr, 1982) have pointed out inconsistencies between adopter characteristics, innovation characteristics, and adoption relationships in many attribute studies. They argue that generalizations are not possible given the variability and instability reported by many attribute studies.

Another critique of innovation research, which encompasses attribute research, is that of biases. Rogers (1995) has noted a variety of biases, but only the pro-innovation bias will be discussed because it is the most relevant to this study. The *pro-innovation bias*, "is the implication of most diffusion research that

an innovation should be diffused and adopted by all members of a social system, that it should be diffused more rapidly, and that the innovation should be neither re-invented nor rejected" (Rogers, 1995, p. 100).

The final critique of innovation research goes back to the dimension of time. Having participants recall information from the past can present some problems. It was noted by Tannon and Rogers (1975) that recall tends to be distorted in the direction of dissonance reduction.

Park and Recreation Innovation Research

There has been little empirical park and recreation research dedicated solely to the diffusion of innovations. Four major areas are emphasized by park and recreation innovation authors. The first involves the perspectives given by Crompton and Havitz (1987) and Sherman and Havitz (1991). These perspectives involved looking at Rogers (1983) innovation-decision process model and determining how it could be used to explain the successes and failures of proposed innovative ideas within park and recreation agencies. The second perspective includes advocating for change (for example, Heller, 2000). Although this perspective can be very useful in grassroot efforts to cause change, the literature does little to help managers completely understand the various elements involved in change. The third area concentrates on providing information on how an innovation was implemented, and the articles are typically reported as case studies, (for example, Copper, 1983). This innovation effort is important and helps individuals learn more about how different innovations occur in different organizations. One of the major setbacks of this effort is that they are

not based upon theoretical frameworks. Therefore, the authors do not provide needed information about the process of diffusing innovations. The fourth area includes some researchers that have provided a theoretical framework with their research in park and recreation innovations, but they are limited in number (for example, Stynes & Szcodronski, 1980). Overall, not enough empirical research has been done in the field of parks and recreation regarding diffusion of innovation research to adequately apply the theory in the field.

Local Public Park and Recreation Agencies

A local public park and recreation agency constitutes any public park and recreation agency that falls under the following categories: municipalities, special districts, or an "arm of the state" (which includes townships, schools, counties, and villages) (van der Smissen, et al., 1999).

> Schools, counties, and townships are considered "*arms of the state*" because the state establishes the geographical boundaries, which encompass the whole state. Counties and townships are political subdivisions of the state that are included in municipality legislation. Then, the state divides itself into school districts. Legislation authorizing schools may include provisions for athletics and community recreation, especially summer programs, or in some states, it may include specific "community education" legislation, which includes recreation services . . . Municipalities are created for the benefit of people living inside the designated boundaries. Municipalities may be established either by home rule

> charter or by authorizing legislation which defines their powers and responsibilities . . . Numerous states have passed enabling legislation which authorizes the establishment of *special districts* at the local level to provide designated park and recreation services. Such districts are independent and autonomous with their own governing bodies elected by the electorate within the specific district or judicially appointed and with taxing power. (van der Smissen, et al., 1999, pp. 27-28).

Kraus and Curtis (1990) have noted some of the trends that have been occurring in local public agencies. Due to lack of federal funding, joint operations between some local government agencies have been pursued in order to accomplish specific duties through shared resources. *Privatization*, public sector divestiture of assets and service responsibilities, allowing the private sector to take over all aspects of service and service delivery[2], has also been seen as one way to solve the issue of accountability with reduced funding (Johnson & Walzer, 2000).

Other issues that should be noted include administrative placement within larger systems and the role of boards and commissions which are common among local park and recreation agencies. Many local public park and recreation agencies operate as units within larger systems (Kraus & Curtis, 1990). Being part of a larger organization modifies the agencies environment. This could

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2 This definition has evolved to include other business ventures such as contracting out (often called *outsourcing* in business), corporization, franchise, internal markets, joint venture, management contracts, private infrastructure development and operation, volunteers, vouchers, public-private partnerships, self-help, and asset sale or long-term leases.

impact the diffusion of innovation because the organizational structure becomes more complex.

Roles of Local Public Park and Recreation Managers

Local public park and recreation managers are responsible for the success and/or failure of their agencies. van der Smissen, et al. (1999) define a *manager* as a person who plans, organizes, directs, and controls in order to manage the organization and organizational units. In addition, a manager has various roles. The roles include being a communicator, leader, coach, mentor, change agent, and power broker (van der Smissen, et al., 1999). Crompton (1999) and Godbey (1997) have also noted a new role, that of an entrepreneur. Furthermore, Kraus and Curtis (1990) have recognized effective managers roles within an organization to consist of *catalyzers* (who make things happen), *disciplinarians* (who make sure that others in the organization obey its policies, *guardians* (protectors of the organization's resources, funds, and public reputation), *innovators* (who stimulate thinking), *model figures* (who define the fundamental values and goals of the organization), and *spokespersons* (who speak for the organization in public meetings). Overall, managers play a role in many different aspects of the agency. This allows them to have a comprehensive understanding of their agency. Managers face a variety of challenges with these roles.

> The new role that is characteristic of effective park and recreation managers is that of an entrepreneur who operates in a public sector environment. An entrepreneur is defined as someone who shifts

> economic resources out of an area of lower and into an area of higher productivity and greater yield. Traditionally, the term was applied only to business people who operated in this way, but it now accurately describes the modus operandi of effective park and recreation managers. They seek creative, resourceful ways of using their scarce funds to leverage substantial additional resources through partnering with a wide range of business, nonprofit, and other government entities. Managers then employ their management and marketing skills to ensure that these resources are used to yield the maximum possible social and economic benefits (Crompton, 1999, p. 10).

Drucker (1985) has noted that innovations are a specific tool of entrepreneurs. If innovations are to be the new tools used by managers, then they should understand what are their roles with these new tools. Grady (1992) found that managers perceived their roles within the concept of innovations to be to create a supportive climate for innovative activity, communicate environmental receptivity for the innovation to the innovator, and to reward innovative performance. The last of which has been continuously debated (Grady, 1992). There are other issues regarding the management of innovations.

Damanpour & Gopalakrishnan (1999) expressed other pertinent issues regarding management of innovations within an organization. The issue relates to the distinction between innovation types when concerning adoption of innovations. This is important to recognize because not all innovations have

identical attributes. In addition, Daft (1978) has noted that the process of adoption or implementation of different types of innovations in organizations is not identical, some follow a top-down process, others a bottom-up process.

The various differences between categories of innovations reflect a variety of issues for managers. This is because the different categories affect different organizations differently. Therefore, categories of innovations are one of the issues that managers will face when dealing with innovations (Damanpour & Gopalakrishnan, 1999).

> Organizational performance is a function of innovating, not adopting radical, technical, product or any one type of innovation alone. The management of innovation, therefore, entails managing streams or sets of innovation, which requires a new perspective in both studying and managing innovations in organizations. Innovation should be considered as a managerial process rather than a purely technological process. To successfully adopt sets of innovations, managers should be able to understand and cope with the different requirements of each type of innovation and introduce structures, cultures, and systems that facilitate the synchronous adoption of multiple types (Damanpour & Gopalakrishnan, 1999, p.77).

Inclusion in Public Services

Legal mandates. Prior to the Americans with Disabilities Act of 1990 (ADA), there were numerous legal efforts made to assist people with disabilities. They include the Architectural Barriers Act of 1968, the Rehabilitation Act of

1973, the Education of All Handicapped Children Act of 1975, the Voting Accessibility for the Elderly and Handicapped Act of 1984, and the Air Carrier Access Act of 1986, the Developmental Disabilities and Bill of Rights Act Amendment of 1987, and the Technology-Related Assistance for Individuals for Disabilities Act of 1988 (U.S. Access Board, 2001; Bullock & Mahon, 2000).

The Architectural Barriers Act of 1968 requires that federally funded buildings and facilities be accessible to people with disabilities (U.S. Access Board, 2001). The Rehabilitation Act of 1973 prohibits discrimination based on disability in federally funded employment and programs and services, by federal contractors, and in the availability and use of federal agencies' electronic and information technology (U.S. Access Board, 2001). The Education of All Handicapped Children Act of 1975, which is now termed Individuals with Disabilities Education Act (IDEA) after 1990 amendments, stated that all children and youth with disabilities would receive a free, appropriate public education (Bullock and Mahon, 2000). The Voting Accessibility for the Elderly and Handicapped Act of 1984 requires that registration facilities and polling places for federal elections be accessible to persons with disabilities (U.S. Access Board, 2001). The Air Carrier Access Act of 1986 prohibits discrimination on the basis of disability in air travel and requires air carriers to accommodate the needs of passengers with disabilities (U.S. Access Board, 2001). The Developmental Disabilities and Bill of Rights Act Amendment of 1987, the amended version of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963, PL 88-164, mandated the establishment and operation

of a federal interagency committee to plan for and coordinate activities related to people with developmental disabilities (Bullock & Mahon, 2000). Finally, the Technology-Related Assistance for Individuals for Disabilities Act of 1988 was enacted to expand availability of assistive technology services and devices to people with disabilities (Bullock & Mahon, 2000). Although the purpose of these laws was to prevent the discrimination of people with disabilities, they often fell short of what was needed to provide inclusive services for people with disabilities. The ADA made the most comprehensive push, in the United States, towards inclusive services. The ADA prohibits discrimination based on disability in employment, state and local government services, transportation, public accommodations, commercial facilities and telecommunications (U.S. Access Board, 2001). The culmination of the covered legal mandates, the growing number of agencies promoting full inclusion, and citizens growing awareness of their rights has stimulated the push for inclusion.

Inhibitors of inclusion. Several authors have noted inhibitors of inclusion. Dattilo (1994) noted psychological reactance, learned helplessness, human helplessness, a controlling environment, overemphasis on competition, and boredom and anxiety as different barriers to inclusion. The National Therapeutic Recreation Society noted physical and attitudinal barriers to affect inclusive services (National Therapeutic Recreation Society, 1999). Bullock and Mahon (2000) noted that children's communication problems and short attention spans, lack of social acceptance as equal partners by others, logistics of meeting transportation, feeding, and toileting needs create barriers to inclusive services

for people with disabilities. Schleien, Ray, & Green (1997) distinguished between external and internal barriers. External barriers included financial constraints, lack of qualified staff, transportation, and/or accessible facilities, poor communication, ineffective service systems, and negative attitudes. Internal barriers included skill limitations, dependence on others, health and fitness, and lack of knowledge. Most of these inhibitors focus on inhibitors to the individual. Concentrating on the person with the disability does not allow for different points of views to be expressed. For example, perspectives of service providers, change agents, or opinion leaders are not taken into consideration. Although Schleien, Ray, & Green (1997) concentrated on some of the external factors which would encompass public service providers, the list did not take into account differences between public service providers.

Summary of Literature Review

The review of literatures has shown several points. First, managers have many roles in park and recreation agencies and therefore, are involved in many of the agencies efforts. This would allow for managers to give very good information concerning the park and recreation agency. Second, legislation shows that inclusion is not an option for adoption. Moreover, methods of implementation, for the most part, have been left to the agencies. Therefore, in this study, efforts were concentrated on the implementation of physical and social inclusion, not the adoption. Third, inclusion is a more innovative option than mainstreaming and integration when including people with disabilities into park and recreation programs/services. Therefore, inclusion was studied as opposed

to mainstreaming or integration. Finally, local public park and recreation agencies are very complex. Therefore, information will be collected from municipalities and "arms of the state," as they have clear boundaries which do not overlap and are distinguished in the U.S. Census.

CHAPTER III

PROCEDURES

This study tested the diffusion of innovation theory through a comparative analysis of social and physical attributes of inclusion within a local public park and recreation setting. The procedures used to acquire and analyze the information for this study are discussed in this chapter.

Population and Sample

The population of this study was 200 Michigan local park and recreation managers. The entire population was sampled in this study.

Instrumentation

A modified questionnaire was used to obtain information from the managers (Appendix B). The original questionnaire was developed by Moore and Benbasat (1991) to study a product innovation, personal workstations (PWSs). The attributes studied included triability, relative advantage, ease of use (complexity), compatibility, visibility (observability), voluntariness, image, and result demonstrability. These eight attributes were modified from Rogers' (1983) five attributes: triability, observability, compatibility, complexity, and relative advantage. This study used seven of the eight attributes suggested by Moore and Benbasat: triability, visibility, complexity, compatibility, relative advantage, result demonstrability, and image. These seven encompass Rogers' original five attributes. One attribute was not used in the instrument for this study.

Voluntariness was omitted because inclusion is not voluntary. Inclusion is federally mandated through the Americans with Disabilities Act of 1990.

As related to local public park and recreation agencies, each of the seven attributes could be seen within physical and social inclusion. For example, triability could be seen when service providers modify a program to include a person(s) with a disability that because of the disability may not be able to participate in the program. Triability occurs when the modification takes place in only one or a few programs before they are made to all or most of the programs. Visibility may occur when the innovation could be viewed by others. For example, an accessible ramp could be viewed by others. Complexity of an innovation is usually expressed through those who have to implement the innovation. For example, if a service provider is not familiar with different techniques to modifying a program, then they may perceive the modification of a program to be highly complex. Compatibility is associated with how inline the innovation is to the agency's mission or general purpose. For example, if an agency has within its mission to serve "all" citizens, then providing programs that accommodate for some of these citizens should be compatible with the agency's mission. Relative advantage is associated with how much better the new innovation is perceived to be than the older innovation that it will be replacing. For example, if a park and recreation manager perceives that a new cement ramp will be better than a wooden ramp, then the manager may be willing to replace the wooden ramps with cement ramps. Results demonstrability are concerned with whether the results of an innovation can be expressed to others.

For example, if a manager cannot express to others the potential results of a new therapeutic pool to others then it is less likely that the pool will be purchased. Finally, if an innovation creates a better perceived image of the agency, then it is more likely to be implemented. For example, if a new program that promotes social inclusion is deemed to potentially create a negative view of the agency, then it is more likely that the new program will not be implemented.

Demographic questions were asked in the questionnaire. They included questions concerning the agency's resources. This element has been noted by Feller & Menzel (1977) to be an important element impacting innovations in the public sector. Questions were also posed concerning manager's education and experience. This helped to obtain information regarding possible similarities and differences of the managers who responded to the questions.

Reliability and validity tests were performed on the instrument. For the reliability, coefficient alpha was measured. Alpha scores for each attribute of social and physical inclusion were compared to the alpha scores of the original instrument (see Chapter IV). For the validity, the content validity was taken. Expert judges were used in this procedure. A pilot study was completed that assisted with the assessment of reliability and validity of the instrument.

Pilot Study

Once the original questionnaire was completed, it was presented to various mid-level local public park and recreation managers. They were contacted through phone or e-mail and asked to participate in the pilot study. Original questionnaires were also distributed to middle level park and recreation

managers at a Southern Michigan Recreation and Parks Association meeting. The pilot study participants completed the original questionnaire and gave feedback concerning the questionnaire to the investigator. Six participants were used in the pilot study.

Collection of Data

Primary and secondary data were collected for this study. The final questionnaire, which was used to collect the primary data, was distributed to the 200 agency managers through first-class mail along with other package material in November of 2001. Other contents within the package included a cover letter requesting the manager's participation in the study and a pre-stamped return envelope. The managers were given three weeks to fill out the questionnaire before receiving a second mailing requesting their participation to the study in December of 2001.

Secondary data were collected through the U.S. Census database, Michigan Recreation and Parks Association (MRPA), Yahoo! Yellow Pages, and various local governmental agency websites. The secondary data collected were used to create a local public park and recreation agency database. This database was used to mail out survey packets to local public park and recreation managers.

Treatment of Data

Profile of the subjects. The sample included 200 local public park and recreation managers in Michigan. Six questions were asked concerning

demographic information of the managers. The questions focused on education background and experience as a local public park and recreation manager.

Elements of the problem. There were three elements of the problem: agency demographics, agency perceptions of attributes of social and physical inclusion, and manager demographics. Agency demographic questions were related to agency resources. Social and physical inclusion attributes included triability, visibility, complexity, compatibility, relative advantage, result demonstrability, and image. Manager demographics were collected through the final questionnaire. The questions focused on manager education and experience.

Relationship of the elements. The three elements are related to the focus of this study, physical and social inclusion attributes, in various ways. Different agency demographics have been shown to influence innovation diffusion (Rogers, 1983, 1995). In addition, different manager backgrounds may produce different perceptions about the local public park and recreation agency.

Descriptive statistics were obtained for all variables. Furthermore, a nonparametric test, Wilcoxon paired signed rank test, was used to directly test the seven hypotheses in this study. In addition, chi-square was used to compare means of agency, social structure, and manager demographics.

Effects of e-mail. During the initial phases of the study, unintended e-mail messages were sent to various managers. This e-mail contained an attached document which contained a description of the study with the hypotheses of the study at the bottom of the document. The exposure of the hypotheses could have

biased the responses of this study. To check for this, independent sample t-tests were run comparing answers of those who received the e-mail and those that did not.

CHAPTER IV

ANALYSIS

This study tested the diffusion of innovation theory through the analysis of social and physical inclusion attributes within a local public park and recreation setting. An analysis of the primary and secondary data collected in this study is discussed in this chapter. In addition, this chapter is organized according to the substantive variables of the problem (hypotheses).

Each of the hypotheses in this chapter were measured using two steps. First, means were taken for each attribute. In the second step, physical and social inclusion attributes were compared using the nonparametric Wilcoxon paired signed rank test.

In this chapter, several tables are used to display various analysis results. For space considerations, several of the words are abbreviated. Therefore, in the tables provided in this chapter, PHY = Physical, SOC = Social, REL = Relative Advantage, CPA = Compatibility, VIS = Visibility, TRI = Triability, IMG = Imagibility, DEM = Results Demonstrability, and CPL = Complexity.

Profile of Managers

On average (mean), managers held park and recreation positions for 19 years, were directors for 11 years, and were employed in their current position for 10 years (Table 1). Moreover, about 51% had a bachelor's degree as their highest level of education earned and 41% had master's degrees (Table 2). These degrees were obtained from 1969 through 2000 (Table 1). On average,

degrees were earned in the early 1980's (see Table 1). In addition, approximately 61% of the managers were not certified park and recreation professionals (Table 3).

Table 1. Descriptive results by manager experience

	n	Min	Max	Mean	SD
Years employed in parks and recreation	76	0.5	35	18.84	9.02
Years held position of director	76	0	31	10.76	8.21
Years employed in current position	76	0.5	28	10.44	8.41
Year of degree	73	1969	2000	1983.36	8.57

Table 2. Frequency and percentage distribution by education level

	f	%
high school diploma	1	1.32
bachelors	39	51.32
masters	32	42.11
doctorate	2	2.63
other	2	2.63
Total	76	100.00

Table 3. Frequency and percentage distribution by Certified Park and Recreation Professional (CPRP)

	f	%
No CPRP	46	60.53
Yes CPRP	30	39.47
Total	76	100.00

Profile of Park and Recreation Agencies

On average (mean), approximately 40% of the agencies had operating budgets larger than $1,000,001, 17% between $500,001-$1,000,000, 23% between $200,001- $500,000, 17% between $50,001- $200,000, and 3% under $50,000 (Table 4). Also, approximately 53% felt they had discretionary funds for new initiatives while 47% felt they did not (Table 5). In addition, the average (mean) agency was established in 1967 (Table 6). Although there is a difference between years in which agencies were established, approximately 50% of the agencies were established between 1960 and 1990. Comparisons were also made regarding whether an agency was a recreation department, park and recreation department or a park department. Approximately 92% of the agencies were either park and recreation or recreation departments (Table 7).

Table 4. Frequency and percentage distribution by agency operating budget

	f	%
Under $50,000	2	2.67
$50,001-$200,000	13	17.33
$200,001-$500,000	17	22.67
$500,001-$1,000,000	13	17.33
Over $1,000,001	30	40.00
Total	75	100.00

Table 5. Frequency and percentage distribution by perceived discretionary funds

	f	%
No perceived discretionary funds	36	47.37
Yes, perceived discretionary funds	40	52.63
Total	76	100.00

Table 6. Descriptive results by department year of establishment

	n	Min	Max	Mean	SD
Department established	69	1896	2001	1967.23	20.81

Table 7. Frequency and percentage distribution by agency type

	f	%
Park agency	6	7.69
Park and Recreation and Recreation agency	72	92.31
Total	78	100.00

Profile of Park and Recreation Agencies' Social Systems

Of the managers who responded to the questionnaire, approximately 19% were from county agencies, 31% were from city agencies, 49% were from township agencies, and 1% was from village agencies (Table 8).

Table 8. Frequency and percentage distribution by governmental unit

	f	%
County	15	19.23
City	24	30.77
Township	38	48.72
Village	1	1.28
Total	78	100.00

Distribution of Respondents

All of the agencies in this study were coded according to their respective congressional district. Of the managers who responded to the questionnaire, most came from agencies that were reflective of their respective congressional district (Table 9). Only congressional district 16 was misrepresented greater than 3.3% (Table 9).

Table 9. Frequency and percentage distributions by congressional districts

Cong. District	*f* total	*f* study	% total	% study	% difference
1	15	5	7.5	6.4	-1.1
2	15	5	7.5	6.4	-1.1
3	9	5	4.5	6.4	1.9
4	12	5	6	6.4	0.4
5	13	4	6.5	5.1	-1.4
6	10	5	5	6.4	1.4
7	18	8	9	10.3	1.3
8	14	8	7	10.3	3.3
9	14	6	7	7.7	0.7
10	19	8	9.5	10.3	0.8
11	12	7	6	9.0	3.0
12	14	3	7	3.8	-3.2
13	16	8	8	10.3	2.3
14	2	0	1	0.0	-1.0
15	2	0	1	0.0	-1.0
16	15	1	7.5	1.3	-6.2
Total	200	78	100%	100%	0%

Manager Perceptions of Agency Inclusiveness

Agency managers were asked regarding their perceptions of their agency's programs concerning physical and social inclusion. Approximately 57% of the managers perceived "not at all" that their agencies provided programs solely for persons with disabilities (Table 10). Approximately 42% of the managers perceived "somewhat" that their agencies provided programs where persons with disabilities participated with persons without disabilities (Table 10). Finally, approximately 50% of the managers perceived "moderately" to "quite a bit" that their agencies provided programs that were physically accessible to people with disabilities (Table 10).

Table 10. Manager perceptions of agency's programs inclusiveness

	Segregated Recreation Programs		Inclusive Recreation Programs		Physically Inclusive Programs	
	f	%	*f*	%	*f*	%
Not at all	43	57	15	20	14	18
Somewhat	18	24	32	42	14	18
Moderately	10	13	14	18	17	22
Quite a bit	1	1	10	13	21	28
Extensive	4	5	5	7	10	13
Total	76	100	76	100	76	100

Instrumentation

Cronbach Alpha (α) was used to test the reliability of the questions used to determine each of the seven attributes. Table 11 contains maximized alpha scores for the questions used to determine attributes of physical inclusion, social inclusion, and of the prior instrument (for personal work stations or PWS's; the short form), which was modified for this study. The original instrument used in this study (different from the prior instrument as the prior instrument was modified to account for differences in this study) contained three questions for each attribute. After all combinations of each attribute were tested for alpha scores, it was determined that one question would be omitted from imagibility, complexity, visibility, and results demonstrability in order to maximize the reliability of the instrument.

Table 11. Cronbach Alpha scores for attributes of physical and social inclusion and PWS's

	α Physical	α Social	α PWS's
Triability	0.87	0.91	0.71
Relative Advantage	0.89	0.88	0.90
Imagibility	0.80	0.88	0.79
Complexity	0.65	0.88	0.84
Visibility	0.81	0.89	0.83
Compatibility	0.94	0.94	0.86
Results Demonstrability	0.75	0.78	0.79

Paired-sample T-test

After testing the reliability of the instrument, assumptions, that should be met in order to use the paired-sample t-test with confidence, were tested using frequency distributions. Skewness and kurtosis levels above 1 and below -1 of the paired differences indicated that the distribution was not normal. After the data was examined, it was determined that the data was not normally distributed (one of the assumptions was not met). Therefore, outliers in the data, with z-scores larger than 3 or less than -3, were omitted. After outliers were omitted, frequency distributions were run again. Similar results indicated that the paired differences were again not normally distributed. Therefore, normality tests were not sustained, and it was determined that the nonparametric Wilcoxon paired signed rank test would be used.

Nonparametric Wilcoxon Paired Signed Rank Test

There are three basic assumptions that should be met when using the Wilcoxon paired signed rank test. The differences of the pairs should be independent, symmetrical, and they should have the same median. Independence was met as responses from one paired difference were not

influenced by other paired differences. Symmetry was measured by testing the skewness of the data through a frequency distribution. It was found that the data was symmetrical as the paired differences of physical and social inclusion attributes had skewness scores less than 1. Finally, median levels were analyzed using frequency distributions, and it was deemed that the paired differences had similar medians.

After the assumptions were met, the Wilcoxon paired signed rank test was run to determine significance of the differences between the attributes of physical and social inclusion. Results of the test are discussed in the following sections.

Hypothesis One: Relative Advantage

The first hypothesis states that physical inclusion is perceived to have more relative advantage to the recreation agency than social inclusion. For example, if hiring a person to speak to people with hearing difficulties is deemed to be overall better than using note cards, then a person may be hired to do sign language. The following equation represents this hypothesis:

$$H_{01}: \mu_{\text{Physical Inclusion relative advantage}} = \mu_{\text{Social Inclusion relative advantage}}$$

$$H_{A1}: \mu_{\text{Physical Inclusion relative advantage}} > \mu_{\text{Social Inclusion relative advantage}}$$

Result. Physical inclusion was perceived as having more relative advantage than social inclusion. As seen in Table 12, physical inclusion relative advantage had a mean of 6.36 and social inclusion relative advantage a mean of 5.76. The difference was statistically significant from 0 with a *p*-value of .000 (Table 13). Given the results of the analysis, the null hypothesis was rejected, and the alternative hypothesis was accepted. Thus, it is important to emphasize the relative advantage of social inclusion above other concepts that it will replace (e.g., integration and mainstreaming) by those who wish to implement social inclusion. If this effort is not made, then social inclusion will not be implemented at a faster rate than it is currently implemented.

Table 12. Descriptive results by physical and social relative advantage

	Mean	n	SD	SE
PHY REL	6.36	73	0.88	0.10
SOC REL	5.76	73	1.12	0.13

Table 13. Wilcoxon Signed Rank Test results for physical and social relative advantage

	n	Mean Rank	Sum of Ranks
Negative Ranks	41a	24.00	984
Positive Ranks	5b	19.40	97
Ties	27c		
Total	73		
p (2-tailed)	0.000		

a SOC REL < PHY REL
b SOC REL > PHY REL
c PHY REL = SOC REL

Hypothesis Two: Compatibility

The second hypothesis states that physical inclusion is perceived to have more compatibility to the recreation agency than social inclusion. For example, an innovation that is more in line with an agency's mission will more likely be implemented than not. The following equation represents this hypothesis:

$$H_{02}: \mu_{\text{Physical Inclusion compatibility}} = \mu_{\text{Social Inclusion compatibility}}$$

$$H_{A2}: \mu_{\text{Physical Inclusion compatibility}} > \mu_{\text{Social Inclusion compatibility}}$$

Result. Physical inclusion was perceived as having more compatibility than social inclusion. As seen in Table 14, physical inclusion compatibility had a mean of 6.14 and social inclusion compatibility a mean of 5.87. The difference was statistically significant from 0 with a *p*-value of .000 (Table 15). Given the results of the analysis, the null hypothesis was rejected, and the alternative hypothesis was accepted. Thus, it is important to emphasize the compatibility of social inclusion with the views of the agency that will adopt social inclusion. If this effort is not made, then social inclusion will not be implemented at a faster rate than it is currently implemented.

Table 14. Descriptive results by compatibility of physical and social inclusion

	Mean	n	SD	SE
PHY CPA	6.14	74	0.9	0.1
SOC CPA	5.87	72	1.01	0.12

Table 15. Wilcoxon Signed Rank Test results for compatibility of physical and social inclusion

	n	Mean Rank	Sum of Ranks
Negative Ranks	25a	20.52	513
Positive Ranks	9b	9.11	82
Ties	38c		
Total	72		
p (2-tailed)	0.000		

a SOC CPA < PHY CPA
b SOC CPA > PHY CPA
c PHY CPA = SOC CPA

Hypothesis Three: Visibility

The third hypothesis states that physical inclusion is perceived to have more visibility to the recreation agency than social inclusion. This has to do with how visible an innovation, for example a new self-propelled ramp, is to others. The following equation represents this hypothesis:

$$H_{03}: \mu_{\text{Physical Inclusion visibility}} = \mu_{\text{Social Inclusion visibility}}$$

$$H_{A3}: \mu_{\text{Physical Inclusion visibility}} > \mu_{\text{Social Inclusion visibility}}$$

Result. Physical inclusion was perceived as having more visibility than social inclusion. As seen in Table 16, physical inclusion visibility had a mean of 4.84 and social inclusion visibility a mean of 3.9. The difference was statistically significant from 0 with a *p*-value of .000 (Table 17). Given the results of the analysis, the null hypothesis was rejected, and the alternative hypothesis was accepted. Thus, it is important to make the social inclusion visible to others to facilitate the adoption of social inclusion. If others, such as potential adopters, are not made aware of social inclusion efforts in an agency, then social inclusion will not be implemented at a faster rate than it is currently implemented.

Table 16. Descriptive results by physical and social visibility

	Mean	n	SD	SE
PHY VIS	4.84	73	1.11	0.13
SOC VIS	3.9	73	1.37	0.16

Table 17. Wilcoxon Signed Rank Test results for physical and social visibility

	n	Mean Rank	Sum of Ranks
Negative Ranks	46a	31.12	1431.5
Positive Ranks	11b	20.14	221.5
Ties	16c		
Total	73		
p (2-tailed)	0.000		

a SOC VIS < PHY VIS
b SOC VIS > PHY VIS
c PHY VIS = SOC VIS

Hypothesis Four: Triability

The fourth hypothesis states that physical inclusion is perceived to have more triability to the recreation agency than social inclusion. For example, if an agency manager has the opportunity to test out the innovation, it has a greater chance of being implemented. The following equation represents this hypothesis:

$$H_{04}: \mu_{\text{Physical Inclusion triability}} = \mu_{\text{Social Inclusion triability}}$$

$$H_{A4}: \mu_{\text{Physical Inclusion triability}} > \mu_{\text{Social Inclusion triability}}$$

Result. Physical inclusion was not perceived as having more triability than social inclusion. As seen in Table 18, physical inclusion triability had a mean of 3.38 and social inclusion triability a mean of 3.38. The difference was not statistically significant from 0 with a *p*-value higher than .050 (see Table 19). Given the results of the analysis, the null hypothesis was accepted, and the alternative hypothesis was rejected. Thus, it is not important for an agency to try out social inclusion before it implements it throughout its programs. If a manager promotes the triability of social inclusion, resources, that may otherwise have been spent on other efforts, such as the other six attributes described in this study, may be wasted.

Table 18. Descriptive results by physical and social triability

	Mean	n	SD	SE
PHY TRI	3.38	67	1.43	0.17
SOC TRI	3.38	67	1.48	0.18

Table 19. Wilcoxon Signed Rank Test results for physical and social triability

	n	Mean Rank	Sum of Ranks
Negative Ranks	23a	19.74	454
Positive Ranks	19b	23.63	449
Ties	25c		
Total	67		
p (2-tailed)	0.975		

a SOC TRI < PHY TRI
b SOC TRI > PHY TRI
c PHY TRI = SOC TRI

Hypothesis Five: Imagibility

The fifth hypothesis states that physical inclusion is perceived to have more imagibility to the recreation agency than social inclusion. For example, if an innovation is introduced that will be perceived by the manager to make the agency look better in the eyes of others, then it is more likely to be implemented. The following equation represents this hypothesis:

$$H_{05}: \mu_{\text{Physical Inclusion imagibility}} = \mu_{\text{Social Inclusion imagibility}}$$

$$H_{A5}: \mu_{\text{Physical Inclusion imagibility}} > \mu_{\text{Social Inclusion imagibility}}$$

Result. Physical inclusion was perceived as having more imagibility than social inclusion. As seen in Table 20, physical inclusion imagibility had a mean of 4.36 and social inclusion imagibility a mean of 3.99. The difference was statistically significant from 0 with a *p*-value of .001 (Table 21). Given the results of the analysis, the null hypothesis was rejected, and the alternative hypothesis was accepted. Thus, it is important that social inclusion is perceived as increasing the image of the adopting agency. If those within the adopting agency do not perceive social inclusion to increase the image of the agency, then social inclusion will not be implemented at a faster rate within the adopting agency.

Table 20. Descriptive results by physical and social imagibility

	Mean	n	SD	SE
PHY IMG	4.36	73	1.46	0.17
SOC IMG	3.99	73	1.49	0.17

Table 21. Wilcoxon Signed Rank Test results for physical and social imagibility

	n	Mean Rank	Sum of Ranks
Negative Ranks	30a	27.03	811
Positive Ranks	15b	14.93	224
Ties	28c		
Total	73		
p (2-tailed)	0.001		

a SOC IMG < PHY IMG
b SOC IMG > PHY IMG
c PHY IMG = SOC IMG

Hypothesis Six: Results Demonstrability

The sixth hypothesis states that physical inclusion is perceived to have more results demonstrability to the recreation agency than social inclusion. For example, if a manager can express to others the potential or actual results of an innovation, then it is more likely to be implemented. The following equation represents this hypothesis:

$$H_{06}: \mu_{\text{Physical Inclusion results demonstrability}} = \mu_{\text{Social Inclusion results demonstrability}}$$

$$H_{A6}: \mu_{\text{Physical Inclusion results demonstrability}} > \mu_{\text{Social Inclusion results demonstrability}}$$

Result. Physical inclusion was perceived as having more results demonstrability than social inclusion. As seen in Table 22, physical inclusion results demonstrability had a mean of 5.01 and social inclusion results demonstrability a mean of 4.54. The difference was statistically significant from 0 with a *p*-value of .000 (Table 23). Given the results of the analysis, the null hypothesis was rejected, and the alternative hypothesis was accepted. Thus, it is critical that the adopting agency be able to express the results of social inclusion. If an adopting agency cannot demonstrate the results of social inclusion, then social inclusion will not be implemented within that adopting agency faster than it is currently being implemented.

Table 22. Descriptive results by physical and social results demonstrability

	Mean	n	SD	SE
PHY DEM	5.01	70	1.24	0.15
SOC DEM	4.54	70	1.41	0.17

Table 23. Wilcoxon Signed Rank Test results for physical and social results demonstrability

	n	Mean Rank	Sum of Ranks
Negative Ranks	34a	26.26	893
Positive Ranks	12b	15.67	188
Ties	24c		
Total	70		
p (2-tailed)	0.000		

a SOC DEM < PHY DEM
b SOC DEM > PHY DEM
c PHY DEM = SOC DEM

Hypothesis Seven: Complexity

The seventh hypothesis states that physical inclusion is perceived to have less complexity to the recreation agency than social inclusion. For example, if a new social inclusion program is perceived to be too complex, then is it more likely that it will not be implemented. The following equation represents this hypothesis:

$$H_{07}: \mu_{\text{Physical Inclusion complexity}} = \mu_{\text{Social Inclusion complexity}}$$

$$H_{A7}: \mu_{\text{Physical Inclusion complexity}} < \mu_{\text{Social Inclusion complexity}}$$

Result. Physical inclusion was not perceived as having more complexity than social inclusion. As seen in Table 24, physical inclusion complexity had a mean of 3.75 and social inclusion complexity a mean of 3.99. The difference was statistically significant from 0 with a *p*-value of .004 (see Table 25). Given the results of the analysis, the null hypothesis was rejected, and the alternative hypothesis was accepted. Thus, it is important for social inclusion to not be perceived as complex by the adopting agency. If social inclusion is perceived to be complex, then the adopting agency may not implement social inclusion at a faster rate than it is currently implementing social inclusion.

Table 24. Descriptive results by physical and social complexity

	Mean	n	SD	SE
PHY CPL	3.75	74	1.23	0.14
SOC CPL	3.99	74	1.08	0.13

Table 25. Wilcoxon Signed Rank Test results for physical and social complexity

	n	Mean Rank	Sum of Ranks
Negative Ranks	21a	29.31	615.5
Positive Ranks	43b	34.06	1464.5
Ties	10c		
Total	74		
p (2-tailed)	0.004		

a SOC CPL < PHY CPL
b SOC CPL > PHY CPL
c PHY CPL = SOC CPL

Effects of E-Mail

As seen in Table 26, none of the variables were significantly (95% confidence) impacted by the e-mail that was sent to the managers. Two variables, physical and social results demonstrability were close to .05, thus this should be noted.

Table 26. Independent sample t-test results for e-mail effects for physical and social inclusion

	t	df	*p* (2-tailed)	SE	95% Confidence Interval	
					Lower	Upper
PHY TRI	0.45	40.20	0.66	0.40	-0.62	0.98
PHY REL	-0.86	51.30	0.40	0.21	-0.61	0.25
PHY IMG	0.64	39.46	0.53	0.31	-0.42	0.82
PHY CPL	-0.19	35.09	0.85	0.29	-0.63	0.52
PHY VIS	-0.35	57.33	0.73	0.25	-0.59	0.42
PHY CPA	-0.73	47.54	0.47	0.22	-0.59	0.28
PHY DEM	1.74	53.25	0.09	0.25	-0.07	0.95
SOC TRI	0.90	44.11	0.37	0.40	-0.45	1.18
SOC REL	0.30	39.13	0.77	0.32	-0.54	0.73
SOC IMG	0.27	43.69	0.79	0.33	-0.58	0.75
SOC CPL	0.81	44.87	0.42	0.28	-0.33	0.78
SOC VIS	0.09	50.41	0.93	0.30	-0.58	0.64
SOC CPA	0.50	36.82	0.62	0.34	-0.52	0.86
SOC DEM	1.78	47.72	0.08	0.32	-0.07	1.22

Summary of Analysis

In summary, after each of the seven hypotheses were analyzed, it was found that there was a significant different between paired difference of the means of physical and social inclusion relative advantage, compatibility, visibility, imagibility, complexity, and results demonstrability. In addition, the e-mails that were sent to the managers did not statistically affect managers' answers.

CHAPTER V

CONCLUSION

The investigator of this study tested the diffusion of innovation theory as one possible explanation for the differences and similarities between the diffusion of social and physical inclusion within local public park and recreation agencies in Michigan. This chapter contains a summary and discussion of the various elements in this study.

Summary of Procedures

In November of 2001, 200 local park and recreation managers were sent questionnaire packages requesting them to provide various demographic information on themselves and on the agency which they direct. Furthermore, questions were posed regarding seven different attributes of physical and social inclusion. Managers filled out the questionnaires and returned them using the self-addressed envelope that was provided to them in the package they received. Managers who did not return the surveys within three weeks received a second questionnaire package containing the same information they had received through the first mailing. The Wilcoxon paired signed rank test was used to compare the significance of the paired difference between means of physical and social inclusion attributes.

Summary of Findings

After each of the seven hypotheses were analyzed, it was found that there was a significant paired difference between managers' perceived diffusion of

physical and social inclusion innovation for relative advantage, compatibility, complexity, visibility, imagibility, and results demonstrability. In addition, it was found that there was no statistical difference between the perceived triability of social and physical inclusion.

Discussion

The fundamental problem which drove this study was the current difficulty managers have diffusing social inclusion within local public park and recreation agencies. Although several explanations were provided, few efforts have been made to understand manager perspectives (see Dattilo, 1994; Schleien, Ray, & Green, 1997; National Therapeutic Recreation Society, 1999; Bullock & Mahon, 2000) and none have been made using the diffusion of innovation theory.

In order to test the diffusion of innovation theory, the investigator collected information regarding various attributes that have been deemed to influence (positively and negatively) the diffusion process of an innovation from managers in local park and recreation agencies in Michigan. As shown through the results, six of the seven hypotheses rejected the null and accepted the alternative. Two points stem from this; first, a discussion of hypotheses which rejected the null and next, a discussion of the hypothesis that accepted the null.

Hypotheses which rejected the null. In this study, various attributes of physical and social inclusion were found to be statistically different. More specifically, the perceived relative advantage, compatibility, visibility, imagibility, complexity and results demonstrability of physical inclusion were found to be significantly higher (less in the case of complexity) than that of social inclusion.

The findings in this study are consistent with prior research studying the diffusion of innovation theory (Rogers, 1983; 1995).

Hypotheses which accepted the null. Although research has shown that triability helps increase the rate of diffusion of innovations, this study found that there was no difference between physical and social inclusion regarding triability. Many factors could explain this.

First, during the pilot study, it was brought to the investigator's attention that the agencies do not have the opportunity to try out physical inclusion. They stated that they either make a facility accessible or they do not. There is no in-between. In addition, there are certain standards that are already initiated that dictate what an agency must do to be physically accessible (U.S. Department of Justice, 2002). Standards are not available for social inclusion.

Another explanation might be that the managers themselves do not implement physical or social inclusion, and therefore, they may not have specific information concerning the implementation of physical and social inclusion. For example, a service provider may have moved a recreation program that was originally offered in an inaccessible facility to a facility where people using wheelchairs could participate in the program. In addition, social inclusion could occur in various levels as well. Thus, a program could have been slightly modified (i.e., rule modification) to implement social inclusion that would have gone unreported to a manager of an agency.

Limitations

The major concern of this research is that of the generalizability to the diffusion process of innovations. The process of innovation diffusion in organizations is not limited to attributes (Mohr, 1999). Therefore, it would be incorrect to determine that a comprehensive understanding of the process of innovations in organizations has been reached through this research. But, this research can be used to understand elements of the process of inclusion in park and recreation agencies in Michigan.

Other limitations of this study concern the nature of the diffusion of innovations. Rogers (1983; 1995) identified four key elements concerned with diffusion. He stated that diffusion is the process by which (1) an innovation (2) is communicated through certain channels (3) over time (4) among the members of a social system. It is within the third point that another limit to this research comes about. Since the process of diffusion occurs through time, it is necessary to examine various points within the process. Information for this study was collected at one single point in time.

Another limitation of the study is that it only asked managers of the local public park and recreation agencies for information concerning their agency. Therefore, only managers' perceptions were analyzed. Although managers play key roles in the implementation of innovations in their agencies, other persons have influence on innovations as well (Mayer & Davidson, 2000). Therefore, information from managers alone may not provide a complete picture of the organizations in this study.

Recommendations Based on Study Results

Each of the attributes gives some insight into the differential rate of diffusion of physical inclusion and social inclusion. Therefore, there are four considerations that a manager should focus on when taking into account the attributes of social inclusion while promoting the implementation of social inclusion of people with disabilities in their programs. All four considerations (benefits, alignment, ease of implementation, and triability) should be fully addressed if a manager wishes to increase the implementation rate of social inclusion.

First, a manager should focus on the benefits of socially including a person with a disability as opposed to integrating or mainstreaming them. The relative advantage of inclusion over integration and mainstreaming should be relayed to those who influence the participation of individuals in park and recreation programs and those who implement (directly and/or indirectly) the park and recreation program. Some influencers include park and recreation programmers (who program services for both people with and without disabilities), agency managers, potential participants with and without disabilities, and parents or guardians of people with and without disabilities (Schleien, Ray, & Green, 1997).

Second, a manager should focus on how social inclusion of people with disabilities into their agency's park and recreation programs is aligned with the mission and vision of the agency. This can be done by promoting, through the media, agency web sites, newsletters, activity guides, word of mouth, and

programs, how social inclusion is aligned with the mission and vision of the agency. Another way is to modify the agency's mission and vision to emphasize how social inclusion is an important part of the agency. By promoting social inclusion, a manager makes social inclusion more visible to potential participants and persons who influence social inclusion in agency park and recreation programs. Furthermore, by promoting the benefits of social inclusion, a manager has given potential participants and persons who influence social inclusion in agency park and recreation programs enough information for them to be able to tell others about the benefits of social inclusion. In addition, through these efforts, the agency's perceived image will increase for people and organizations that support social inclusion in park and recreation programs.

Third, through the promotional efforts noted above, a manager should focus on the relative ease of implementing social inclusion into park and recreation programs in addition to the benefits of social inclusion. For example, if a manager is attempting to provide a description of how social inclusion would affect an agency to other park and recreation employees, the manager should frame the description in a manner that the employees would understand. A manager might frame social inclusion similar to other programs that allow people increased options and opportunities to participate in the agency's park and recreation programs. These programs would be currently implemented, so the employees would have a base of knowledge for the comparison. For example, a manager might compare the implementation of social inclusion to existing scholarship programs, which are currently used in the agency to help people with

low incomes participate in park and recreation programs. By comparing social inclusion to scholarships, the manager has reduced the level of complexity for the employees and increased the chances of social inclusion being implemented in the park and recreation agency.

Finally, a manager should not focus on providing an opportunity for potential participants to try out social inclusion in a program. Social inclusion should be a part of all of the programs. In other words, if a manager focuses on implementing social inclusion programs for people with disabilities in only part of the programs as opposed to all of the programs within the agency, these efforts may be fruitless. An example of this would be to provide social inclusion opportunities for people with disabilities in some parts of a city as opposed to the entire city. This action would not positively influence the implementation rate of social inclusion.

General Implications for Diffusion of Innovations

The findings from the study suggest that when attempting to increase the rate of implementation of social inclusion, a park and recreation agency must pay attention to the attributes of the innovation; especially, the relative advantage, compatibility, visibility, imagibility, complexity and results demonstrability of the innovation.

There are many potential implications based upon this. Specifically, there are three areas where the findings of this study could be generalized. Overall, the basis for the potential implications is that the results of this study can provide managers and others involved within local public park and recreation agencies

tools to assist with the diffusion of innovations. First, the study implications could be generalized towards other innovations utilizing the attributes as a tool to aid in the implementation. For example, for a manager who is interested in building a new skate park (an innovation in the beginning stages of diffusion), he would focus on how much better the new skate park would be to provide programs and services to the youth of the community than other facilities, how easy it would be to build the information and attain information from the potential target market and other markets, how others will be able to see the skate park which will increase the image of the agency, how the skate park is in line with the agency's mission, and how beneficial the skate park would be to the participants. Because of the potential differences between innovations and situations surrounding different innovations, it is important for managers to have a basic understanding of the diffusion of innovation theory before they attempt to promote different innovation attributes.

Second, for those innovations that are slowly diffusing, the results of this study provide a basis for repackaging strategies. For example, if a mid-level manager has been trying to convince a superior to invest in a new computer for the park and recreation agency, then the mid-level manager can focus on how the new computer will be better than the older computer, how workers will be able to work faster and accomplish more which is in line with what the manager wants from the workers, how the new computers will not be more complex than the older computers to use, and how investing in the new computers will increase the image of the manager in the eyes of the workers as they will feel that she

cares about them more. It is also important that the manager understands the potential results of the new computers so that she could be a potential advocate for the new computers if the funding for the new computers comes from another department.

Finally, the study results have potential implications for the involvement of other significant members of the social system, such as advocacy groups, policy makers, friends groups, state and national park and recreation professional associations, local education systems, and consumers, who are interested in promoting a particular innovation, such as social inclusion. Local public park and recreation managers could use these members of the social system to influence the diffusion of social inclusion. This would be done by promoting the various attributes of social inclusion through these members by taking into consideration the various qualities of each agency. For example, a manager could publish articles in various newsletters or publications disseminated by state and national park and recreation professional associations, friends groups, and/or advocacy groups. The information provided would create visibility for the issue of social inclusion. In addition, the information could focus on specific attributes of social inclusion such as methods to simplify the implementation of social inclusion, the advantages of implementing social inclusion, or some potential results of implementing social inclusion.

A manager could also work with members of the social system to provide collaborative programs that either promote social inclusion and/or that implement social inclusion. For example, a manager could work with a local university to

assist in modifying current programs within the agency to support the implementation of social inclusion. By collaborating with other members of the social system and using their expertise, key attributes of implementing social inclusion, such as relative advantage, can be increased. In addition, initial collaborations may open the door for future collaborations involving other innovations.

Additionally, a manager could more broadly share her experiences with other professionals for the purpose of advancing the innovation. The focus could be on the various attributes of social inclusion at state, national and international professional conferences. Michigan Recreation and Park Association, National Recreation and Park Association, National Institute on Recreation Inclusion, National Therapeutic Recreation Society, and TASH (an international association of people with disabilities) host annual conferences where professional information is disseminated.

Recommendations for Further Study

Taking everything into consideration, the investigator makes various recommendations for further study. First, if this study was to be reproduced, information should be collected from a wider array of individuals of each of the local public park and recreation agencies. Furthermore, future studies should target understanding why triability was not found to be a significant factor. Other manager, agency and social system factors need to be examined to determine whether they explain the differences that were found in this study.

Beyond this study, the investigator recommends that studies should concentrate on the other elements of the diffusion of innovation theory. For example, future studies should examine the specific communication processes that were used to diffuse physical and social inclusion, analyze the effects of time on the diffusion process, or study the effects of social cohorts on the diffusion of physical and social inclusion.

APPENDIX

Appendix A

Source and accuracy statement for the 1993 public use file from the survey of income and program participation (SIPP) (U.S. Census, 1993).

Source: U.S. Census (2002). Source and accuracy statement. Retrieved March 3, 2002, from http://www.census.gov/hhes/www/disable/sipp/src.html.

Accuracy of Estimates

We base SIPP estimates on a sample. The sample estimates may differ somewhat from the values obtained from administering a complete census using the same questionnaire, instructions, and enumerators. The difference occurs because with an estimate based on a sample survey two types of errors are possible: nonsampling and sampling. We can provide estimates of the magnitude of the SIPP sampling error, but this is not true of nonsampling error. The next few sections describe SIPP nonsampling error sources, followed by a discussion of sampling error, its estimation, and its use in data analysis.

Nonsampling variability. We attribute nonsampling errors to many sources, they include:

- inability to obtain information about all cases in the sample,
- definitional difficulties,
- differences in the interpretation of questions,

- inability or unwillingness on the part of the respondents to provide correct information,
- inability to recall information,
- errors made in collection (e.g. recording or coding the data),
- errors made in processing the data,
- errors made in estimating values for missing data,
- biases resulting from the differing recall periods caused by the interviewing pattern used,
- undercoverage.

We used quality control and edit procedures to reduce errors made by respondents, coders and interviewers. More detailed discussions of the existence and control of nonsampling errors in the SIPP are in the SIPP Quality Profile.

Undercoverage in SIPP resulted from missed living quarters and missed persons within sample households. It is known that undercoverage varies with age, race, and sex. Generally, undercoverage is larger for males than for females and larger for Blacks than for Nonblacks. Ratio estimation to independent age-race-sex population controls partially corrects for the bias due to survey undercoverage. However, biases exist in the estimates when persons in missed households or missed persons in interviewed households have characteristics different from those of interviewed persons in the same age-race-sex group.

A common measure of survey coverage is the coverage ratio, the estimated population before ratio adjustment divided by the independent population control. Table 6 shows CPS coverage ratios for age-sex-race groups for 1992. The CPS coverage ratios can exhibit some variability from month to month, but these are a typical set of coverage ratios. Other Census Bureau household surveys like the SIPP experience similar coverage.

Comparability with other estimates. Exercise caution when comparing data from this report with data from other SIPP publications or with data from other surveys. Comparability problems are from varying seasonal patterns for many characteristics, different nonsampling errors, and different concepts and procedures. Refer to the SIPP Quality Profile for known differences with data from other sources and further discussion.

Sampling variability. Standard errors indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The standard errors mostly measure the variations that occurred by chance because we surveyed a sample rather than the entire population.

Appendix B (modified to fit thesis requirements)

Michigan Local Public Park and Recreation Departments

This study is composed of three sections. **Section 1** asks general questions concerning your department. **Section 2** asks more detailed questions concerning your perceptions of two different elements of access. **Section 3** asks questions about your experience and education. Each of the three sections begins with brief instructions.

Section 1

The following questions refer to your department.
Please circle or fill in the most appropriate answer for each question.

1. How much operating budget was allocated (in total) to your department this fiscal year?

   a. Under $50,000
   b. $50,001- $200,000
   c. $200,001- $500,000
   d. $500,001- $1,000,000
   e. Over $1,000,001

2. Does your department have discretionary funds to implement new initiatives? No Yes

3. In what year was your department established? _____

4. To what extent does your department do the following:	Not at all	Somewhat	Moderately	Quite a bit	Extensive
a. Directly provide organized recreational programs solely for persons with disabilities	1	2	3	4	5
b. Directly provide organized recreational programs where people with disabilities participate in the recreational programs with people without disabilities	1	2	3	4	5
c. Directly provide organized recreational programs that are physically accessible for persons with disabilities	1	2	3	4	5

Section 2

The following questions concern your perceptions of two different elements of access. Please circle or fill in the most appropriate answer for each question.

Physical Access is the removal of architectural barriers to help people with disabilities freely access a recreational activity. One example of physical access would be to create a ramp in front of a recreational facility to enable a person using a wheelchair to enter the building on their own. In the following statements, please answer regarding your perceptions on each statement below concerning physical access as they relate to your department.

Extremely Disagree						Extremely Agree	
1	2	3	4	5	6	7	1. Physical access was available to my department to adequately test run various designs
1	2	3	4	5	6	7	2. Before deciding whether to use any of the physical access designs, my department was able to properly try them out
1	2	3	4	5	6	7	3. My department was permitted to provide physical access on a trial basis long enough to see what its benefits are
1	2	3	4	5	6	7	4. Providing physical access makes it easier for my department to fulfill its mission
1	2	3	4	5	6	7	5. Providing physical access enhances my department's effectiveness
1	2	3	4	5	6	7	6. Overall, providing physical access is advantageous
1	2	3	4	5	6	7	7. Providing physical access improves my department's image within the community
1	2	3	4	5	6	7	8. Departments in the community who provide physical access have more prestige than those who do not
1	2	3	4	5	6	7	9. Providing physical access is a status symbol in the community
1	2	3	4	5	6	7	10. Physical access is burdensome to provide
1	2	3	4	5	6	7	11. Providing physical access is often frustrating
1	2	3	4	5	6	7	12. Physical access is easy to implement
1	2	3	4	5	6	7	13. In my community, one sees physical access provided
1	2	3	4	5	6	7	14. Physical access is not very visible in my community
1	2	3	4	5	6	7	15. It is easy to observe physical access provided in the community

1	2	3	4	5	6	7	16. Providing physical access is completely compatible with my department's mission
1	2	3	4	5	6	7	17. Providing physical access fits well with my department's mission
1	2	3	4	5	6	7	18. Providing physical access fits into my department's mission
1	2	3	4	5	6	7	19. My department would have difficulties communicating the results of providing physical access opportunities to others
1	2	3	4	5	6	7	20. My department could communicate to others the consequences of physical access
1	2	3	4	5	6	7	21. The results of providing physical access are apparent

22. Does your department have expertise available to provide physical access? No Yes

23. Please state the three most influential barriers to providing physical access.

1. _____

2. _____

3. _____

Social Access is providing opportunities that encourage social interactions between people with and without disabilities so that they may participate freely in a recreational activity. One example is modifying the game of soccer so that a person with hearing difficulties can communicate with other players, officials, coaches, etc. (without hearing difficulties) using hand signals. In the following statements, please answer regarding your perceptions on each statement below concerning social access as they relate to your department.

Extremely Disagree						Extremely Agree	
1	2	3	4	5	6	7	1. Social access was available to my department to adequately test run various opportunities
1	2	3	4	5	6	7	2. Before deciding whether to use any of the social access opportunities, my department was able to properly try them out
1	2	3	4	5	6	7	3. My department was permitted to provide social access on a trial basis long enough to see what its benefits are
1	2	3	4	5	6	7	4. Providing social access makes it easier for my department to fulfill its mission
1	2	3	4	5	6	7	5. Providing social access enhances my department's effectiveness
1	2	3	4	5	6	7	6. Overall, providing social access is advantageous
1	2	3	4	5	6	7	7. Providing social access improves my department's image within the community
1	2	3	4	5	6	7	8. Departments in the community who provide social access have more prestige than those who do not
1	2	3	4	5	6	7	9. Providing social access is a status symbol in the community
1	2	3	4	5	6	7	10. Social access is burdensome to provide
1	2	3	4	5	6	7	11. Providing social access is often frustrating
1	2	3	4	5	6	7	12. Social access is easy to provide

1	2	3	4	5	6	7	13. In my community, one sees social access provided
1	2	3	4	5	6	7	14. Social access is not very visible in my community
1	2	3	4	5	6	7	15. It is easy observe social access provided in the community
1	2	3	4	5	6	7	16. Providing social access is completely compatible with my department's mission
1	2	3	4	5	6	7	17. Providing social access fits well with my department's mission
1	2	3	4	5	6	7	18. Providing social access fits into my department's mission
1	2	3	4	5	6	7	19. My department would have difficulties communicating the results of providing social access opportunities to others
1	2	3	4	5	6	7	20. My department could communicate to others the consequences of social access
1	2	3	4	5	6	7	21. The results of providing social access are apparent

22. Does your department have expertise available to provide social access? No Yes

23. Please state the three most influential barriers to providing social access.

1. _____

2. _____

3. _____

Section 3

The following questions refer to your education and experience as the director of your department. Please circle or fill in the most appropriate answer.

1. What is your highest degree?

   a. High School Diploma
   b. Bachelors
   c. Masters
   d. Doctorate
   e. Other _____

2. In what year did you obtain your highest degree of education? _____

3. How many years have you been employed in the field of parks and recreation? _____

4. How many years have you held a position of director? _____

5. How many years have you been employed in your current position? _____

6. Are you currently a Certified Park and Recreation Professional (CPRP)? No Yes

Thank you for your participation in this study!

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