This is to certify that the
dissertation entitled

PREFERENCES OF CONSUMERS AND CAREGIVERS FOR INCLUSIVE OVER NONINCLUSIVE RECREATION SERVICES
A COMPARISON STUDY

presented by

MARY LOU SCHILLING

has been accepted towards fulfillment
of the requirements for the

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

Richard Dale Parker
Major Professor's Signature

August 15, 2003
Date

MSU is an Affirmative Action/Equal Opportunity Institution

PREFERENCES OF CONSUMERS AND CAREGIVERS FOR INCLUSIVE OVER NONINCLUSIVE RECREATION SERVICES A COMPARISON STUDY

By

Mary Lou Schilling

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Park, Recreation, and Tourism Resources

2003

ABSTRACT

PREFERENCES OF CONSUMERS AND CAREGIVERS FOR INCLUSIVE OVER NONINCLUSIVE RECREATION SERVICES A COMPARISON STUDY

By

Mary Lou Schilling

Noninclusion continues to be the typical approach in providing community-based recreation services for people with disabilities (Anderson & Heyne, 2000; ARPS/NTRS, 1997). This traditional approach is inconsistent with social policy and legislation that advocates inclusion, normalization, least restrictive environments, and social role valorization. No current literature seeks consumer input related to their preferences for inclusive or noninclusive recreation services. This lack of consumer input is inconsistent with trends in service delivery which embrace consumer empowerment, decision making, person-centered planning, and self-determination.

The purpose of this investigation was to identify consumers' and caregivers' preferences for inclusive or noninclusive recreation services. Participants were individuals with diagnoses of moderate or mild mental retardation (*n* = 62) and their caregivers (*n* = 46). Consumers were interviewed using a forced-choice questionnaire supported by pictorial cues. Caregivers were surveyed using a questionnaire of similar content. Descriptive and statistical techniques were used to compare consumer inclusive preferences to level of cognitive impairment, gender, past involvement in inclusive recreation, type of residence, and age. Caregiver data were analyzed comparing inclusive

preferences to past involvement in inclusive recreation, years of caregiving experience, age, and inclusive related training.

Results indicated that caregivers overwhelmingly preferred inclusive recreation services. Younger caregivers and those with less experience were more likely to prefer passive, home-based inclusive activities. Older caregivers and those with more experience were more likely to prefer active, community-based inclusive activities. Results also indicated that consumers preferred inclusive recreation but not to the same extent as their caregivers. Consumer age was found to significantly impact their preference for inclusive recreation services. Descriptive statistics also revealed that gender and housing impacted consumer preference for inclusion. Finally, consumers with diagnosis of moderate and mild cognitive impairment were found to be valid and reliable sources in reporting their preferences for inclusive recreation services.

Based on the results of consumer and caregiver inquiry recommendations were made to provide a combination of inclusive and noninclusive community-based recreation programs. Consumers should be encouraged to be active decision makers in their leisure, life, and work related activities. Caregivers should be provided with increased formal education regarding best practice strategies in the implementation of community-based, challenging leisure activities. A partner program was proposed to provide a structured strategy to facilitate inclusive recreation opportunities for people with disabilities.

Dedicated to my husband, Alan,
and my children, Patrick, Katie, and Ben.

ACKNOWLEDGMENTS

This project would not have been possible without the support of my family, my committee, my colleagues, and the consumers, caregivers, expert panel members, and referring agencies who actively agreed to participate. The following acknowledgments identifies these individuals and provides a thank you for their support.

To the consumers who agreed to be members of the consumer panel, pilot, and the primary investigation. To Lynn, Al, Tim, and those consumers who agreed to be photograph models and forever pictured in the appendices of this dissertation. To the panel of experts who offered insight in the design of my tool. To the caregivers who agreed to participate in the pilot and the actual study. To Mid-Michigan Industries, the Mt. Pleasant Center, Gratiot Community Mental Health, McBride Homes, Inc., CenCare AFC Homes, and Central Michigan Non Profit Housing for their assistance in referring caregivers and consumers as participants in this investigation. A special thank you to the employees of Mid-Michigan Industries and the Mt. Pleasant Center who allowed me to interview consumers at their work or home locations.

To the members of my dissertation committee at Michigan State University. To the Chair, Dr. Richard Paulsen who offered hours of support, insight, and direction in the design and implementation of this investigation. To Dr. Gail Dummer and Dr. Margot Kurtz for their technical and methodological support and guidance. To Dr. James Bristor for his encouragement, enthusiasm, and good humor throughout the design and implementation of this project.

To the faculty and staff of the Department of Recreation, Parks, and Leisure Services Administration program at Central Michigan University for their on-going support and encouragement.

Finally, to Ed Barth who provided encouragement, support, and many hours of editorial comments throughout the design and analysis of this project.

TABLE OF CONTENTS

CHAPTER III

CHAPTER IV

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

Introduction to the Study

Introduction and Statement of the Problem

The early 1900s brought with them such advances in medical technology and treatment that persons with significant disabilities survived the acute phases of their impairments (Wolfensberger, 1975). Subsequently, parents identified concerns about their ability to properly care for and manage their children with disabilities at home. Eventually, state-operated institutions emerged to provide residential care and services to people with cognitive and physical impairments (Gelb, 1995; Wolfensberger, 1975).

As the number of people residing in state institutions increased, it became necessary to determine the most effective strategies to serve and care for this segment of society. Educational specialists and allied health professionals emerged to create a unique body of knowledge offering strategies and protocols that were intended to improve the training provided to people with disabilities (Crowe, Auxter, & Pyfer, 1981). Initially, these services were directed, philosophically, by the medical model -- a model that focuses on curing or ameliorating illness, impairment, or disability (Wolfensberger, 1975). A physician guides a medical team through a course of action that is intended to increase a person's level of functioning and potentially cure the residual deficits caused by that individual's disability.

Eventually, the medical model came under scrutiny. Professionals working with people with developmental disabilities knew that a cure was not likely. They recognized the need for specialized training and services to enhance a person's functional skills and maximize levels of personal independence in home, work/school, and leisure pursuits (Bullock & Mahon, 1997). Philosophically, the principles of normalization (Wolfensberger, 1972), mainstreaming, integration (Austin & Crawford, 1996; Smith, Austin, & Kennedy, 1996), and inclusion (Scherschligt, Chiunti, & Burkhour, 1992) supported the need for a model of service delivery that advocated consumer input, decision making, and empowerment.

In the mid to late 1980s, person-centered planning became the primary focus of service delivery for persons with developmental disabilities (O'Brien, O'Brien, & Mount, 1997). This model differs from the traditional medical model in its focus on personal abilities versus personal limitations and deficits. The person-centered planning model is an attempt to match consumers' wishes and aspirations with their abilities and resources. The intention of this planning strategy is to provide consumer empowerment and personal decision making (Holburn, Jacobson, & Vietze, 2000). In person-centered planning, therefore, the consumer is encouraged to be an active (versus passive or unaware) member of his or her life planning as it relates to decisions involving work, school, life, and leisure pursuits.

The term "self-determination" is used to support the underlying philosophy of person-centered planning. This humanistic philosophy, which guides current services, has emerged over the last 70 years. Prerequisites to this philosophical approach were advancements in medical technology, increased knowledge on the part of allied health professionals, and enabling legislation prohibiting discrimination on the basis of disability, impairment, or illness. In practice, services for people with developmental disabilities have evolved from institutionalization to community-based residential accommodations, segregated training to least restrictive training, childlike play experiences to age-appropriate activities, service models focusing on treatment to service delivery focusing on consumer empowerment, and no access to vocational, recreational, or educational services to full, accommodating, community-based opportunities for people with disabilities.

Full inclusion is the new social mandate (Scherschligt et al., 1992). Full inclusion occurs when people with disabilities engage in activities with (versus next to) able-bodied peers (Smith, Austin, & Kennedy, 1996). The concept of normalization ensures that people with disabilities engage in activities in the same environments as people without disabilities (Wolfensberger, 1975). Similarly, the social role valorization theory suggests that people must be exposed to "normal" situations, engaged in activity with people without disability, to learn normal behaviors and be valued as contributing members of society (Wolfensberger, 1983; 1995b). However, segregated recreation is reported as the *norm* (Anderson & Heyne, 2000), and recent research has indicated that people with disability are participating in activities that are primarily noninclusive (APRS/NTRS, 1997). Specifically, Devine (APRS/NTRS, 1997) found that the majority of people with disability who attend public recreation programs participate in activities designed specifically for others with disability. This behavioral choice is inconsistent with social and legal movements that have ensured inclusive opportunities for people with disability, especially when research also has revealed that the majority of public recreation agencies support inclusion and make it available upon consumer request (APRS/NTRS, 1997). No research is available concerning who is making decisions regarding recreation participation patterns for individuals with disabilities. No research, to date, has identified consumers' preferences for inclusive or noninclusive recreation models of service delivery.

A review of the available literature indicated that there is adequate support for the philosophical need for inclusion, adequate support from enabling legislation promoting inclusion (Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 327), and adequate resources describing strategies to successfully foster the inclusion process (Anderson, Brown, & Soli, 1996; Block, 1994; Block & Etz, 1995; Bork, 1989; Browder & Cooper, 1994; Edwards & Smith, 1989; Foley, 1979; Richardson, Wilson, Wetherald, & Peters, 1987; Sable & Gravink, 1995; Scherschligt et al., 1992; Schleien, Rynders, Heyne, & Tabourne, 1995; Smith et al., 1996; Sowers & Powers, 1995; Wehman, 1993; West, 1984). Yet, the literature appears less adequate with regard to consumer input into the inclusive process and consumer desire for inclusive recreation services. Knowing that it is "critical to seek the personal insights of those most directly affected by shifts in social policy" (Wyngaarden, 1981, p. 107) and knowing that determining individual preferences is a focal point in the person-centered approach to service delivery (Everson & Zhang, 2000; Reid, Everson, &

Green, 1999) it is critical to ask consumers whether they prefer inclusive or noninclusive leisure experiences.

Purpose of the Study

My purpose in this investigation was to identify consumers' and caregivers' preferences for inclusive over noninclusive recreation services. Consumers in this study were people with moderate and mild levels of cognitive impairment. Consumers' preferences were compared according to their level of cognitive impairment, gender, past involvement in inclusive recreation services, type of residence, and age. In addition, caregivers' preferences were compared based on their years of experience as a caregiver, past involvement in inclusive recreation services, age, and extent of training related to inclusion.

Hypotheses

The following hypotheses, stated in null form, were formulated to guide the analysis of data in this study. Based on the literature reviewed, statements of expected directional outcome were created for each hypothesis.

1. Consumers do not prefer inclusive recreation services over noninclusive recreation services.

2. There is no difference in consumers' preferences for inclusive recreation services, based on level of cognitive impairment.

3. There is no difference in consumers' preferences for inclusive recreation services, based on their gender.

4. There is no difference in consumers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.

5. There is no difference in consumers' preferences for inclusive recreation services, based on their type of residence.

6. There is no relationship between consumers' preferences for inclusive recreation services and their age.
7. Caregivers do not prefer inclusive recreation services over noninclusive recreation services.
8. Consumers and caregivers do not differ in their preferences for inclusive recreation services.
9. There is no difference in caregivers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.
10. There is no relationship between caregivers' preferences for inclusive recreation services and their years of experience as a caregiver.
11. There is no relationship between caregivers' preferences for inclusive recreation services and their age.
12. There is no difference in caregivers' preferences for inclusive recreation services, based on their extent of training related to inclusion.

Independent Variables

Two types of independent variables were used in this study: consumer based and caregiver based. Consumer variables included level of cognitive impairment, type of residence, past involvement in inclusive recreation experiences, age, and gender. Caregiver variables were years of experience as a caregiver, past involvement in inclusive recreation experiences, age, and extent of training related to inclusion.

Dependent Variables

The dependent variables in this study were consumer preference and caregiver preference for inclusive recreation services. Analyses were carried out to determine whether there was a relationship between the dependent variables and independent variables.

Delimitations

The sample for this investigation was delimited to individuals with diagnoses of moderate and mild levels of mental retardation with no sensory impairments that would inhibit their ability to respond to interview questions. Specifically, persons who were interviewed had a diagnosis of either moderate or mild mental retardation (or an intelligence quotient range from 36 to 70). The study sample was further delimited to individuals residing in the mid-Michigan area.

Limitations

The sample comprised people residing in the mid-Michigan area. This sample of people with disability was not culturally diverse, which will limit the generalizability of the investigation results to a more culturally diverse population of people with disability. Sample size (i.e., 62 consumers, 46 caregivers) may negatively affect the generalizability of the results especially those results related to gender and place of residence. Convenience versus random sampling was used when interviewing consumers with mental retardation and their caregivers. This biased sampling technique may negatively affect validity and may limit the generalizability of the investigation results. In addition, the tool used in the investigation showed inclusive recreation activities in which two to three people with disability were engaged. The limited number of people shown in the tool will limit the generalizability of the results to programs involving greater numbers of people. Finally, because it is well documented that individuals with mental retardation have a greater than average rate of acquiescence, the potential for acquiescence may negatively affect the validity and reliability of the results.

Basic Assumptions

In conducting this study I assumed that: (a) the theories of normalization and social role valorization apply to all aspects of life and therefore apply to leisure lifestyle and leisure participation patterns; (b) persons with diagnoses of moderate or mild levels of mental retardation are valid sources of information about their preferences for services (Wyngaarden, 1981); (c) persons with diagnoses of mental retardation are the most appropriate sources of information about their life and satisfaction with life activities (Wyngaarden, 1981); (d) interviewing people with mental retardation is a viable method of data collection (Malik, Ashton-Shaeffer, & Kleiber, 1991); and (e) caregivers understand the operational definition of inclusion.

Operational Definitions

The following terms are defined as they were used in this study.

Accessibility -- The degree to which a program, facility, or position is available or open to a person with a disability (Burlingame & Skalko, 1997).

Accommodation -- Making the environment or service easy to use or accessible by a person with a disability (Burlingame & Skalko, 1997).

Acquiescence -- The tendency of people to respond "yes" to questions, regardless of the content (Sigelman, Budd, Spandel, & Schoenrock, 1981b).

Caregiver – A parent or attendant who cares for and knows an individual with moderate or mild developmental disability (Sigelman, Budd, Winer, Schoenrock, & Martin, 1982).

Developmental disability -- A variety of chronic, long-term conditions that emerge or are present during childhood and interfere with normal patterns of growth and development (Burlingame & Skalko, 1997; Yamamoto, 1993).

Inclusion -- In any life activity, the "equal and joint participation of persons with and without disabilities" (Smith et al., 1996, p. 12).

Inclusive recreation -- Recreation services that foster both physical and social interaction of persons with and without disabilities. The person with disability engages in recreation activity directly with (versus beside) a person without disability (Smith et al., 1996; Wolfensberger, 1972).

Integration -- Provision of services in the most normative environment possible (Austin & Crawford, 1996; Wolfensberger, 1972).

Mainstreaming – A process of service delivery that focuses on skill acquisition to facilitate the involvement of persons with disability in activities with people without disability (Smith et al., 1996).

Mild mental retardation -- A diagnostic condition characterized by an individual exhibiting an IQ of between 50 to 55 and 70, with adaptive behavior deficits in social skills and advanced executive functioning (American Psychiatric Association [APA], 1994; Burlingame & Skalko, 1997).

Moderate mental retardation -- A diagnostic condition characterized by an individual exhibiting an IQ of between 35 to 40 and 50 to 55, with adaptive behavior deficits noted in social skills, community safety skills, physical endurance, coordination and strength, advanced activities of daily living, and leisure skills (APA, 1994; Burlingame & Skalko, 1997; Yamamoto, 1993).

Noninclusive recreation -- Recreation programming delivered with the primary intention of serving only people with disabilities (Broida, 1995).

Normalization -- providing services in environments and under conditions that follow cultural norms (Anderson & Greer, 1976; Phillips, 1992; Wolfensberger, 1972).

Social role valorization -- The perception that people are valued by their social roles (Wolfensberger, 1983).

Special recreation services (specialized or noninclusive) -- Recreation programs offered specifically for persons with disabilities (Broida, 1995).

Overview

Chapter 1 was an introduction to the study and a statement of the problem underlying the research. The purpose of the study was set forth, and the hypotheses were stated. The study delimitations, limitations, basic assumptions, and operational definitions were provided for increased clarity.

CHAPTER II

Literature Review

Introduction

My purpose in this investigation was to identify consumers' and caregivers' preferences for inclusive over noninclusive recreation services. Consumers in this study were people with moderate and mild levels of cognitive impairment. This chapter contains a review of the literature. Topics that are discussed are: (a) developmental disabilities and mental retardation; (b) theoretical aspects influencing service delivery; (c) social role valorization theory; (d) legislative influence; (e) recreation preferences of people with developmental disability; (f) perceived barriers to leisure participation and inclusive recreation services; (g) perceptions of service providers, peers, and consumers toward inclusive recreation services; (h) perceived value of inclusive and special recreation services; (i) strategies to foster inclusive recreation services; (j) empowerment, personal choice, and decision making of persons with disability; and (k) interviewing persons with mental retardation.

Developmental Disabilities and Mental Retardation

Developmental disabilities are defined as a group of chronic, long term conditions that are present during childhood and interfere with normal patterns of growth and development (Burlingame & Skalko, 1997; Yamamoto, 1993). Developmental disabilities comprise, but are not limited to, such diagnoses as mental retardation, cerebral palsy, autism, learning disability, spina bifida, epilepsy, and muscular dystrophy (Yamamoto, 1993) and affect 1% to 3% of the population of the United States (President's Committee on Mental Retardation [PCMR], 1997; University of Maryland Medicine, 2001).

The largest clinical group of individuals diagnosed as having a developmental disability are those with mental retardation (Yamamoto, 1993). To be diagnosed as mentally retarded, a person must exhibit significant subaverage intellectual functioning, existing concurrently with deficits in adaptive functioning, manifested before18 years of age (APA, 1994). The primary symptom of mental retardation is the failure to meet various age-related intellectual markers (University of Maryland Medicine, 2001). A person classified as mentally retarded will score 70 or less on a standardized intelligence test (APA, 1994; University of Maryland Medicine, 2001) and have deficits in adaptive functioning. Adaptive skills are those age-related behaviors that demonstrate an individual's competence in personal independence and social responsibilities (APA, 1994). Adaptive skills that are problematic for people with mental retardation include communication, self-care, health and safety, self-direction, academics and/or learning, community access, and social, vocational, and leisure skills (American Association on Mental Retardation [AAMR], 2001; University of Maryland Medicine, 2001).

There are four levels of mental retardation (mild, moderate, severe, and profound), which are defined according to cognitive and adaptive behavior deficits. The great majority (95%) of people with mental retardation display mild or moderate levels of cognitive impairment, whereas the remainder (5%)

experience more severe levels of cognitive and adaptive behavior deficits (APA, 1994).

Persons diagnosed with mild mental retardation will obtain a score between 50-55 and 70 on an intelligence test and display adaptive behavior deficits in social skills and executive functioning (APA, 1994; Burlingame & Skalko, 1997). On the other hand, persons diagnosed with a moderate level of cognitive impairment will have an IQ between 35-40 and 50-55, with adaptive behavior deficits in social skills, community safety, physical endurance, coordination, strength, advanced activities of daily living, and leisure (APA, 1994; Burlingame & Skalko, 1997; Yamamoto, 1993).

Persons clinically diagnosed as severely mentally impaired will have an IQ between 20-25 and 35-40 and will display more significant adaptive behavior deficits in speech and language, self-care skills, independent living skills, spontaneous play skills, and motor development (APA, 1994; Burlingame & Skalko, 1997; Yamamoto, 1993). Persons who are severely mentally impaired may also exhibit self-stimulating or self-injurious behaviors (Yamamoto, 1993).

Finally, persons diagnosed with profound mental retardation will have an IQ below 20 or 25 and will require significant supervision or be dependent on others for their personal needs (APA, 1994; Yamamoto, 1993). Persons diagnosed with profound mental retardation will display poor sensory-motor skills, minimal to no speech and language, and deficits in environmental awareness, self-awareness, and safety skills. People with profound mental retardation often are multi-handicapped, displaying extremes in motor functioning (hypo or hyper tone) as well as the significant cognitive deficits.

Mental retardation can be caused by genetic and chromosomal abnormalities, infectious agents, trauma, metabolic disturbances, toxicity, nutritional issues, and other environmental influences (University of Maryland Medicine, 2001; Yamamoto, 1993). The causative factors occur during the prenatal, perinatal, or postnatal periods of life (Yamamoto, 1993). However, the residual deficits must hinder cognition and adaptive functioning before a person's 18th year (Yamamoto, 1993; APA, 1994).

Theoretical Aspects Influencing Service Delivery

During the early 1970s, services for individuals with mental retardation began to shift from a custodial model of service delivery to one focused on training and habilitation (Bullock & Mahon, 1997). This emerging philosophy was intended to provide services that improved functioning and maximized a person's level of independence (Burlingame, Blaschko, & Skalko, 2001). The intention of training was to develop the skills necessary to actively engage in and be accepted as part of a community. Wolfensberger (1995a) suggests that individuals with disabilities are not valued members of their community unless they look, behave, and act in manners similar to those without disabilities. Today, the social mandate is to provide services that facilitate inclusion. Inclusion occurs when individuals with disability engage in activities with (versus beside) individuals without disability (Smith et al., 1996).

Since the 1970s, the literature has presented trends in service delivery intended to foster inclusion. The concept of inclusion had its origin in the principles of normalization, mainstreaming, and integration. The following paragraphs provide an overview of these concepts and, where necessary, their application to recreation services.

Normalization is defined as the "utilization of means which are as culturally normative as possible, in order to establish and/or maintain personal behaviors and characteristics which are as culturally normative as possible" (Wolfensberger, 1972, p. 28). In other words, if people with disabilities are exposed to "normal" situations, this will facilitate "normal" responses or behaviors (Phillips, 1992). The principle of normalization emphasizes that people with disabilities should live a near- "normal" existence. Therefore, normalization emphasizes the right for people with disabilities to live in a family environment, and to work, attend school, and engage in community and leisure activities with persons without disabilities (Anderson & Greer, 1976).

Mainstreaming is concerned with the individual's opportunities, skills, and potential to engage in activities with the majority of society. Mainstreaming is considered a process of service delivery ensuring least restrictive environments based on the competencies of the person with disability (Smith et al., 1996). Mainstreaming suggests a progressive order of skill development, enabling the person with disability to obtain the prerequisite skills deemed necessary for full participation in activity with able-bodied peers. In recreation, programs designed to foster mainstreaming would teach the individual with disability the physical and social skills necessary to engage in activity with able-bodied peers.

Integration is described as the "practices that maximize a person's potential in the mainstream of society" (Austin & Crawford, 1996). Individuals with disability are referred to as integrated when they engage in activity in the same environments as people without disability. Wolfensberger (1972) divided integration into two categories: physical integration and social integration. Physical integration involves the environmental factors that influence the success of the experience (e.g., facility access, facility location, number of persons with disability at the same location). Social integration is concerned with the potential social exchanges that are facilitated through participation in an activity (Wolfensberger, 1972). It is the social-integration component that Wolfensberger (1972) believed was most critical to inclusion.

Inclusion, as it relates to recreation services, is defined as "the general provision of access to recreation opportunities by persons with disabilities" (Smith et al., 1996, p. 11). The intention of inclusive recreation services is to provide "equal and joint participation of persons with and without disabilities" (Smith, et al., 1996, p.12). Dattilo and Jekubovich-Fenton (1995) suggested that inclusive recreation allows for freedom of choice, adequate support and being valued as a member of a group or activity. Vaughan and Winslow (1979) reported that inclusion occurs in the least restrictive environment possible, enabling the person with a disability to engage in activity with able-bodied peers under the instruction of a non-special population program director. Additionally, the literature repeatedly reflects the need for social interaction (beyond just physical access) as a necessary component to inclusion (Wolfensberger, 1972; Dattilo & Schleien, 1994; Smith et al., 1996). Furthermore, inclusive experiences are reported as critical components to a satisfying leisure lifestyle (Sneegas, 1989; Taylor, Kagay, & Leichenko, 1986).

Social Role Valorization Theory

Wolfensberger (1983) suggested two strategies to change the public perception and valuing of persons with disabilities; these are "enhancement of a persons 'social image' or perceived value in the eyes of others, and . . . enhancement of their 'competencies'" (p. 236). As stated previously, mainstreaming is an attempt to enhance competencies, whereas normalization, integration, and inclusion are attempts to alter the perceptions people have toward individuals with disabilities. Wolfensberger (1983) suggested that the "most implicit and highest goal of normalization must be the creation, support, and defense of valued social roles for people who are at risk of social devaluation" (p. 234). Therefore, he suggested a name change from the principle of normalization to the social role valorization theory. Social role valorization theory is a perceptual theory that suggests that people are valued according to their social roles (Wolfensberger, 1983). If a person's social role is valued, that person will be valued by society. Furthermore, Wolfensberger (1995a) suggested that it is possible to forecast probabilities in relationship behavior if an action is taken or omitted. This action-versus-outcome theory can be applied to persons with disabilities participating in recreation programs, as Wolfensberger (1995a) demonstrated in the following "if this, then that" scenarios:

> *If* one congregates devalued people together in numbers that are too large for the social systems around them to relate to and assimilate adaptively, *then* one will probably reap rejection, hostility, and efforts at segregation from these larger social systems. . . . *If* certain people view and treat handicapped adults as eternal children, *then* such handicapped adults had probably earlier been interpreted as big children, observed in childish activities and routines, seen clothed and groomed as children, or heard addressed as children. . . . *If* one wants handicapped adults to be seen and treated as adults, *then* at least in the sight of others, one must be prepared

> to engage them in adult activities and routines, perhaps to the maximum degree possible. . . . *If* one wants devalued people to be [more] accepted and better integrated in society, *then* one may have to do things that enable them to have positive appearances and to not have repugnant personal habits. (pp. 164 - 166)

Upon reviewing the theory of social role valorization, it appears necessary to provide recreation opportunities that are age appropriate and ensure that persons of similar age engage in activity together. The environments in which leisure activity are carried out should be community based and in the same facilities as those frequented by able-bodied peers. People with disability should have opportunities to engage in activity with people without disability. In addition, leisure activities should facilitate social interactions and social exchanges between people with and without disability.

However, it has been reported that the great majority of consumers with disability attend noninclusive special recreation programs even though most agencies reportedly support inclusion (APRS/NTRS, 1997). Once again, if people with disability are to be valued for their abilities (versus disabilities), theoretically programs must be provided that are inclusive in nature. Yet, the literature does not offer insights as to why people with disability choose to participate in activities with others with disability. Nor does the literature offer insights into consumers' preferences concerning inclusion as it relates to participation in recreation. To support inclusion, recreation professionals must know the preferences of consumers.

Legislative Influence

To ensure the provision of normalization, mainstreaming, integration, and inclusion enabling legislation has been passed to facilitate these social reforms. In the United States, four primary legislative acts have affected the provision of inclusive opportunities for people with disabilities. These acts have focused on the provision of education, the assurance of rehabilitation, the elimination of discrimination or attitudinal barriers, and the removal of architectural barriers. Therefore, these acts serve as "the impetus to foster inclusion of persons with disabilities in all critical areas of life" (Zoerink & Rosegard, 1997, p. 19).

PL 90-480 of 1968 was the first act mandating the elimination of architectural barriers for persons with physical disabilities. This law, most commonly referred to as the Architectural Barriers act of 1968, "assured that certain buildings financed with Federal funds are so designed and constructed as to be accessible to the physically handicapped" (Pub. L. No. 90-480, 82 Stat.). When this law was passed, the term *accessible* meant approachable, obtainable, capable of being entered, or easy to reach (Kennedy, Austin, & Smith, 1987). Therefore, the intention of PL 90-480 was to ensure physical access to facilities for people with physical disabilities. This law affected only those organizations receiving federal funding or assistance. Because most public recreation services receive some federal assistance, this legislation mandated the removal of architectural barriers through significant facility modifications (remodeling) or barrier-free design with new construction.

As time passed, the federal government determined that further measures were necessary to ensure enhanced rights for people with disabilities. Therefore, federal legislators passed PL 93-112, the Rehabilitation Act of 1973. This act is often referred to as the "handicapped civil rights act" because it prohibited discrimination from participation in programs on the basis of handicapping condition (Kennedy et al., 1987). Section 504 of this act had the greatest effect on integrative services, stating that "No otherwise qualified handicapped individual . . .shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance" (Pub. L. No. 93-112, 87 Stat.). This legislation, in comparison to PL 90-480, defined disability to include but not be limited to "conditions such as: orthopedic, visual, speech, and hearing impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, heart disease, diabetes, mental retardation, emotional illness, drug addiction, and alcoholism" (Commission on Civil Rights, 1983, p. 8). This legislation was further revised in 1978 (PL 95-602), providing financial assistance for program development and training of staff to provide recreation services for people with disabilities (Zoerink & Rosegard, 1997).

In 1975, the Education for All Handicapped Children Act was passed by the 94th Congress. This act, commonly referred to as PL 94-142, ensured free and appropriate education to children, adolescents, and young adults with disabilities. The language of PL 94-142 included the provision of both special education and related services (Pub. L. No. 94-142, 89 Stat. 773). Related services are interpreted as those services that enhance a student's academic skills and assist in maximizing his or her functional level. Recreation services are identified in this legislation as a related service. PL 94-142 further defined recreation to include "assessment of leisure functioning, . . . therapeutic recreation services, . . . recreation programs in schools and community agencies, and . . . leisure education" (Petrovello & Sullivan, 1989, p. 29). Through the identification and definition of recreation as a *related* service, the 94th Congress provided the opportunity for recreation to become a component of a child's individual educational plan and a component of the school curriculum for students with special education needs (Coyne & Rics, 1980). Even though these services can be offered in either a segregated (self-contained) or integrated environment, PL 94-142 "mandates that each child . . . participate with non-handicapped children in non-academic and extra-curricular services and activities to the maximum extent appropriate for that child" (Coyne & Rics, 1980, p. 4), thus encouraging the provision of inclusive education, extra-curricular activities, and recreation services.

In 1990 PL 94-142 was retitled as the Individuals with Disabilities Education Act (IDEA, PL 101-476). The 1990 amendments emphasized full inclusion and assured a greater school emphasis in preparing students for life transitions following graduation. Recreation services were maintained as appropriate *related* services to include assessment of leisure functioning, leisure education, therapeutic recreation, and recreation within the school and community (Bullock & Johnson, 1998). Therefore, recreation services were continued as a possible component of a students' educational plan to augment or enhance the educational process in the most inclusive setting possible. The Individuals with Disabilities Education Act continued to be amended and in1997 the focus of such amendments included a greater focus on individual performance outcomes, increased access to the general education curriculum, strengthened role of parents and students with disabilities, increased involvement by regular education teachers, and, whenever possible, implementation of special education and *related* services within regular education classrooms (Pub. L. No. 105-17). Therefore, legislation that was initially intended to provide educational opportunities for individuals with disabilities had evolved to assure individual competency, empowerment, transition services, and a right to educational and *related* services in the most inclusive environments possible.

In 1990, due to continued awareness of the need to strengthen legislation protecting people with disabilities from discrimination, the 101st Congress passed the Americans With Disabilities Act (ADA), PL 101-336 (Satcher & Dooley-Dickey, 1991). The primary purpose of this legislation was "to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities" (Pub. L. No. 101-336, 104 Stat. 327). Specifically, this legislation indicated that "no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity" (Pub. L. No.101-336, 104 Stat. 327). Furthermore, this legislation defined "public entities" as private enterprises used by the public, including such recreational facilities as "a motion picture house, theater, concert hall, stadium, or other place of exhibition or entertainment; . . . an auditorium, convention center, lecture hall, or other place of public gathering; . . . a museum, library, gallery, or other place of public display or collection; . . . a park, zoo, amusement park, or other place of recreation; . . . a gymnasium, health spa.

No.

with

(Sc

bu

ev

pe

nc

m

a

d

c

c

spa, bowling alley, golf course, or other place of exercise or recreation" (Pub. L. No. 101-336, 104 Stat. 327). The intention of the ADA was to "bring persons with disabilities into the economic and social mainstream of American life" (Scherschligt et al., 1992, p. 8).

Legislation has supported social reforms that ensure not only accessibility but full accommodations for persons with disabilities. Since 1968, legislation has evolved from simply removing barriers to full-service accommodations for all people with disabilities. The presence of such legislation supports the theories of normalization and, to a degree, social role valorization, which ultimately foster mainstreaming, integration, and full inclusion. However, even though theories and legislation have supported a movement for full inclusion of people with disability, there is little or no evidence that people with disability prefer inclusive over noninclusive recreation services. Thus, there was a need to ask consumers directly whether they prefer inclusive over noninclusive recreation opportunities.

Recreation Preferences of People With Developmental Disability

Social reforms and legislation have supported the formation of policies designed to empower people with disability in decision making related to life, work, and leisure pursuits. Therefore, it is appropriate to explore the activity preferences of people with developmental disability. The purpose of this section is to present the results of empirical research on leisure preferences and leisure behavior of people with developmental disability.

Sparrow and Mayne (1990) interviewed 40 adults with mild levels of mental retardation to determine their current and ideal recreation participation patterns. The investigators found that most participants recreated by self (44%), with friends (37%), and, to a lesser extent, with family members (19%). Similarly, the researchers found that nearly 50% recreated at home, 35% in the community, and 17% sought recreation activity through their place of employment. Per self report, the subjects indicated they engaged most in hobbies and pastimes (49%), followed by indoor activities (35%), health and fitness activities (18%), outdoor recreation (11%), team sports (10%), and, to a lesser extent, individual sports (3%) and aquatic activity (3%). Comparatively, the participants reported they ideally would like to participate in sports (50%), fitness activities (43%), outdoor pursuits (37%), and aquatic activities (36%). Finally, the majority of participants supported involvement in both indoor recreation activities (67%) and hobbies (73%).

Malik (1990) interviewed 19 adults with mild and moderate levels of mental retardation. These interviewees were part of a larger observational study on the leisure behavior of residents of group homes residing in Illinois. All people interviewed were 18 years of age or older and were involved in a day activity or work-related day program. Participants were asked to respond to a total of 29 questions (15 closed ended, 14 open ended) over a period of 30 to 45 minutes. It was noted that some of the interviewees had difficulty completing the interviews secondary to issues with distractability and attending. When respondents were asked what activities they liked to do when they were alone, they indicated they listened to music, watched television, put on make-up, looked at scrapbooks, read the Bible or a magazine, went for walks, or cleaned their rooms. When respondents were asked what they liked to do when they were with others, they stated that they liked to visit with friends, watch television, go to the mall, play sports, or go to the movies. The investigator also asked respondents whether they were aware of or had heard of the terms *recreation* and *leisure.* The majority (75%) had never heard the term *leisure.* Those who said they had heard of leisure were unable to define this term. Similarly, 65% of those interviewed had never heard the term *recreation.* Therefore, Malik concluded that when interviewing persons with cognitive impairment about leisure behavior, interviewers should use familiar terms such as *fun* versus *recreation* or *leisure.*

Dattilo and Hoge (1995) interviewed 100 adults with mild to moderate cognitive impairments. Of those interviewed, the majority were single (n = 92), male (n = 65), 20 to 29 years of age (n = 46), and lived at home with their families (n = 63). Open-ended questions, with supportive prompting, were used to learn respondents' leisure preferences, as well as barriers and constraints to their leisure participation. The results of this qualitative study indicated that respondents preferred isolated activities such as watching television or videos and listening to music. When participating in activities with others, participants indicated they preferred being with friends, bowling, crafts, hobbies, yardwork, shopping, playing baseball and basketball, biking, swimming, pet care, and going for walks.

In summary, the reviewed literature indicated that persons with cognitive impairment engage primarily in indoor and solitary activities. However, people with cognitive impairment have reported an interest in engaging in community-based activities and activities with others (e.g., bowling and team sports). Yet, the literature was unclear about whether people with cognitive impairment prefer to engage in any activity with people with or without disabilities.

Perceived Barriers to Leisure Participation and Inclusive Recreation Services

As professionals attempt to facilitate compliance with legislation, social mandates, and personal choice, it is necessary to become familiar with those factors that restrict people with disabilities from actively participating in leisure activities or services. A focus on identifying and eliminating barriers is at "the heart of the efforts to integrate persons with disabilities" into the mainstream of recreation activity (Thiboutot, Smith, & Labanowich, 1992, p. 284). Research on the barriers that people with disabilities experience as they attempt to access community-based recreation services is reviewed in this section. Barriers identified by both consumers and agencies are discussed.

Barriers that Influence Participation by Individuals

In the 1986 Harris Poll, completed by Taylor et al., 1,000 people with disabilities were asked their perceptions of mainstreaming. Results related to leisure indicated that people with disabilities went to the movies, cultural events, music performances, and sporting events far less than adults without disabilities. This study indicated that people with disabilities also were less likely to shop in a grocery store, dine out, or be involved in community activities including religious, volunteer, or recreation groups. Survey results indicated that 56% of those sampled reported that their disability prevented them from attending cultural or sporting events, or socializing with friends outside of their home. Low income status was also reported as negatively affecting respondents' social life and mobility. Additional barriers prohibiting people from fully participating in life included a fear of barriers, dependency on others, lack of accessible transportation, restricted access to public buildings and public restrooms, and self-conscious behaviors related to their disability. Finally, perception of life satisfaction and disability were compared. Only 69% of persons with disabilities reported that they were somewhat or very satisfied with life, compared to a 90% satisfaction rate among persons without disabilities. The results suggest that lack of participation in social and community activities reduces life satisfaction.

Fourteen years later, nearly 1,000 people were sampled in the Harris Survey on Americans with Disabilities (National Organization on Disability [NOD], 2000). It was found that individuals with disabilities still were be less likely to go to the mall, or to attend movies, concerts, sporting events, and other cultural activities as compared to their able-bodied peers. Further, people with disabilities were less likely than those without disabilities to socialize routinely with friends, family, and neighbors. However, improvement was noted in this survey because it identified that young adults with disabilities (aged 19 to 29) were more likely to dine out and socialize with others as compared to their nondisabled peers (90% compared to 89%). Nonetheless, people with disabilities continued to report that they experienced less life satisfaction as compared to people without disabilities. Specifically, only 33% of those with disabilities reported that they were *very satisfied* with life, as compared to 67% of those without disabilities. These data suggest that people with disabilities continue to experience constraints inhibiting their leisure participation and that lack of leisure involvement (among other things) inhibits life satisfaction.

In an empirical study, West (1984) examined the relationship between attitudinal barriers and community recreation participation patterns of persons with disabilities. One-hundred eighty (180) people with a diagnosis of mental retardation, mental illness, or physically disability, were interviewed to determine the degree to which negative affective responses (e.g., staring, teasing, name calling, sympathy) influenced their leisure participation. Nearly 52% of those interviewed indicated that they experienced negative responses from people when they engaged in community activities. Results suggested that persons diagnosed as mentally retarded or blind experienced greater negative reactions (while in parks) than persons with other physical disabilities or mental illness. West also found that the use of parks by persons with disabilities declined following experiences of negative affective responses or social stigma.

Sparrow and Mayne (1990) interviewed 40 adults with mild cognitive deficits to investigate their current patterns of recreation participation, constraints to recreation participation, and ideal recreation pursuits. Major constraints identified by participants that inhibited their participation in community-based recreation programs included lack of opportunity (65%), lack of transportation (58%), financial constraints (58%), lack of activity skill (55%), unavailable facilities (53%), and attitudinal barriers (50%). To a lesser extent those interviewed indicated that they did not engage in recreation activities due to time constraints (5%) and gender stereotyping (3%).

Hawkins, Peng, Hsieh, and Eklund (1999) assessed the leisure constraints of 118 adults with moderate and mild levels of mental retardation. The investigators used a modified version of the leisure constraints section of the Leisure Assessment Inventory (Hawkins, Ardovino, & Hsieh, 1998) as their research tool. The Leisure Assessment Inventory uses forced-choice, either-or questioning, supported by pictorial cues to manage common issues of acquiescence when questioning people with mental retardation. Results of this investigation revealed the following top10 reasons why people with mental retardation did not engage in recreational activity of choice: (a) lack equipment (90%); (b) lack skill (89%); (c) lack decision-making power related to leisure pursuits (79%); (d) engage in activities only with friends (74%); (e) lack available instruction (53%); (f) no access to facilities (52%); (g) lack transportation (47%); (h) lack finances (45%); (i) fatigue (44%); and (j) have no available partner (44%). As documented in previous literature, Hawkins et al. identified both structural and interpersonal constraints that people with mental retardation must negotiate before engaging in leisure activities of choice. This research also suggested that a lack of empowerment by individuals with cognitive impairment hindered the individuals' ability to engage in activities of choice.

Verpillot and Dattilo (1995) completed face-to-face interviews with 11 individuals with mental retardation to explore the constraints associated with their leisure choices. The 7 males and 4 females they interviewed had diagnoses of mild cognitive impairments and were 21 to 65 years of age. The results of the interviews suggested that many consumers lacked awareness of leisure resources and therefore allowed others to make decisions related to free-time activities. In addition, those interviewed reported that their mothers were individuals who most frequently restricted leisure participation. Many interviewees also reported frustration with the lack of personal control and decision making related to their leisure time. This investigation, although limited in sample size and specific hard data, suggests that individuals with developmental disabilities have the desire to be empowered to learn and participate in leisure activities of their own preferences and choices.

Barriers That Limit the Provision of Services by Recreation Agencies

Individuals as well as agencies experience barriers in the provision of recreation services for people with disabilities. Literature regarding the challenges encountered by agencies in attempting to provide recreation opportunities for people with disabilities is reviewed in this section..

Logan (1970) sampled 122 public agencies to determine the factors responsible for limiting or not providing recreation programs to people with disabilities. Agencies surveyed included municipal recreation departments (n = 12), commercial recreation facilities (n = 39), youth programs (n = 6), churches (n = 38), fraternal and service groups (n = 17), and schools (n = 10). From this study Logan concluded that architectural barriers, limitations based on disability, finances, nonacceptance by people without disability, parental anxieties, inexperienced staff, logistics (e.g., scheduling conflicts), and transportation were the primary to providing public recreation programs to people with disabilities.

Schleien, Germ, and McAvoy (1996) surveyed 484 community leisure service agencies to determine, in part, perceived barriers to inclusive services. Of the agencies surveyed, only 17% of urban agencies and 29% of rural agencies reported that they did not offer inclusive services. All respondents indicated that the most significant barriers to inclusive programming were financial constraints (50%) and staffing constraints (48%). Less frequently, agencies reported transportation (36%), architectural barriers (30%), the program itself (29%), public attitude (13%), and poor administrative support (13%) as barriers to providing inclusive services.

Germ and Schleien (1997) completed an investigation involving interviews of 484 persons from 13 community leisure service agencies. Participants were asked to identify their perceived barriers to participation in inclusive recreation services. Survey participants were consumers, administrators, program staff, or volunteers. All groups identified the following types of barriers: financial (from both consumer and agency constraints), attitudinal (e.g., instructors fearing people with disabilities, public attitude, and volunteers not establishing friendships with people with disabilities), architectural, transportation, and programmatic (e.g., inadequate activity choices for people with significant disability, lack of inclusive recreation programs for adults and teens with disability, and scheduling conflicts).

Devine and Kotowski (1999) surveyed 369 municipal park and recreation agencies in 47 states concerning the barriers encountered in providing of inclusive recreation services. The majority of agencies (80%) reported that their greatest barriers were lack of financial resources and staffing constraints (e.g., lack of transportation, adaptive equipment, and community resistance). Seventy-eight percent of the agencies also reported that a lack of qualified staff inhibited their ability to provide inclusive opportunities. Finally, negative staff attitude and too much demand for inclusive services also were identified as issues that contributed to the problems encountered in attempting to provide inclusive services.

Despite legislative and social mandates, barriers to recreation participation and inclusion continue to exist for people with disability. Consumers have reported that transportation, finances, leisure skills, personal attitudes, their disability, lack of partners, and empowerment are barriers to leisure participation. Practitioners have identified that staff training, transportation, finances, attitudes, and agency goals inhibit equal recreational opportunities for people with disabilities.

Perceptions of Service Providers, Peers, and Consumers Towards Inclusive Recreation Services

As identified in previous research, the attitudes of participants and others are barriers to participation in leisure services for individuals with disabilities. Thus, these attitudes can positively or negatively attempts to provide recreation services that are inclusive. This section contains a review of the literature related to attitudes of service providers, caregivers, consumers, and peers with regard to inclusive recreation services.

Perceptions of Service Providers

Dickinson (1980) sampled 100 recreation administrators employed within the state of Pennsylvania to investigate their attitudes toward mainstreaming. At the time of the study, mainstreaming was referred to as the provision of community-based recreation services to people with disabilities, with no qualifying factors for the provision of segregated or inclusive experiences. Results indicated that administrators identified positive attitudes among recreation administrators toward mainstreaming people with disabilities. However, raw data regarding the actual provision of services did not match the positive attitudes of administrators toward mainstreaming. Specifically, administrators from 53% of the agencies sampled indicated they provided services to 50 or fewer people with disability, 24% served 50 to 100 people with disabilities, 16% served 100 to 200 people with disabilities, and only 7% reported that their agencies served 201 to 300 people with disabilities.

More recently, Anderson, et al. (1996) surveyed the attitudes of public recreation professionals following training seminars on inclusive recreation services. Fifteen 3-hour training sessions were provided over a 2-year period of time. The unique feature of this program was that it used an interactive video network system to facilitate a training program to 150 practitioners throughout North Dakota. Pre- and posttesting of practitioners' attitudes toward persons with disabilities was measured using the Attitude Toward Disabled Persons Scale (ATDP) and the Integration Knowledge Scale. Results indicated that participants' significantly increased their positive attitudes towards people with disability following this 45-hour training session. Thus, it was concluded that education and training regarding inclusion can foster positive attitudes toward the inclusive process and toward people with disabilities.

Perceptions of Peers

Block and Malloy (1998) used the Attitudes Towards Integrated Sports (ATIS) scale to assess the perceptions of peers, coaches, and parents related to the inclusion of children with disabilities in a fast-pitched softball league for girls 10 to 12 years of age. The ATIS is a modified version of the Children's Attitudes Towards Integrated Physical Education-Revised (Block, 1995a), a validated instrument that is used to assess the attitudes of grade school children toward inclusive physical education. Eighty-eight players from nine teams, 5 coaches, and 28 parents participated in this study. The results of this preliminary study suggested that players without disabilities favored the inclusion of a person with a disability into the mainstream of their softball league or team. The players agreed to extensive rule modifications for the person with disability, including allowing her to use a tee to bat, allowing shortened baselines, and allowing all fielders to sit while the person with a disability was at bat. It should additionally be noted that the majority of players (85%) did not think that the player with a disability should play in a sports program associated with the Special Olympics or any other segregated sports program. The majority of participants in this study (72%) said they had joined this fast-pitched softball league to have fun, whereas a minority of participants (7%) indicated they participated for the competition. Similarly, parents were favorable toward a person with a disability participating in fast-pitched softball and subsequent rule modification. However, 50% of the parents thought that a child with a disability should play in a separate sports programs (such as the Special Olympics). On the other hand, the coaches' attitudes toward inclusion of a child with a disability in this sports league were split. Two of the five coaches responding indicated that no rule modifications should be made, and the majority of coaches indicated that such a child should participate in a special sports league for people with disabilities.

In summary, attitudes toward inclusive recreation services vary among consumers, caregivers, and peers. On the basis of the reviewed literature, it appears that the majority of peers and consumers are in favor of an inclusive recreation program even when significant rule modifications are necessary to ensure participation by persons with disabilities. On the other hand, it appears that caregivers and providers of services are split in their perceptions of inclusion, some supporting inclusive services and others indicating they prefer separate services or competitive opportunities for people with disabilities. The literature also indicates that education and training enhance people's perceptions of a those with disabilities.

Perceived Value of Inclusive and Special Recreation Services

In addition to self-perception and personal insights into the value of inclusive versus special recreation services, one must explore the empirical research supporting the benefits of inclusive services. This section contains a review of literature comparing the benefits of both inclusive and special recreation services. Both empirical and descriptive studies are discussed, with primary emphasis on inclusive training and recreation service opportunities provided to people with cognitive and physical impairments.

Foley (1979) compared the swim-skill competencies of persons with disabilities trained in an integrated program to those of persons trained in a segregated program. Two swim groups were compared: a control group with 20 children with disabilities and a treatment group with 10 children with disabilities and 8 children without disabilities. The subjects ranged from 5 to 11 years in age and were identified as beginning swimmers before the initiation of this investigation. The "I Can" aquatic training instrument was used for instructional training content. Both groups were provided with 1-hour training sessions, three times per week, for a duration of 5 weeks. A participant-to-staff ratio of 2:1 was maintained in both groups throughout the training. Foley hypothesized that the children with disability who were involved in the mainstreamed group would demonstrate more swim-skill competency than those in the segregated group. The results of this study did not support his hypothesis. However, all of the children in the investigation demonstrated improved swim-skill performance. Therefore, the author concluded that this study demonstrated that children with disabilities can be successfully trained in an integrated program without a negative effect on skill attainment.

McAvoy, Schatz, Stutz, Schleien, and Lais (1989) investigated the personal and lifestyle effects on persons with and without disability after engaging in an integrated wilderness experience. Both qualitative and quantitative methods were used to explore outcomes. The Trait Anxiety Scale (a component of the State-Trait Anxiety Scale) was administered, pre- and post-experience, to determine the effect of trait anxiety following an adventure experience. Results indicated that people exhibited a reduction in trait anxiety following an adventure programming experience. Test results indicated that trait anxiety levels were reduced for a duration of 1 month following the experience.

Qualitative techniques then were used to determine the effect of wildness adventure programming on the participants' lifestyles, attitudes, and feelings. Telephone interviews were conducted 6 to 7 months after the experience on a random sample of participants. Results indicated that an integrated wilderness adventure experience had a positive effect on the participants. All (100%) of the participants indicated they would participate in an integrated wilderness program again and would recommend it to their friends. In addition, 78% of the participants indicated long-term life style changes as a result of the experience. Persons with disabilities indicated they had a better understanding of their disability, an increased knowledge of how to pace themselves, a sense of physical strength, increased concern for the environment, increased self-confidence, and an increased willingness to take risks. Persons without disabilities indicated they learned to be less judgmental and to think more positively, displayed increased self-confidence, developed a heightened sense of others' abilities, and gained an appreciation for the natural environment.

Edwards and Smith (1989) investigated the effect an integrated day camp experience on the appropriateness of social interactions with people with disabilities. Eight people with disabilities were selected for participation in this study. Throughout this 2-week integrated program, all subjects were assisted by companions or support personnel. Subjects were observed a total of 96 times per week using the Social Interaction Evaluation. This tool allowed the observers to identify subjects' interactions and to record whether the interactions were appropriate or inappropriate. Results indicated that the number of appropriate interactions increased significantly from the first week to the second week of observations. However, results also indicated that there was no change in the frequency of inappropriate interactions between week 1 and week 2. The investigators concluded that the social interactions of people with disabilities would improve if they were exposed to an inclusive activity environment.

Kleiber, Ashton-Shaeffer, Malik, Lee, and Hood (1990) explored the perceived effect of participation in special recreation services on the community integration, personal development, and adjustment of people with disabilities. Consumers and caregivers were sampled. Consumers were identified as people with disabilities who participated in programs sponsored by special recreation associations (SRA) in Illinois. One-hundred forty-five (145) consumers participated in this investigation; the majority (116 participants) were diagnosed as mentally impaired, 16 people were diagnosed as having physical or sensory impairments without the presence of mental retardation, and the remainder of the participants were identified as multiply impaired. Consumer interviews were completed in group format to inquire about the perception of benefits of SRA involvement. Caregivers were sampled by means of mailed questionnaires. The findings of this study indicated that caregivers reported that consumers displayed increases in community participation, social competence, physical competence, and personal competence. Consumers indicated that SRA participation allowed them to learn new things and improve their socialization skills.

In 1992, Wilhite and Kleiber investigated the relationship between participation in organized competitive sports and improved community integration by persons with developmental disabilities. Data were collected from participants, caregivers, and participation records. Ninety-six (96) participants and 14 caregivers were interviewed or surveyed regarding their perceptions of participation in organized sports and the influence of this participation on community integration. Community integration was assessed in two ways: (a) self-reports of involvement in activities outside the home and (b) perceptions of comfort level and independence in community facilities. Participation records were reviewed to identify the extent of participation in competitive sports (i.e., Special Olympics) over the last 10 years. Information collected from caregivers suggested that persons with more significant levels of disability (moderate to severe mental retardation) displayed increased physical and social competence in community settings as a result of participating in organized competitive sports. However, caregivers reported that the competencies of persons with mild levels of mental retardation did not improve enough to positively influence their community integration. Similarly, participants with moderate or severe levels of mental retardation were more likely than those with mild levels of retardation to indicate increased participation in other community recreation programs and to demonstrate emerging social interaction skills given active participation in organized sports (i.e., Special Olympics). This conclusion was also supported by data obtained through participation records.

Using experimental, multiple-baseline design, Sowers and Powers (1995) investigated the effectiveness of a training program intended to improve persons with disabilities independent living and community integration skills. The consumers were trained to independently use a fast food restaurant. Three subjects with physical and multiple disabilities were involved in this investigation and made four weekly visits to restaurants. Results indicated that all participants increased their abilities to be independent in this activity. Caregivers and consumers were interviewed following the training to obtain their perceptions of the effectiveness of this program. On the basis of this training program, all three consumers reported that they felt more confident to complete activities on their own in the future.

In conclusion, research has supported both inclusive and noninclusive training or activity environments for people with disabilities. Special recreation services, which are noninclusive in nature, have demonstrated the ability to increase the community integration skills of participants with disabilities. On the other hand, inclusive services of a noncompetitive nature have been found to improve participants' social skills, independent living skills, self-confidence, and awareness of personal abilities and limitations. However, inclusive services of a competitive nature have been found to heighten anxiety levels and decrease activity skill acquisition among persons with disabilities. Thus, there is a need for non-competitive as opposed to competitive activity opportunities within inclusive service delivery.

Strategies to Foster Inclusive Recreation Services

Research on barrier identification and the value and benefits of leisure has helped practitioners design strategies to foster inclusive services. "Inclusion of generic programs, . . . reverse mainstreaming" (Schleien et al., 1995, p. 7), and buddy systems are three primary strategies that are used to facilitate inclusive recreation opportunities for people with disabilities. Inclusion in generic programs parallels integration in the educational system. In this approach, trained staff members assist individuals with disability attending a "regular" recreation class. The staff assist the "regular" program leader and successfully eliminate the barriers to participation for a person with a disability (Richardson et al., 1987; Schleien et al, 1995). In reverse mainstreaming, a traditionally segregated class is "opened" to encourage persons without disabilities to participate with people with disabilities (Zoerink & Rosegard, 1997). Furthermore, buddy systems use able-bodied peers to assist people with disabilities (Salzberg & Langford, 1981; Sable & Gravink, 1995). The following paragraphs offer a review of literature describing successful strategies to foster inclusive recreation services. Both applied research and program reviews are presented.

Germ and Schleien (1997) interviewed administrators, program staff, volunteers, and consumers of services to determine the professional practices or strategies that foster inclusive recreation services. Minnesota's community leisure service agencies that were successfully serving people with disabilities in inclusive programs were selected for study. Participants included those who programmed within municipalities (recreation and park departments), community education programs, community centers, and camps. A total of 484 individuals from 13 different agencies participated in the investigation. An open-ended questionnaire was administered to each participant. The findings of this study were linked to the participants' role in fostering inclusive services. Administrators perceived that their role in fostering inclusive services was to establish philosophy, goals, finances, and program development to ensure inclusion. Supervisors identified their role was to complete an initial screening or needs assessment and appropriately place people with disabilities in activities that

f
e
a
i
s

r
a
a
a
r
c

y
c
t
c
s
c
c
v
s
d
th

foster inclusion. Program instructors and volunteers thought their role was to ensure a consumers' skill attainment, offer appropriate adaptations, and monitor attitudes. Finally, consumers thought their role was to attend programs and to inform staff of their needs, wishes, desires, and aspirations related to inclusive services.

Salzberg and Langford (1981) identified a need for increased normalization in the provision of community-based recreation services. The authors established an extensive volunteer program operating on a *buddy system* approach. All volunteers were asked to take part in two activities per month with a person with a disability. The perceived results of this program were increased normal activity experiences, increased age-appropriate activity, and in some cases, the fostering of friendships between people with and without disabilities.

The Montgomery County Department of Recreation in Silver Spring, Maryland, implemented a program intended to facilitate inclusion. In 1984, this department completed a needs assessment to determine the future direction of the therapeutic recreation program (Richardson et al., 1987). Consumers with disabilities (n = 6000) were asked whether they wished to participate in segregated programming, generic programming, or both. Ninety percent (5,400) of the respondents indicated they wished to participate in generic programming opportunities. The authors described generic programming as enabling people with disabilities participation in *regular* recreation classes with the assistance of a support person or aid. After reviewing the results of the needs assessment, the department established a plan to facilitate the mainstreaming process. Initially, they established an advisory board to deal specifically with issues of integrated programming. Once such programming was in place, they worked to develop a policy statement on mainstreaming and initial goals for mainstreaming. The department was successful in obtaining funding to hire three additional employees to facilitate an inclusive recreation program. Mainstreaming companions were a significant component of the mainstreaming program. Companions provided one-on-one assistance to people with disabilities as they engaged in *regular* recreation programming. A program continuum was established that identified four progressive levels of mainstreaming. Each mainstreaming level was matched with the necessary accommodations needed for active participation in a generic program. These levels were referred to as *Challenge Levels*. Level 1 indicated complete mainstreaming. Level 2 indicated accommodations were necessary such as adaptive equipment, transportation, or interpreters. Level 3 indicated the need for major involvement of a support person or companion. Level 4 indicated a segregated program that was age-appropriate, implemented in the least restrictive environment possible, and emphasized ability versus disability. The success of this program was demonstrated through the mainstreaming of 262 persons (Richardson et al., 1987).

Bork (1989) also described the use of *companions* within the Metropolitan Park District of Toledo, Ohio. He recognized that nature lovers, who happened to have a disability, were restricted from experiencing the solitude of parks and natural preserves because they were unable to access these remote natural areas. Toledo Metropolitan Park District initiated a *trail partners* program whereby trained volunteers helped people with disabilities gain access to natural remote areas of the park system. At the time of writing, Bork reported that 39 persons were interested in participating in this program at some level (participant or consumer).

Schleien, Fahnestock, Green, and Rynders (1990) presented a case study to illustrate the effectiveness of sociometry, circle of friends, and cooperative learning in facilitating a successful integrative experience for a person with a significant disability. The strategies that were used focused on preparing and manipulating the receiving environment. Sociometric strategies included a group dynamic assessment and an empowering process of group restructuring. Through the circle-of-friends strategy a small group of significant others was empowered to assist the person with a disability in an integrative experience. Finally, cooperative learning was identified as an educational tool that fostered individual interactions between one significant other and the person with a disability. The authors reported that using these combined strategies fostered successful community integration in this person with a disability.

Schleien and Green (1992) presented the concept of *zero exclusion*. As they described it, zero exclusion results when partnerships are formed between therapeutic recreation specialists and recreation programmers who traditionally work with people without disabilities. These professionals work together to foster inclusive opportunities for individuals as they design and develop new programs. Critical to this concept is the inclusion of persons with disabilities at the programs' inception. A case study was presented in which a 10-year-old girl was successfully integrated into a newly organized Girl Scout troop. The authors reported that an advantage of this type of inclusive strategy is that it promotes equal status of individuals with and without disabilities. Disadvantages of this strategy are that the initial costs of new programs may be increased with the cost of adaptive devices and that increased staffing might be necessary.

Broida (1995) presented individual case studies in which programmatic partnerships and *transitional* services were used. Broida defined transitional services as those that manage resources necessary to move people to a greater level of independence in their activities. One case study she cited involved Certified Therapeutic Recreation Specialists (CTRS) working with individuals to improve their access to the community. Included in the case study were individuals with diagnoses of bilateral lower extremity amputation, mental retardation, and cancer. All of the services provided appeared to focus on a transition that would progressively remove the CTRS from direct services and develop consumer skills that would lead to independent leisure activity.

No discussion on strategies to foster inclusive services would be complete without considering agencies' preparation to provide such services. Devine and Govern (2001) explored the degree to which the agencies provided inclusive services, purchased adaptive equipment, provided staff training related to inclusion, reviewed and revised departmental policy, assured the availability of inclusive specialists, and marketed inclusive services. Specifically, the sample included 369 municipal park and recreation agencies in 47 different states. Only 8% of the agencies sampled indicated that they provided extensive inclusive services. The majority of agencies reported they provided some inclusive services. The majority of respondents (43%) also indicated that they had purchased some adaptive equipment but continued to need more to ensure accommodation and full inclusion. Also, respondents indicated that they had provided some staff training related to inclusion but thought they needed to offer more training. Only 18% reported that they had hired adequate specialists or consultants on inclusion. The majority of respondents (54%) reported that they had not developed a marketing strategy to promote inclusive recreation services. Finally, only 12% of the respondents indicated that they had reviewed and revised their policies to ensure full access to services by people with disabilities.

In summary, the literature reviewed for this study report that individuals with developmental disabilities are engaging in inclusive recreation services and may even select these services over traditional segregated programming. The strategies that have been identified to be the most effective in fostering inclusion and ensuring successful participation, by people with disabilities in recreational activity are using buddy systems, trained companions, and preparing the receiving environments.

Empowerment, Personal Choice, and Decision Making of Persons with Disability

People experience greater life satisfaction when they are able to make their own decisions about their lives (Philips, 1992). However, people with developmental disabilities historically have been unable to make decisions about where they live, whom they live with, when they eat, and what they do during their free time (Bullock & Mahon, 1992; Friedman, 1976). Research has supported the reliability and validity of decision-making abilities of people with moderate and mild levels of cognitive impairment (Dattilo, Hoge, & Malley, 1996; Sigelman et al., 1982; Sigelman et al., 1981a; Wadsworth & Harper, 1991). However, decisions traditionally have been made by the people who care for or supervise the activities of people with disabilities (Hawkins et al., 1999; Verpillot & Dattilo, 1995).

Empowering people with developmental disabilities to make decisions about their lives is the intention of person-centered planning and self-determination. Person-centered planning service delivery models recently have been endorsed by many states as a service reform model for people with developmental disabilities (O'Brien et al., 1997). The unique feature of person-centered planning is its focus on a consumer's abilities versus limitations (Hewitt & O'Nell, 1998). Person-centered planning is guided by the principles of normalization and individualized service delivery. The primary intention is to place the consumer in an empowerment position related to his or her life and life planning. Consumer choice and educated decision making are at the forefront of this service delivery model. The wishes, aspirations, and preferences of the consumer must be honored and considered a priority of the habilitative team. The team's job is to provide the support services necessary to fulfill the wishes and aspirations of the consumer related to life planning.

Self-determination is recognized as a philosophical approach to service delivery rather than a specific service delivery model. It is grounded on the principles of personal control and life planning, independence, active participation, and inclusion (Levitz, 2001). Head (2003) identified four principles guiding self-determination: (a) freedom; (b) authority; (c) support; and (d) responsibility. Freedom is the ability of a person with disability to plan his or her life with the assistance of chosen friends and family. Authority is the freedom to purchase the supports needed to facilitate a self-directed plan of action. Support services imply the organization of resources necessary to access a plan. The plan should allow the individual to live in the community, rich with community involvement, contribution, and membership. Finally, responsibility implies that the person with disability is recognized as a valued and caring member of a community and is capable of making decisions that are personally and socially life enhancing.

Bullock and Mahon (1992) offered a four-step model to assist people with mental retardation in decision making related to person-centered and life planning. This model included: (a) identification of personal goals or aspirations; (b) selection of choices or options to attain the goal; (c) identification of consequences ("if" versus "then" discussions); and (d) selection of the best choice that will lead to goal attainment. They believed that "people with mental retardation should be encouraged to make decisions about their participation in community-based programs" (p. 28).

Dattilo and Jekubovich-Fenton (1995) suggested that one's perception of control over leisure choices is actually more important than the selected leisure activity in which the person participates. Dattilo and Rusch (1985) found that even people with severe disabilities reduce their participation in activities when they are not allowed to control or make decisions about their environment. Nonetheless, as late as 1990, Bannerman, Sheldon, Sherman, and Harchik (1990) reported that habilitative services did not consider clients' preferences when planning or engaging in leisure and activities of daily living.

Interviewing Persons With Mental Retardation

Personal choice and empowerment are based on the belief that individuals are reliable self-reporters. Since the early 1980s, researchers have explored issues related to interviewing persons with cognitive impairments. Wyngaarden (1981) stated, "It is possible and, indeed, critical to seek the personal insights of those most directly affected by shifts in social policy. Mentally retarded persons proved to be one of the valued and valid sources of information" (p.107). The following section provides an overview of the literature concerning recommended protocols, techniques, and guidelines to use when interviewing persons with developmental disabilities.

As part of a larger investigation exploring the adjustment of persons from an institution to the community, Wyngaarden (1981) interviewed 383 people with mental retardation. The general findings of this project indicated that approximately 15% of those interviewed had a great deal of difficulty responding to the questions and that 33% of the respondents appeared mildly confused about some of the questions they were asked. However, the majority of respondents (80%) were identified as willing and eager to participate in the interview process. The investigators concluded that such interviews provided "in-depth and highly provocative insights into the experience of retarded persons returning to community life" (p. 113).

Sigelman, Schoenrock, et al. (1981) completed a three-part investigation to determine the reliability and validity of responses when interviewing persons with cognitive impairments. In the first phase, the investigators interviewed 52 children with varying levels of mental retardation (mild, moderate, severe, and profound mental impairment) who lived in a state institution. In the second phase, Sigelman et al. interviewed 58 adults with diagnoses of mild, moderate, severe, or profound mental retardation who resided in a state institution. In the third phase, the investigators interviewed 57 children with diagnoses of mild, moderate, or severe mental retardation who resided in the community. The findings suggested that verbal interviews were not feasible for people with profound mental retardation. Also difficult were responses to open-ended and multiple-choice questions. The investigators found that yes-no and either-or questions (using pictures) were the easiest for people with mental retardation to answer. However, the authors noted that the acquiescent response rate among persons with cognitive impairments was high and that the lower the cognitive level of performance, the higher their tendency to acquiesce.

Sigelman, Budd, Spanhel, and Schoenrock (1981b) expanded their previous research with a study focusing on the acquiescence response rate of persons with cognitive impairments. In particular, the investigators explored the relationship between acquiescence rate, IQ level, and residential setting. Three groups were sampled: (a) adolescents residing in the community, (b) adolescents residing in an institutional setting, and (c) adults residing in an institutional setting. The sampled groups were asked yes-no questions regarding behaviors using paired alternatives (e.g., “Are you happy?” and “Are you sad?”). Persons answering yes to both questions were identified as acquiescing. Results of this investigation indicated that there was a high rate of acquiescence in persons with cognitive impairment. Specifically, the authors reported that 40% to 50% of the respondents contradicted themselves by answering yes to the original questions and their opposites. Also, the authors found that acquiescence was more likely in persons with lower IQ levels. In further exploration, the investigators reinterviewed persons with severe cognitive impairments. Results of the additional interviews suggested that acquiescence was more likely when the individuals misunderstood the information presented. The authors concluded that yes-no questions should be avoided when interviewing people with mental retardation.

Sigelman et al. (1982) further explored response bias and validity when questioning persons with mental retardation. As in the 1981 study, three groups were sampled: (a) adolescents diagnosed as mentally impaired residing in institutions, (b) adolescents diagnosed as mentally impaired living in the community, and (c) adults diagnosed with mental retardation living in an institution. Diagnoses of the individuals sampled ranged from mild mental retardation to profound mental retardation. Two interviews were scheduled, 1-week apart, to compare respondents' answers to questions regarding the: activities, residential setting, and quality of life. Alternate questions on these topics were asked 1 week following the initial interviews. Interviews also were administered to the caregivers of persons with cognitive impairments. The questions posed to caregivers were similar to those asked of persons with mental retardation. Yes-no questions, open-ended questions with and without probes, and verbal and pictorial multiple-choice questions were asked. Response validity was determined by comparing the responses of caregivers and persons with disability. Response bias was assessed by comparing responses to paired alternative yes-no questions. If persons with mental retardation contradicted themselves while answering alternative questions, response bias was considered to be present. The investigators concluded that the use of open-ended questions were inadequate because persons with mental retardation could not answer the questions or, if they could respond, they were unable to elaborate on their answers. The authors found that probing during open-ended questions did not improve the response rate or quality of response to such questions. The researchers also found that the response rate improved with yes-no questions but that response validity was sacrificed secondary to an increase in acquiescence. Verbal and pictorial multiple-choice questions were found to be more useful than open-ended questions.

Sigelman and Budd (1986) investigated the effect of visual aids on the responsiveness to multiple-choice and either-or questions by persons with mental retardation. Three groups of people diagnosed as mentally impaired were sampled. As in previous research completed by Sigelman et al., the sample comprised children and adults who were institutionalized and children who resided in the community. Parents and caregivers were interviewed as a validity check. Subjects were interviewed privately and asked questions regarding leisure activities and activities of daily living. Each group was interviewed on two occasions. During the first interview, participants were asked questions without the support of visual aids, but during the second interview visual aids were used Visual aids (photographs and sketches) were used to identify possible responses to yes-no, either-or, and multiple-choice questions. Interview results demonstrated that (a) pictures had no or little effect on the interviewees' ability to respond to yes-no questions, (b) visual aids did not reduce respondents' tendency toward acquiescence, and (c) visual aids improved responses to multiple-choice and either-or questions. Pictures appeared to have a positive effect on reducing bias when respondents were required to select one of two items. Therefore, this research supported the use of visual aids when interviewing persons with mental impairments, especially when presenting either-or questions. The results of this study further supported previous research indicating that it is a poor strategy to use yes-no questions when interviewing persons with cognitive impairments.

Flynn (1986) completed a pilot study to investigate, in part, the validity of open-ended questions when interviewing persons with mental retardation. Flynn also sought to discover whether persons with mental retardation can provide meaningful information when responding to questions about their life and life satisfaction. Fifteen people who resided in their own homes and had diagnoses of mental retardation were interviewed. In this pilot study, Flynn determined that the subjects were willing to discuss their life and life experiences. However, those interviewed often provided too much information, too little information, or off-topic information when responding to open-ended questions.

Dent (1986) explored the practicality of using open-ended questions when interviewing 23 children, aged 8 to 11 years, with IQ's ranging from 50 to 70 (mild mental retardation). The purpose was to determine the ability of persons with mild mental retardation to accurately recall and self-report incidents a day after an event. The investigation team staged an incident, and the next the children were asked to recall that incident. The individual selected to interview the children with disability had no prior knowledge of the staged incident. Three questioning formats were used during the interview: (a) free recall, (b) general questions, and (c) specific questions. Dent concluded that, with this sample, asking general questions (e.g., "What did the person look like?") was the preferred open-ended interview technique as compared to specific questioning (e.g., "What was the person wearing?") or free recall (e.g., "Tell me what happened.").

Wadsworth and Harper (1991) explored the reliability of self-report by persons diagnosed as moderately mentally impaired. A picture-prompted test was designed and compared with verbal questioning techniques. The results of the investigation indicated that the use of pictures (sketches) enhanced the test-retest reliability of the interview. Forty-three adults with a diagnosis of moderate mental impairment volunteered to participate in this investigation. Participants were asked to respond to questions presented in an either-or format. The questionnaire was readministered every 7 days over a period of 21 days for a total of four interviews. During two consecutive interviews, participants were asked questions verbally with no visual aid and during the other two consecutive interviews, the participants were asked questions with pictorial representations. The authors concluded that visual-cued (picture-cued) strategies of questionnaire administration increased the reliability of self-reports by persons with a diagnosis of moderate mental retardation.

Dattilo et al. (1996) surveyed 100 adults with mental retardation to obtain their perceptions of their level of involvement in leisure activity, quality of leisure experiences, and constraints to leisure pursuits. Sixty-five percent of those interviewed were males who lived at home with their families. The questionnaire format included pictorial representations of activity options, yes-no responses, and Likert-scale responses to questions concerning quantity or amount. Two weeks following the initial administration of the instrument, a second questionnaire was presented to 20% of the original group. Overall, there was a high correlation between the two test administrations. A similar questionnaire was administered to caregivers. The investigators noted a significant correlation between the responses of caregivers and those of persons with mental retardation. In conclusion, Dattilo et al. recommended that a variety of strategies be implemented to increase confidence in the reliability and validity of responses when questioning persons with mental retardation.

In summary, the literature supported interviewing persons with moderate and mild levels of mental retardation. However, verbal interview formats were not considered effective in questioning persons with profound degrees of cognitive impairment. When interviewing persons with mild or moderate degrees of mental retardation, it was recommended that multiple-choice or either-or questions with pictorial cues be used to improve the accuracy and reliability of responses. It has been found that people with mental retardation have a greater than average incidence of acquiescence; the tendency toward acquiescence increases with decreasing IQ. However, acquiescence can be managed by employing multiple questioning strategies, such as either-or, multiple-choice, specific open-ended questions, and visual aids.

CHAPTER III

METHODS

Introduction

My purpose in this study was to identify consumers' and caregivers' preferences for inclusive over noninclusive recreation services. Consumers in this study were people with moderate and mild levels of cognitive impairment. The procedures that were followed in the study are explained in this chapter which is divided into two major sections. The first section (Section A) details the development of the instruments including: (a) an overview, (b) development of the consumer instrument; and (c) development of the caregiver instrument. The second section (Section B) describes the study and includes: (a) selection of the participants; (b) consumer interview and caregiver survey procedures; and (c) treatment of the data.

Section A: Development of the Instruments

Overview

Following the review of the literature two instruments were developed for use in this study. One instrument was developed for consumer inquiry and the second instrument was developed for caregiver inquiry. This section describes the methods used to develop both instruments and is divided into two subsections including: (a) development of the consumer instrument, and (b) development of the caregiver instrument.

Development of the Consumer Instrument

The literature indicated that when people with cognitive impairments are questioned, closed-ended questions promote acquiescence (Sigelman et al, 1981b), whereas open-ended questions decrease responsiveness (Sigelman et al., 1982), cause confusion (Biklen & Moseley, 1988; Wyngaarden, 1981), elicit off-topic or irrelevant responses (Flynn, 1986), and are biased by subjects' attempts to please the interviewer (Biklen & Moseley, 1988; Wyngaarden, 1981). However, using pictures has been found to stimulate and improve responsiveness (Alreck & Settle, 1995; Sigelman & Budd, 1986; Sigelman et al., 1982; Wadsworth & Harper, 1991). In particular, closed-ended questioning, supported by pictorial cues, has been found to be one of the most effective strategies for questioning people with mental retardation (Sigelman & Budd, 1986; Wadsworth & Harper, 1991).

Following the review of the literature, I designed the instruments used to collect data for this study. The consumer interview instrument was designed using closed-ended questions, supported by either-or pictorial cues (Sigelman & Budd, 1986; Wadsworth & Harper, 1991). The procedural strategies used to develop the consumer instrument are described within this section and visually represented in Table 3.1.

Table 3.1: *Procedural steps involved in the development of the consumer instrument.*

Step	**Procedure**
Step 1	Literature review
Step 2	Interview instrument designed and pictorial cues choreographed
Step 3	Worked with community-based rehabilitation agenct to seek referrals from interested participants
Step 4	Photographs taken
Step 5	Expert panel review of photographs
Step 6	Photograph retakes
Step 7	Consumer panel review of photographs
Step 8	Integrate photographs as pictorial cues to interview instrument
Step 9	Pilot testing
Step 10	Instrument revision
Step 11	Interview protocol and instrument ready for implementation

Pictorial Cues

The first step in the design of the consumer instrument was the development of the pictorial cues. Color photographs were selected as the best method to help participants with cognitive impairment respond to questions presented throughout the interview. An assistant and I took photographs using both a standard and a digital camera.

Individuals with and without disabilities were conveniently selected to participate as models in this study. Individuals without disabilities were selected on the basis of their age and gender. The models were informed of the study purpose, the types of photographs in which they would be modeling, how the photographs would be used in the investigation, where the photographs would be stored, and how the photographs would be used once the study was completed. Models were also asked to return for additional photo sessions if necessary (following review by panels of experts and consumers and a pilot study). To ensure confidentiality, the models' names were not revealed in any documentation.

With the assistance of a second referring agency (a mid-Michigan community mental health organization) I contacted guardians to obtain permission for their wards to participate in this study as models for the photographs. The guardians were informed of the study purpose, types of photographs to be taken, and potential risks; they were asked to sign a release consenting to their wards' participation and the use of their photographs (Appendix A). In addition, participants were informed of the potential risks of participation and were asked to sign the same waiver assenting to participate in the study, and allowing the use of their photographs in the study and in publications following the completion of the investigation. Individuals (with moderate or mild levels of cognitive impairment) from the mid-Michigan area who were not to be involved in the consumer panel, pilot study, or primary investigation were asked to model for the photographs.

The individuals without disabilities who participated in the study as models were conveniently selected on the basis of their age and gender. The models with and without disabilities needed to be of similar ages and to represent both genders equally. All models received small gifts of appreciation for their participation in this investigation.

Activities represented in the pictorial cues. The photographs that were taken showed people with and without disabilities participating in a variety of recreational activities. The literature directed the type of recreational activities selected for inclusion in the photographs (Dattilo & Hoge, 1995; Malik, 1990; Sparrow & Mayne, 1990). Activities that people with mental retardation are known to engage in most frequently and those that people with disabilities report they prefer were selected for use in the photographs. Therefore, photographs showed people viewing television (Dattilo & Hoge, 1996; Malik, 1990), listening to music (Dattilo & Hoge, 1996; Malik, 1990), bowling (Dattilo & Hoge, 1996), working on a craft (Dattilo & Hoge, 1996; Sparrow & Mayne, 1990), playing basketball (Dattilo & Hoge, 1996), and going for a walk (Dattilo & Hoge, 1996; Malik, 1990).

People represented in the pictorial cues. Because a paired-alternative approach (Wadsworth & Harper, 1991) would be used, two photographs were created for each activity. One photograph displayed participants engaged in activity with people with disabilities (displaying noninclusive recreation patterns), whereas the second photograph displayed people with and without disabilities engaged in the same activity (displaying inclusive recreation patterns). A total of 12 photographs (or six photo sets) were created for use in this investigation.

The people with disabilities that were photographed had a primary diagnosis of mental retardation with distinct physical or facial anomalies (i.e., Down syndrome). No people with visual impairments or people using wheelchairs were displayed in the photographs. The people without disabilities had plain physical and facial features. All people in the photographs were adults of similar ages. The two genders were equally represented in the photographs. Finally, the photograph models were asked to wear similar clothing (e.g., jeans and tee-shirts, sweatsuits) and to wear minimal jewelry.

Choreography of pictorial cues. Every effort was made to reduce background and other environmental distractions in the photographs. The people were the primary focus of each photograph, and the activity blended into the background. Where appropriate, a portrait approach (close-up shot) was taken with each photograph to highlight the people and reduce the backgrounds. Photographs were choreographed as follows (Appendix B):

1. This was a photo of people with disability engaged in the activity of bowling. The photograph was taken at a local bowling arena. Two people with disability were photographed. The photo displayed one person at the ball return, with ball in hand. The second person was near the ball return, facing the person with the ball. Both people appeared to be bowling together. One person was male and the other was female. This was a close-up shot with the people the main focus; bowling lane was visible in the background.

2. This photograph was the same as photo 1 except that the second person (without the bowling ball) did not have a disability. Both people in the photograph were male.

3. This was a photograph of people with disability engaged in a one-on-one game of basketball. The photograph was taken at a local gymnasium. Two people with disability were photographed, one male and one female. The

photograph showed the female handling the basketball, with the male guarding her. A close-up photo was taken so that one could see the participants' faces, with the gymnasium in the background.

4. This photograph was the same as photo 3 except that the person guarding was a person without disability. The person handling the ball had a disability. Both people in the photograph were male.

5. This photograph was of three people with disability watching television, two were male and one was female. The photograph was taken in a living area. All participants were sitting in chairs next to one another. One person was holding a remote control and another was holding a TV guide. Two males and one female were present. The television was visible in the background of the photograph.

6. This photograph was the same as photo 5 except that one person (male) did not have a disability. One person with a disability held the TV guide. The person without a disability held the remote control.

7. This was a photograph of three people with disabilities, two males and one female, going for a walk. The photo showed the participants walking side by side down a sidewalk, without physical contact. Trees were visible in the background of the photograph.

8. This photograph was the same as photo 7 except that the female did not have a disability.

9. This photograph showed two people with disabilities listening to music in an indoor area. One person was wearing a headset, smiling, and looking at the

second person. The person wearing the headset was male, and the person without the headset was female. A CD player was positioned in front of the person wearing the headset. A close-up shot was taken to minimize environmental distractions.

10. This photograph was the same as photo 9 except that the female did not have a disability. The male with a disability continued to wear the headset.

11. This photograph showed two people with disabilities engaged in a craft or hobby. One person was male and the other was female. The photograph was taken in a living area, with the participants sitting at a table. The photograph showed both people working on a similar project (i.e., painting a birdhouse). Both appeared to be working on their project.

12. This photograph was the same as photo 11 except that the male did not have a disability.

Reliability of the Instrument

When an investigation involves people with cognitive impairment, an interview, and the use of photographs as a component of the interview tool, reliability may be compromised. Reliability has been described as the consistency or repeatability of a measurement (Babbie, 1995; Wiersma, 1995). Questionnaires and interview instruments are considered reliable when the investigator consistently receives similar responses to the same questions. Reliability coefficients can range from 0 to 1.0, with .70 or higher being preferred (Wiersma,1995). Strategies to maximize reliability are discussed in the following paragraphs.

Reliability and the Interview Process. Reliability issues that can occur during the process of interviewing include inconsistencies in interview delivery, and errors in recording and interpretation. To ensure consistency in interview delivery and to ensure adequate knowledge on the a part of the interviewer (Alreck & Settle, 1995; Malik, Ashton-Shaeffer, & Kleiber, 1991; Wadsworth & Harper, 1991), I completed all of the interviews with the participants. I have had more than 5 years of programming experience with people with developmental disabilities and designed the research project. Also, I was of the same mean age as the participants, according to Alreck and Settle (1995), if the ages were different reliability problems could result.

Several strategies were employed to reduce recording and interpretation errors. One strategy was to tape record responses to the open-ended questions regarding participation in recreation activities (Biklen & Moseley, 1988; Malik et al., 1991). The tape was replayed immediately following each interview and the content checked for accuracy of recording and interpretation. A checklist was used to help in recording responses to either-or, close-ended, and open-ended questions regarding recreation participation (Alreck & Settle, 1995). Finally, I was not compensated for the interviews, which reportedly reduces the potential for falsification in data collection (Alreck & Settle, 1995).

Reliability of the Interview Tool. Reliability issues with the tool itself were minimized through the use of expert and consumer panels as well as pilot testing (Dattilo et al., 1996). Expert and consumer panelists looked at the photographs to ensure they could identify people with and without disabilities.

Photographs that achieved an 80% or better agreement rate among members of the consumer and expert panel were not changed. Photographs that had less than an 80% agreement rate were changed as per recommendations of the panel members.

Another strategy that was implemented to improve reliability of consumer responses was the use of repeated measures. The same question (regarding choice of inclusion or noninclusion) was asked six times. The photographs used in the consumer instrument repeatedly showed the same people, even though the activities and environments changed.

Validity of the Instrument

Validity refers to the accuracy and factual interpretation of the results of an investigation (Babbie,1995; Fraenkel & Wallen, 1996). In this investigation, validity issues could arise with the interview tool, its delivery, and the population sampled. Strategies to manage validity issues are explained in this section.

Validity and the Sampling Group. Low cognition and a tendency toward acquiescence (Malik et al., 1991; Sigelman et al., 1981a; 1981b) are primary validity concerns when questioning people with mental retardation. The literature suggested that the amount of acquiescence corresponds with intelligence. The lower a person's intelligence, the higher the amount of acquiescence (Sigelman et al., 1981b). Therefore, only those people diagnosed with moderate or mild levels of mental retardation were interviewed during this investigation (Sigelman et al., 1981b). In addition, pictorial cues were used to improve responses to closed-ended questions (Dattilo et al., 1996; Sigelman et al., 1982; Wadsworth & Harper, 1991). These pictorial cues were presented in a random fashion throughout the interview (Alreck & Settle, 1995; Dattilo et al., 1996; Wadsworth & Harper, 1991). Below-normal intelligence is associated with decreased attending skills. Therefore, the interview was designed to reduce environmental distractions, be short in duration, and offer participants breaks in activity every 15 minutes or as needed (Alreck & Settle, 1995). For the same reason, abstractions, abstract adjectives, and value-oriented statements were avoided throughout the interview (Malik, 1990; Wyngaarden, 1981).

Validity and the Interview Delivery Process. Attempting to please the interviewer (Wyngaarden, 1981) and fears associated with the interview process (Malik et al., 1991) are other validity concerns when questioning people with mental retardation. In an attempt to reduce the participants' desire to please me, I assured them that there were no right or wrong answers and that their answers would have no effect on the services they received from the referring agency (Biklen & Moseley, 1988). Further, I used no questions or statements intended to "lead" the participants' responses (Alreck & Settle, 1995; Malik et al., 1991; Wyngaarden, 1981). To reduce subjects' fear associated with the interview process, I spent time building rapport with each participant (Biklen & Moseley, 1988; Malik et al., 1991; Wadsworth & Harper, 1991; Wyngaarden, 1981) and held the interview in an environment familiar to the participant (Malik et al., 1991; Wyngaarden, 1981).

Validity and the Instrument. The use of pictorial cues may also have raised concerns about the validity of the consumer instrument. Specifically, I needed to be assured that the participants could discriminate between the people with and without disabilities shown in the photographs. For this reason, a consumer panel and an expert panel were asked to evaluate the instrument's content for validity issues (e.g., "Was it easy to identify the people with and without disabilities in the photographs?"). Photographs that had an 80% or better agreement rate among members of the consumer and expert panel were not changed. Photographs having less than an 80% agreement rate were changed as per recommendations from panel members.

Method Used to Select the Panel of Experts and the Panel of Consumers

The Panel of Experts. A panel of experts consisting of six professionals was asked to review the photographs for purposes of establishing content validity (Dattilo et al., 1996). A convenience sampling technique was used to secure panel participants with backgrounds in therapeutic recreation, parks and recreation, vocational rehabilitation, and case management. Panel members were asked to review the photographs to ensure that they could easily distinguish between people with and those without disabilities (Appendix C). Similarly, they were asked whether they thought that people with moderate and mild levels of cognitive impairment would be able to recognize the people with and without disabilities shown in the photographs. The experts also were asked to assess the photographs for any environmental distractions that could potentially divert a participant's attention from the people in the photographs. An 80% (five out of six) agreement rating was expected for each photograph. If fewer than five of the participants agreed with the content of a particular photograph, the photo was changed. If it was necessary to modify a photograph, the same models were asked to return for changes to the original photograph. However, if the panel provided feedback that they could not identify whether a particular individual did or did not have a disability, a new model was sought. Following feedback from the panel of experts, the instrument was prepared for the consumer panel and the pilot test.

The Panel of Consumers. I contacted seven individuals with disabilities to serve as members of a consumer panel and review the photographs for content validity purposes. This panel consisted of people with moderate and mild levels of cognitive impairment who lived in the mid-Michigan area and were not subjects in the primary study or models for the photographs. A convenience sampling technique was used to select members of this panel.

I met with the panelists at their homes or places of employment. They were presented with each photo set and asked to look at the pictures and identify differences in the people in the photographs (Appendix D). The intention of this line of questioning was to ensure that the consumers could clearly observe that some of the people in the photographs had disabilities whereas others did not. I asked each consumer nonleading open-ended questions as they looked at the photographs. Initially, consumers were asked whether they observed differences in the people in the photographs. If their responses did not relate to disability versus nondisability differences, I continued with graded probing questions that eventually led to directly asking consumers to point to the people in the photographs who had disabilities. If 80% (four out of five) of the consumer panel agreed with the photo content (e.g., were able to point to the people with disabilities in the photographs), it was not changed. If more than four of the panelists disagreed with the photo content, the photograph was changed. As with the expert panel, if it was necessary to modify the photographs, the same models were asked to return for changes to the original photographs. However, if the panel provided feedback indicating that they could not identify whether an individual did or did not have a disability, a new model was sought. Following feedback from the consumer panel, the instrument was prepared for the pilot study involving consumers.

Consumer Interview Instrument

Once the instrument (photographs) was evaluated by the panel of experts and the consumer panel, the interview procedures were added (Appendix E).to create the data collection tool. As stated earlier, consumers were interviewed to determine their preferences for noninclusive or inclusive recreation services. A brief overview of the interview instrument designed for administration to the consumers is given in this section.

Using repeated measures, closed-ended questioning supported by either-or pictorial cues was the primary method of questioning people with mental retardation. Open-ended questions were used to obtain information from consumers about their recreation participation patterns. Consumers' demographic data (diagnosis, age, gender, residence type) were obtained from the referring agency. For complete interview procedures see Appendix E.

The Consumer Pilot Study

Selection of Pilot Study Participants. The instrument and interview procedures were pilot tested by consumers. Seven individuals, were conveniently selected, to take part in the pilot study. They were representative of the sample in this study (Dattilo et al., 1996). Participants involved in the pilot study were not involved in instrument development, the panel of experts, the consumer panel, or the actual study.

Consumer Pilot Study Procedures. The purpose of the consumer pilot study (Appendix F) was to evaluate the interview procedures for reliability and practicality (e.g., ease of use, readability, understanding, time, terminology). As in Wyngaarden's (1981) study, the referring agency assisted in making the initial contacts with people who might be interested in participating in the study. Letters were sent to consumers or guardians (as appropriate), inquiring whether they wished to participate. Potential participants were asked to sign and return a release form indicating their interest in participating in this study and allowing the agency to provide me with their demographic information. The cover letter and release form (Consent to Participate in Research, Appendix G) (a) described the purpose and benefits of the study, (b) identified that there were no known risks of participation, (c) described the interview procedures, (d) assured participants that they could refuse to participate or terminate the interview at any time without compromising their access to services, and (e) assured participants that the information they shared would remain confidential. Participants who were 18 years of age and competent (being their own guardians) signed the permission form as consenting adults. If a participant was under the age of 18 or incompetent, the legal guardian signed the form consenting to their ward's participation in the study. In such cases, consumers also were asked to sign the consent form, assenting to participate (Malik, 1990).

Once people interested in participating in the pilot study had been identified, I telephoned them to arrange a time and location for the interview (Wyngaarden, 1981). Locations were chosen that would ensure privacy, minimize distractions, and be familiar to the consumers (Malik et al., 1991). Thus, the consumer pilots were implemented in either their homes or their place of employment. For comfort and perceived safety of the consumer and interviewer, a caregiver was in the area of the interview but did not directly observe or offer input to the participant.

To initiate the interview, I discussed the purpose and intention of the pilot study. Consumers were assured there were no right or wrong answers. Privacy, confidentiality, and risk of participation also were discussed. Consumers were informed that the pilot study would involve two meetings with the investigator.

The consumer pilot began with scripted questions and comments to establish rapport and maximize consumers' comfort (Biklen & Moseley, 1988). I read verbatim the pilot consumer interview instrument (Appendix E); however, I was allowed to rephrase questions in a number of different ways to elicit a complete response from participants (Wyngaarden, 1981). Supplying suggestive answers while rephrasing was avoided to minimize biased responses (Malik et al., 1991; Wyngaarden, 1981). Also, I avoided using value-oriented or abstract adjectives (e.g., wish, prefer) because they are difficult for people with mental retardation to understand (Malik, 1990; Wyngaarden, 1981). If the pilot lasted more than 15 minutes, participants were given a short break to minimize the potential for fatigue bias (Alreck & Settle, 1995). Once the interview was completed, a time and location for the second interview were arranged with both the participant and the caregiver. To avoid bias, consumers were asked not to discuss the interview with one another until after the second interview.

Analysis of the Consumer Pilot Study. The consumer pilot study involved a review of the interview procedures for reliability and practical usability. A test-retest method (Babbie, 1995) was used to assess the reliability of consumers' responses to the instrument and interview procedures. The pilot was administered to consumers a second time 1 week following the first administration (Wadsworth & Harper, 1991). The consistency of consumer agreement was assessed using a reliability co-efficient. The closer the reliability co-efficient value was to 1.0 the more reliable the procedures and instrument.

Development of the Caregiver Instrument

The caregiver instrument was similar in content to the consumer instrument but was formatted to be completed independently by participants. The procedural techniques used to develop the caregiver instrument are described within this section and visually represented in the following table (Table 3.2).

Table 3.2: *Procedural steps involved in the development of the caregiver survey tool.*

Step	**Procedure**
Step 1	Questionnaire designed based on literature review and the content of the consumer instrument
Step 2	Worked with a referring agency to seek interested participants
Step 3	Pilot testing
Step 4	Modification of questionnaire
Step 5	Questionnaire ready for implementation in the study

Caregiver Instrument

I designed the caregiver instrument (Appendix H), which included content similar to the consumer interview. Caregivers were asked to respond to questions regarding their preferences for inclusive or noninclusive recreation services for the children or consumers under their care. They were given the opportunity to provide subjective data regarding their preferences in a *comments section* included on the instrument. Unlike consumers, caregivers were given no pictorial cues. In addition, for comparison purposes, caregivers were asked to provide demographic information such as their age, years of experience as a caregiver, extent of training related to inclusion, and past involvement in inclusive recreation services.

Caregiver Pilot Study Procedures

The purpose of the caregiver pilot study was to evaluate the caregiver survey for reliability, readability, and ease of use (Appendix I). Participants in the study were conveniently sampled through contacts with consumers who had participated in the consumer pilot study. Caregivers were asked to complete the caregiver survey and respond to questions evaluating the clarity of information presented.

Selection of Caregiver Pilot Study Participants. The caregiver instrument was pilot tested by caregivers ($n = 5$) who were not involved in the actual study. Pilot participants were conveniently sampled through contacts with consumers who had participated in the consumer pilot study.

Caregiver Pilot Study Analysis. As was done with the consumer instrument, the caregiver instrument was changed if 80% (four out of five) of the pilot participants recommended modifications.

Section B: The Study

Selection of the Participants

Sixty-two people with diagnoses of moderate or mild levels of mental retardation and 46 caregivers were sampled in the primary investigation. A convenience sampling technique was used to select participants for this study.

A large community-based rehabilitation facility was contacted to assist in securing participants for the study. This rehabilitation agency had a catchment area of four counties and daily served over 480 people with developmental disabilities. Agency reports indicated that 42% of the persons diagnosed with developmental disabilities were female and 58% were male. The primary ethnicity of agency consumers was Caucasian (93%), whereas others were African American (3%), or Asian, Native American, and Hispanic (3%). The referring agency served a broad age group. However, the majority of their consumers were in their 30s (28%) or 40s (32%). Consumers in their 20s acc

dis

tee

of

cor

ins

car

init

foll

Co

Th

accounted for approximately 17% of the agency's working persons with disabilities, whereas 15% were in their 50s, 6% were in their 60s, and 2% were teens, ages 16 to 19 years. This organization's consumers resided in four types of living accommodations: (a) private homes, (b) semi-independent apartment complexes, (c) adult foster care or other group home facilities, and (d) institutional settings.

Consumer Interview and Caregiver Survey Procedures

Following the pilot of both consumers and caregivers, the consumer and caregiver instruments and procedures were modified as appropriate. I then initiated the actual study. The procedures for the study are described in the following paragraphs.

Consumer Interview Procedures

The procedures used when interviewing consumers are within this section. These procedural steps are visually represented in Table 3.3.

Table 3.3: *Consumer interview procedures*

Step	**Procedure**
Step 1	Obtained written guardian consent for consumer participation
Step 2	Interview scheduled
Step 3	Record demographic data
Step 4	Meet with interested consumer
Step 5	Obtain consumer assent or refusal to participate
Step 6	Interview initiated with rapport building
Step 7	Presented questions related to inclusion using closed-ended, either-or questioning supported by pictorial cues
Step 8	Presented questions concerning recreation participation patterns
Step 9	Debriefing
Step 10	Consumer thanked for their participation and assured supervision of caregiver

The investigator contacted a large mid-Michigan rehabilitation agency requesting their involvement in this research project. Following an initial telephone contact, I sent a letter to the agency (Appendix J) describing the study and its purpose, as well as the involvement of consumers and caregivers, and requesting their assistance in contacting consumers who might be interested in participating in the study. This proposal required the approval of the agency's executive director and board of directors. As in Wyngaarden's (1981) study, the referring agency made the initial contacts with the consumers and caregivers, seeking their participation in the study. Interested participants completed the Consent to Participate in Research form (Appendix G) which described the purpose and benefits of the study, identified that there were no known risks of participation, described the survey procedures, assured participants that they could refuse to participate or terminate their involvement at any time without compromising their access to current services, and promised participants that the information they shared would remain confidential. Participants who were 18 years of age and competent signed the permission form if they were their own guardians. If a participant was under the age of 18 or incompetent, the legal guardian signed the consent to participate form (Malik, 1990). Consumers and guardians were notified that, by signing the permission form, they gave the referring agency permission to provide me with basic demographic information about them (i.e., level of mental retardation, age, gender, address, phone). Once interested participants were identified by the referring agency, I contacted them either by telephone or at their place of employment to arrange a time and location for the interview (Wyngaarden, 1981). Interview locations were arranged at the convenience of the consumer but assured privacy, minimized distractions, and were familiar to the consumer (Malik et al., 1991). For this reason, interviews were implemented in the consumers' home or place of employment (the referring agency).

To minimize reliability issues (e.g., in consistency in interview delivery, recording, and interpretation errors) I conducted all interviews with the consumers. I was consistent in wearing casual clothing (e.g., khakis and shirt, or sweater) and minimal to no jewelry during all of the scheduled interviews. Also, I maintained the same demeanor during each interview. I obtained demographic data (i.e., date of birth, gender, diagnosis, type of residence) from the referring community-based rehabilitation agency before initiating the interview. The referring agency gave me a listing of consumers who had provided a signed release form, as well as all of the requested demographic information.

Interviews began with introductions and an overview of the purpose and benefits of the study. As appropriate, I told consumers that their guardians had given permission for them to participate in the interview and asked whether they agreed with their guardian and wished to participate. If so, the consumer was asked to co-sign the release form (Appendix G). Consumers who were their own guardians were reminded that they had signed the release and were asked whether they still wished to be involved in the study. Given consumer assent, the inquiry began with my assuring consumers that there were no right or wrong answers and no known risk of participation, and informed them that their privacy and confidentiality would be maintained. Participants were also assured that their responses would not affect the services they received from the referring agency. Participants were shown the interview tool and audiotape recorder, and informed that some of their responses would be recorded but erased shortly after the interview (Alreck & Settle, 1995).

The interview area was arranged for the comfort and convenience of the consumers. When interviews were arranged at the place of employment, they were completed in either a conference room, a break room, or a lunch area. When interviews were arranged at consumers' homes, they took place in the quiet of the dining room, kitchen, or living room. Interviews at the state institution took place in the dining area of the appropriate apartment, office, or conference room.

Interviews began with my asking questions and making comments to establish rapport and maximize consumers' comfort (Biklen & Moseley, 1988). I read the consumer interview procedure verbatim (Alreck & Settle, 1995) (Appendix E); however, I was allowed to rephrase questions, maintaining the original content, to ensure that consumers understood (Dattilo & Hoge, 1995).

When asking the closed-ended questions related to the consumer's preferences for inclusive or noninclusive recreation services, I used photographs as pictural cues to assist the consumer in responding. The investigator asked the participant the first closed-ended question and presented the photo set, upright, facing the consumer. Responses were immediately recorded on the interview checklist. This procedure was repeated six times until all activity card sets had been presented. Photo sets were presented in random order as per the directions in each interview instrument (Alreck & Settle, 1995).

All photographs used in the consumer instrument were numbered, 1 through 12. Photos 1 and 2 represented people engaged in bowling, photos 3 and 4 showed people engaged in one on one basketball, photos 5 and 6 represented people watching television, photos 7 and 8 showed people going for a walk, photos 9 and 10 showed people listening to music, and photos 11 and 12 showed people working on a craft. The number was written on the back of each photograph and visible only to the investigator. All photographs were 5" x 7" and laminated for protection.

I developed six interview instruments, with activities presented in random order. Consumers 1 through 10 were administered consumer interview instrument 1, consumers 11 through 20 received instrument 4, consumers 21 through 30 were interviewed using instrument 2, consumers 31 through 40 were administered instrument 5, consumers 41 through 50 received instrument 6, consumers 51 through 60 received instrument 3, and consumers 61 and 62 received consumer interview instrument 1.

Open-ended questions concerning the types of recreational activities in which the consumers currently participated, were posed during the final segment of the interview. Consumers were asked what types of recreational activities they participated in the most and with whom they participated in these activities. I recorded consumers' responses using a checklist provided on the interview tool; responses also were audiotaped to avoid recording and interpretation errors (Alreck & Settle, 1995). During the inquiry, I asked questions in a number of different ways to elicit complete responses from the participants (Wyngaarden, 1981). I avoided supplying suggestive answers while rephrasing the questions because this might have biased the consumers' responses (Malik et al., 1991; Wyngaarden, 1981). In addition, value-oriented or abstract adjectives (e.g., wish, prefer) were avoided because they are difficult for persons with mental retardation to understand (Malik, 1990; Wyngaarden, 1981).

It took each participant approximately 15 to 20 minutes to complete the consumer interview (Malik, 1990). If an interview took longer than that, consumers were given a short break to avoid fatigue bias (Alreck and Settle, 1995).

When the interview was completed, a debriefing occurred to ensure complete disclosure of the purpose of the interview. I reviewed the operational definition of inclusion with each participant and asked whether he or she had any questions. I then thanked the interviewee for participating and returned him or her to the caregiver or work supervisor.

I replayed the audiotape immediately following the interview to ensure accurate recording of the consumer's responses. Audiotape recordings were then erased.

Caregiver Survey Procedures

Following the caregiver pilot study, the caregiver instrument was appropriately modified. As in Wyngaarden's (1981) study, the referring agency helped me make initial contacts with the caregivers. Once the consumer interviews were completed, I contacted the home managers or supervisors and asked them to distribute surveys to caregivers who worked with individuals with diagnosis of moderate and mild levels of cognitive impairments. Due to confidentiality, no direct tie between a particular consumer and caregiver could be made. However, consumers' residences were identified and caregivers within those homes were asked to complete the surveys. Home managers or supervisors were informed of the operational definition of inclusion. Home managers were asked to relay this to their staff, and any questions were to be referred to me. Caregivers completed the surveys voluntarily and returned them, in sealed envelopes, to their supervisors, who in turn gave the completed surveys to me. Because caregivers oversaw activities of several consumers and because some consumers lived independently, I expected that fewer caregivers than consumers would participate in this investigation.

Treatment of the Data

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 10.0. Data-analysis techniques for each hypothesis are described in this section.

1. *Consumers do not prefer inclusive recreation service over noninclusive recreation services.*

Descriptive statistics, in the form of frequencies and percentages, were used to identify the frequency with which consumers indicated they preferred inclusive or noninclusion recreation services.

2. *There is no difference between consumers' preference for inclusive recreation services, based on level of cognitive impairment.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare consumers' preferences for inclusion according to their diagnostic group (i.e., moderate and mild cognitive impairment). Given the sum of responses from each diagnostic group, an independent-sample *t*-test (at the .05 level of significance) was used to compare the preferences of the two groups for statistical significance.

3. *There is no difference in consumers' preferences for inclusive recreation services, based on their gender.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare male and female consumers' preference for inclusion. Given the sum of responses from each gender group (male and female), an independent-sample *t*-test (at the .05 level of significance) was used to compare the preferences of the two groups for statistical significance.

4. *There is no difference in consumers' preferences for inclusive recreation services, based on their past involvement inclusive recreation experiences.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare consumers' preference for inclusion according to their past involvement in inclusive recreational activity. The chi-square, nonparametric statistical technique, at the .05 level of significance, was used to test the relationship between consumers' past involvement in inclusive recreation activities and their preference for inclusion in each activity presented.

5. *There is no difference between consumers' preferences for inclusive recreation services, based on their type of residence.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare consumers' preferences for inclusion according to their living accommodations. The chi-square, nonparametric statistical technique, at the .05 level of significance, was used to test the relationship between consumers' type of residence and their preference for inclusion in each activity presented.

6. *There is no relationship between consumers' preferences for inclusive recreation services and their age.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare the preferences for inclusion of consumers in various age groups. The raw data (age) were compared to consumers' preferences for inclusive services (per activity) using the point-biserial correlation test at the .05 level of significance (2-tailed).

7. *Caregivers do not prefer inclusive recreation services over noninclusive recreation services.*

Descriptive statistics in the form of frequencies and percentages, were used to identify the frequency with which caregivers indicated they preferred inclusive or noninclusive recreation services.

8. *Consumers and caregivers do not differ in their preferences for inclusive recreation services.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare consumers' and caregivers' preferences for inclusion. Using the sum of consumer responses and the sum of caregiver responses, a one-sample *t*-test (at the .05 level of significance) was used to compare the preferences of the two groups for statistical significance.

9. *There is no difference between caregivers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare caregivers' past involvement in inclusive recreation experiences and their preferences for inclusive recreation services. The chi-square statistical test, at the .05 level of significance, was used to determine whether there was a significant relationship between caregivers' past involvement in inclusive recreation activities and their preference for inclusion for the wards under their care.

10. *There is no relationship between caregivers' preferences for inclusive recreation services and their years of experience as a caregiver.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare the preferences for inclusion of caregivers with varying years of experience. The raw data (years of caregiving) were compared to the preference for inclusive recreation services (per activity) using the point-biserial correlation test at the .05 level of significance (2-tailed).

11. *There is no relationship between caregivers' preferences for inclusive recreation services and their age.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare caregivers' preferences for inclusion according to their age group. The raw data (age) were compared to caregivers' preferences for inclusive services (per activity) using the point-biserial correlation test at the .05 level of significance (2-tailed).

12. *There is no difference in caregivers' preferences for inclusive recreation services, based on their extent of training related to inclusion.*

Descriptive statistics, in the form of frequencies and percentages, were used to compare caregivers' preferences for inclusion according to their extent of training related to inclusion. The chi-square statistical test, at the .05 level of significance, was used to determine whether there was a significant relationship between caregivers training and their preference for inclusion for the wards under their care.

CHAPTER IV

Results

Introduction

My purpose in this investigation was to identify consumers' and caregivers' preferences for inclusive over noninclusive recreation services. Consumers in this study were people with moderate and mild levels of cognitive impairment. This chapter provides a description of the sample groups (i.e., consumers and caregivers), the panel of experts, the panel of consumers, the consumer pilot, the caregiver pilot, results of the primary investigation and relationship to the hypotheses.

Sample Groups

Consumers Sampled

Referring agencies. Two community agencies located in the mid-Michigan area were contacted to take part in this investigation. These organizations acted as referring agencies to provide a contact for the people with developmental disabilities and their guardians. The first agency assisted in making contact with guardians to find people who might be interested in modeling for the photographs that would later be used as pictorial cues in the primary investigation. Four guardians were contacted and three gave positive responses, allowing two males and one female to participate in the investigation as models.

The second community agency was contacted to help me secure interested participants for the consumer panel, the consumer pilot, and the primary study. This agency mailed 210 letters to guardians to seek permission for their children (or wards) to participate in the interviews. Ninety-four positive responses were obtained, representing a 44.7% response rate. From this group, 5 individuals participated on the consumer panel, 7 individuals participated in the consumer pilot, and 65 people were contacted to be interviewed in the primary investigation. Of the 65 consumers contacted for the primary investigation, 3 refused to participate. The remaining consumers who had received their guardians' approval (*n* = 17) did not take part in the investigation because they were difficult to contact or otherwise unable to participate (e.g., lacked a phone, were employed at a community-based site where an interview would be inappropriate).

Models for the pictorial cues. The three people that participated as models for the pictural cues were all diagnosed as having Down syndrome. The referring agency reported that each person was between 25 and 45 years of age, with a diagnosis of moderate or mild mental retardation. Specific demographic information on the individuals was not made available to me.

Members of the consumer panel. The participants (*n* = 5) who agreed to be members of the consumer panel ranged in age from 19 to 59 with a mean of 31 years. Four males and 1 female participated on the panel. Of that number, 3 of them had diagnoses of mild mental retardation and 2 had diagnoses of moderate mental retardation.

Members of the consumer pilot. Seven participants were involved in the consumer pilot; 5 were male and 2 female. They ranged in age from 28 to 50 years, with a mean of 38 years. Six participants had a diagnosis of mild mental retardation, whereas 1 was diagnosed with moderate mental retardation. When the initial interview procedures were piloted, the participants (n = 2) displayed considerable acquiescence. The procedures were modified, and these participants were eliminated from the study. Two new people were secured to take part in the pilot, maintaining the original number of 5 members to pilot the interview procedures. Final pilot members ranged in age from 28 to 50 years, with a mean age of 39 years. Four participants were diagnosed with mild cognitive impairment, and 1 was diagnosed with moderate cognitive impairment.

Consumers for the primary investigation. Of the 62 individuals interviewed as part of the primary investigation, the majority (69.4%, n = 43) were male; 30.6% (n = 19) were female. Participants ranged in age from 18 to 73 years, with a mean of 42 years. Fifty-two percent (51.6%, n = 32) of the participants had diagnoses of moderate mental retardation, whereas the others (48.4%, n = 30) had diagnoses of mild cognitive impairment. The majority of participants (41.9%) resided in group homes or adult foster care homes, others (30.6%) lived in a state residential facility, 14.5% resided in semi-independent apartment complexes, and 12.9% lived in private homes.

Caregivers and Individuals Without Disability Sampled

Models for the pictorial cues. I asked 3 individuals without disabilities to participate as models for photographs that would later be used as pictorial cues in the primary investigation. Two males and 1 female, aged 28 to 47 years, of average height and weight, agreed to participate in this study as models.

Panel of experts. Six professionals employed in Michigan, agreed to serve on the panel of experts. The panel was conveniently selected on the basis of members' background, expertise, and the types of job the individuals performed. All panel experts had experience in programming with people with developmental disabilities and currently were employed in positions serving adults with developmental disabilities. The panel consisted of 2 therapeutic recreation specialists, 1 park and recreation professional who supervised a community-based special recreation program for people with developmental disabilities, 1 vocational rehabilitation specialist, and 2 case managers. Panel members were not familiar with any of the people displayed in the photographs.

Caregiver pilot. Five individuals were conveniently sampled to take part in the caregiver pilot. Participants ranged in age from 20 to 82 years, with a mean age of 51. Caregivers reported 2 to 52 years of experience working with people with developmental disabilities, with an average of 22 years of experience in caring for those with disabilities. Three were parents of people with developmental disabilities and 2 cared for people with developmental disabilities in group homes. Three pilot participants cared for adults with mild mental retardation, 1 cared for a person with moderate mental retardation, and the third cared for individuals with both mild and moderate cognitive impairment.

Caregivers for the primary investigation. Sixty-eight surveys were delivered or mailed to caregivers of people with developmental disabilities. Forty-six were completed and returned, yielding a response rate of 67.6%. Caregivers who participated in the primary investigation ranged in age from 20 to 60, with a mean of 37 years. Caregivers reported that they had cared for people with disabilities an average of nearly 10 years, with a range of 6 months to 30 years of service. Caregivers reported caring for people with developmental disabilities in a state institution (30.4%), a group home or adult foster care (39.1 %), a semi-independent apartment complex (26.1%), and in private homes (4.3%).

The Panel of Experts

The first stage in this investigation was to ensure that the pictorial cues (photographs) clearly represented the desired content. An expert panel was therefore asked to look at each of the photographs and identify whether it was easy to distinguish between people with and those without disabilities. Similarly, they were also asked whether they believed that people with moderate and mild levels of cognitive impairment would be able to recognize the people with and without disabilities who were shown in the photographs. Finally, the experts were asked to assess the photographs for any environmental distractions that would direct a participant's attention from the people in the photograph.

Because of feedback received from the expert panel, retakes were needed for two of the photographs. Photo 2 (i.e., people with and without disabilities bowling) and photo 4 (i.e., people with and without disabilities playing basketball) required retakes because 3 (50%) of the panelists perceived that all people in both photographs had disabilities. Regarding photo 2, panelists commented that the facial expression of the individual without a disability made them believe he had a disability. Comments from panelists regarding photo 4 indicated that the body posture and positioning of the person without a disability made him appear as if he had a disability. All of the panelists (100%) reported that photo1 (i.e., people with disabilities bowling), photo 3 (i.e., people with disabilities playing basketball), photo 5 (i.e., people with disabilities watching television), photo 7 (i.e., people with disabilities going for a walk), photo 8 (i.e., people with and without disabilities going for a walk), photo 9 (i.e., people with disability listening to music), and photo 11 (i.e., people with disabilities working on a craft) displayed the intended image or content. One panelist questioned the content of photo 10 (i.e., people with and without disabilities listening to music) and photo 12 (i.e., people with and without disabilities working on a craft). However, these photographs did not require retakes because all of the other panelists (83.3%) identified the correct content in both photographs. Another panelist questioned whether people with mild or moderate impairment would recognize photo 6 (i.e., people with and without disabilities watching television) as showing a person without a disability holding the remote; this panelist said "He's holding the remote funny." The same panelist consistently questioned whether people with moderate mental retardation would be able to notice the difference between people in the photographs.

The Panel of Consumers

Because of the feedback received from the expert panel, two of the photographs were retaken. All of the photographs were then prepared for review by a panel of consumers. All consumers (100%) on the panel were able to point to the people in photographs numbered 4, 7, 8, 9, 10, 11, and 12 and identify the people with and without disabilities. One individual each questioned the content of photographs 1, 2, 3, 5, and 6. However, the other panelists (80%) correctly identified the content of these photographs so no retakes were necessary.
Two of the 3 panelists with diagnoses of mild mental retardation were 100% accurate in their review of the content of the photographs. Both individuals with diagnoses of moderate mental retardation questioned the content of one photograph each. The third person diagnosed as having mild mental retardation questioned the content of three photographs.

The Consumer Pilot

Following the consumer and expert panels' reviews of the photographs, the procedures were reviewed for reliability and practicality (e.g., ease of use, understanding, time, terminology). Five individuals were intended to be part of the consumer pilot. The first 2 members of the pilot were interviewed using the interview procedure verbatim. It was determined that probing questions, which were intended to clarify consumers' responses, only led to increased distraction, incongruent responses, and increased acquiescence. Therefore, the interview procedures were modified (i.e., probing questions were eliminated) and these 2 pilot members were eliminated from the investigation.

Five persons (1 with a diagnosis of moderate mental retardation and 4 with diagnoses of mild mental retardation) who were not members of the instrument development (photograph models), the consumer panel, or the primary study were conveniently sampled to take part in the consumer pilot (Dattilo, et al., 1996). The new interview procedures were followed verbatim. A test-retest method (Babbie, 1995) was used to assess the reliability of consumers' responses to the interview procedure. The first and second administrations of the procedures were implemented 1 week apart. The alpha reliability coefficient was found to be .58. Based on the small sample, this alpha level was considered adequate. However, further analysis of the pilot test results also revealed a range in individual congruency from 33% to 100%. A mean agreement rate of 71% was found for individuals with mild cognitive impairment; whereas a 50% agreement rate was found for people with moderate cognitive impairment. Per-activity agreement ranged from 50% to 100%, with a mean of 72% congruency. Finally, when the least congruent consumer responses were eliminated, the alpha coefficient was found to be .66.

The Caregiver Pilot

Five individuals who cared for people with developmental disabilities were conveniently sampled to take part in the caregiver pilot. This pilot study was used to evaluate the caregiver questionnaire for ease of use, readability, and reliability. All of the caregivers (100%) reported that the questions were easy to read. One participant reported being unfamiliar with some of the terms used in one question (e.g., mainstreaming, integration). However, no member of the pilot recommended that questions be changed or reworded to make them easier to understand. Therefore, the caregiver survey was not altered but was prepared for administration to caregivers in the primary investigation.

The Results of the Primary Investigation and Relationship to the Hypothesis

The following section provides a descriptive overview of the results of this study related to each hypothesis. In addition, Table 4.1 provides a graphic summation of the results of this study related to each hypothesis.

Table 4.1: *Study results related to each hypothesis.*

Hypothesis	*Result*	*Direction*
1. Consumers do not prefer inclusive recreation services over noninclusive recreation services.	Rejected.	Consumers prefer inclusion.
2. There is no difference between consumers' preferences for inclusive recreation services, based on level of cognitive impairment.	Not rejected.	No difference between diagnostic groups.
3. There is no difference between consumers' preferences for inclusive recreation services, based on gender.	Not rejected.	Males prefer inclusion more than females but no statistically significance difference found.

Table 4.1 (con't)

4. There is no difference in consumers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.	Not rejected.	No difference between groups.
5. There is no difference in consumers' preference for inclusive recreation services, based on type of residence.	Not rejected.	Those living in more restrictive living environments prefer inclusion but the difference was not found to be statistically significant.
6. There is no relationship between consumers' preferences for inclusive recreation services and their age.	Rejected.	Younger participants preferred inclusive recreation. Older participants preferred noninclusive recreation.
7. Caregivers do not prefer inclusive recreation services over noninclusive recreation services.	Rejected.	Caregivers prefer inclusive recreation.
8. Consumers and caregivers do not differ in their preferences fo inclusive recreation services.	Rejected.	The degree to which caregivers prefer inclusion is much greater than the degree that consumers prefer inclusion.
9. There is no difference in caregivers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.	Not rejected.	No difference between those with experience and those without experience in inclusive recreation.
10. There is no relationship between caregivers' preferences for inclusive recreation services and their years of experience as a caregiver.	Not rejected.	No statitically significant difference. However, more experienced caregivers preferred inclsuion with basketball, bowling, and crafts.

Table 4.1 (con't)

11. There is no relationship between caregivers' preference for inclusive recreation services and their age.	Not rejected.	No statitically significant difference. However, more experienced caregivers preferred inclsuion with basketball, bowling, and crafts.
12. There is no relationship between caregivers preferences for inclusive recreation, based on the extent of training related to inclusion.	Rejected.	Formal training related to inclusion significantly impacted a caregivers preference for inclusive bowling, basketball, and crafts.

Hypothesis 1: Consumers do not prefer inclusive recreation services over noninclusive recreation services.

Descriptive statistics suggested that consumers in this study preferred inclusion over noninclusion. As illustrated in Table 4.2, inclusion was preferred most often in bowling. The majority of consumers (64.5%) said they preferred inclusive bowling opportunities over noninclusive bowling experiences. Respondents also reported preferences for inclusion while listening to music

Table 4.2: *Consumers' preferences for inclusive recreation, according to specific activities.*

Activity	**(*n* = 62)**	**% of Consumers Reporting Preference for Inclusion Per Activity Experience**
Bowling	(*n* = 40)	64.5%
Listening to music	(*n* = 35)	56.5%
Going for a walk	(*n* = 34)	54.8%
Basketball	(*n* = 33)	53.2%
Watching television	(*n* = 32)	51.6%
Working on a hobby	(*n* = 30)	48.4%

(56.5%), going for a walk (54.8%), playing basketball (53.2%), and watching television (51.6%). Participating in hobbies/crafts was the only activity in which consumers reported a slight preference for noninclusive. With regard to working on a craft or hobby, 48.4% of the consumers stated a preference for engaging in this activity with individuals without a disability.

When activities were categorized as passive or active, the data continued to reflect consumers' preference for inclusive versus noninclusive recreation opportunities. Specifically, 58.3% of the consumers said they preferred inclusion when participating in physical activities (i.e., bowling, playing basketball, and going for a walk). Similarly, 54.5% of those interviewed preferred inclusion when engaging in passive activities (i.e., watching television, listening to music, and participating in a hobby or craft).

Overall, an alpha reliability coefficient of .80 was obtained when assessing the reliability of consumers' responses concerning their preferences for inclusive or noninclusive recreation. Thirty-seven percent (37%) of those interviewed were 100% congruent in their preference for inclusion or noninclusion. That is, 13 participants (21%) indicated a 100% preference for inclusive services, whereas 10 (16.1%) indicated a 100% preference for noninclusive services. Other consumers (16.1%) reported a preference for inclusion in five out of the six activities presented, whereas 11.3% preferred inclusion in four of the six activities presented. Nearly 13% (12.9%) preferred inclusion in three of the six activities presented, 14.5% preferred inclusion in two of the six activities presented, and 8% preferred inclusion in one of the six activities presented.

Hypothesis 2: There is no difference between consumers' preferences for inclusive recreation services, based on level of cognitive impairment.

The hypothesis was not rejected. Using an independent-sample *t*-test no statistically significant difference was found between diagnostic groups, given the sum of consumers' responses regarding their preference for inclusive or noninclusive recreation experiences. In addition, using a stronger statistic (i.e., chi-square at the .05 level of significance), no statistically significant relationship was found between diagnostic groups and the preference for inclusion within each activity presented.

Participants diagnosed with mild cognitive impairment ($n = 30$) reported a preference for inclusion while bowling (60%), playing basketball (56.7%), and watching television (53.3%). As observed in Table 4.3 those individuals with mild cognitive impairment stated a preference for inclusion in music and hobbies 50% of the time. Those with mild impairment were least likely to prefer inclusion while going for a walk (46.7%).

Table 4.3: *Consumers' preferences for inclusion, according to consumer diagnosis.*

Activity	**Mild** **(*n* = 30)**	**Moderate** **(*n* = 32)**
Bowling	60.0%	68.8%
Basketball	56.7%	50.0%
Walking	46.7%	62.5%
Watching TV	53.3%	50.0%
Listening to music	50.0%	62.5%
Completing crafts	50.0%	46.9%

In comparison, those individuals with moderate cognitive impairment (*n* = 32) reported a preference for inclusion while bowling (68.8%), listening to music (62.5%), and going for a walk (62.5%). Equal responses were given for inclusion while playing basketball (50%) and watching television (50%). Those with moderate cognitive impairment were least likely to prefer inclusion when engaged in a hobby or craft (46.6%).

Hypothesis 3: There is no difference between consumers' preferences for inclusive recreation services, based on gender.

The hypothesis was not rejected. Descriptive statistics suggested that males preferred inclusive recreation services more than did females. However, no statistically significant relationship was found between preference for inclusive recreation and gender. A chi-square, nonparametric test, at the .05 level of significance, was used in analyzing each activity and gender. Also, the sum of inclusive responses and gender were analyzed using an independent-sample *t*-test (at the .05 level of significance). In both analyses, no statistically significant relationship was found.

As described in Table 4.4, males reported a greater preference for inclusive recreation opportunities then did females (*n* = 19).

Table 4.4: *Preference for inclusive recreation, based on gender.*

Activity	**Male Preferences (*n* = 43)**	**Female Preferences (*n* = 19)**
Bowling	67.4%	57.9%
Listening to music	62.8%	42.1%
Basketball	58.1%	42.1%
Going for a walk	58.1%	47.4%
Watching television	53.5%	47.4%
Working on a craft	53.5%	36.8%

Males preferred inclusion when bowling (67.4%), listening to music (62.8%), playing basketball (58.1%), going for walks (58.1%), watching television (53.5%), and working on crafts (53.5%). Females preferred inclusive opportunities when bowling (57.9%), viewing television (47.4%), going for walks (47.4%), listening to music (42.1%), playing basketball (42.1%), and to a lesser extent when working on crafts (36.8%).

Hypothesis 4: There is no difference in consumers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.

The hypothesis was not rejected. Using a chi-square, nonparametric test, at the .05 level of significance, no statistically significant relationship was found when comparing consumers' preference for inclusion and their previous exposure to inclusive recreation.

Sixty-nine percent (*n* = 43) of the consumers reported they participated primarily in activities specifically designed for people with disabilities. The types of noninclusive recreation experiences they reported included activities with roommates and staff, special recreation involvement, recreation with co-workers (with disabilities) sponsored by the referring agency, and participation in Special Olympics. Nearly 10% (*n* = 6) of the consumers reported that they engaged in activities considered inclusive. The inclusive experiences they reported were activities they participated in with family members or best buddies who did not have a disability. Eleven percent (*n* = 7) of the participants said they engaged in a combination of inclusive and noninclusive recreation activities. The majority of these experiences were activities with roommates and staff, a best buddy, a pen pal, or a family member. Finally, 6.5% (*n* = 4) of those interviewed said they participated in activities by themselves and denied participating in recreation activities with members of their apartments or households.

The 43 participants who reported engaging in noninclusive recreational activities also reported a preference for inclusion. As shown in Table 4.5, those

Table 4.5: *Preferences for inclusive recreation, according to consumers' previous involvement in inclusive recreational experiences.*

Activity	**Experience With Non-inclusion (*n*=43)**	**Experience With Both Inclusion and Noninclusion (*n*=7)**	**Experience With Inclusion (*n*=6)**	**Other (*n*=4)**
Bowling	62.8%	71.4%	66.7%	50%
Basketball	58.1%	14.3%	50%	50%
Going for Walks	53.5%	57.1%	50%	50%
Watching Television	51.2%	42.9%	50%	50%
Listening to Music	51.2%	57.1%	66.7%	75%
Working on Craft	51.2%	28.6%	33.3%	50%

who participated primarily in noninclusive activities reported a preference for inclusion while bowling (62.8%), playing basketball (58.1%), going for a walk (53.5%), watching television (51.2%), listening to music (51.2%), and completing crafts (51.2%). The participants who said their primary exposure to recreation was inclusive had mixed opinions about their preference for further inclusion. Specifically, those with the most inclusive experience (*n* = 6) preferred inclusion while bowling (66.7%) and listening to music (66.7%). Equal responses for inclusion were given for basketball (50%), watching television (50%), and going for a walk (50%). This group least preferred inclusion when working on a craft (33.3%). The 7 individuals who reported a history of engaging in both inclusive and noninclusive activities also expressed varying interest in inclusive recreational experiences. Seventy-one percent (71.4%) reported a preference for inclusion while bowling, and 57.1% reported a preference for inclusion while listening to music and going for a walk. On the other hand, this group was less likely to prefer inclusion while watching television (42.9%), working on a craft (28.6%), and playing basketball (14.3%). Four participants said they engaged in recreation activities by themselves. These individuals reported they would prefer inclusion while listening to music (75%), going for a walk (50%), bowling (50%), playing basketball (50%), watching television (50%), and working on a craft (50%).

Hypothesis 5: There is no difference in consumers' preference for inclusive recreation services, based on their type of residence.

The hypothesis was not rejected. Using a chi-square, nonparametric test, at the .05 level of significance, no statistically significant relationship was found when comparing consumers' preferences for inclusive recreation and their residence type.

However, descriptive statistics showed that consumers living in the most restrictive environments preferred inclusive recreation over noninclusive recreation. Nineteen participants (30.6%) lived in a state-operated institution for people with developmental disabilities. As illustrated in Figure 4.1 and Table 4.6,

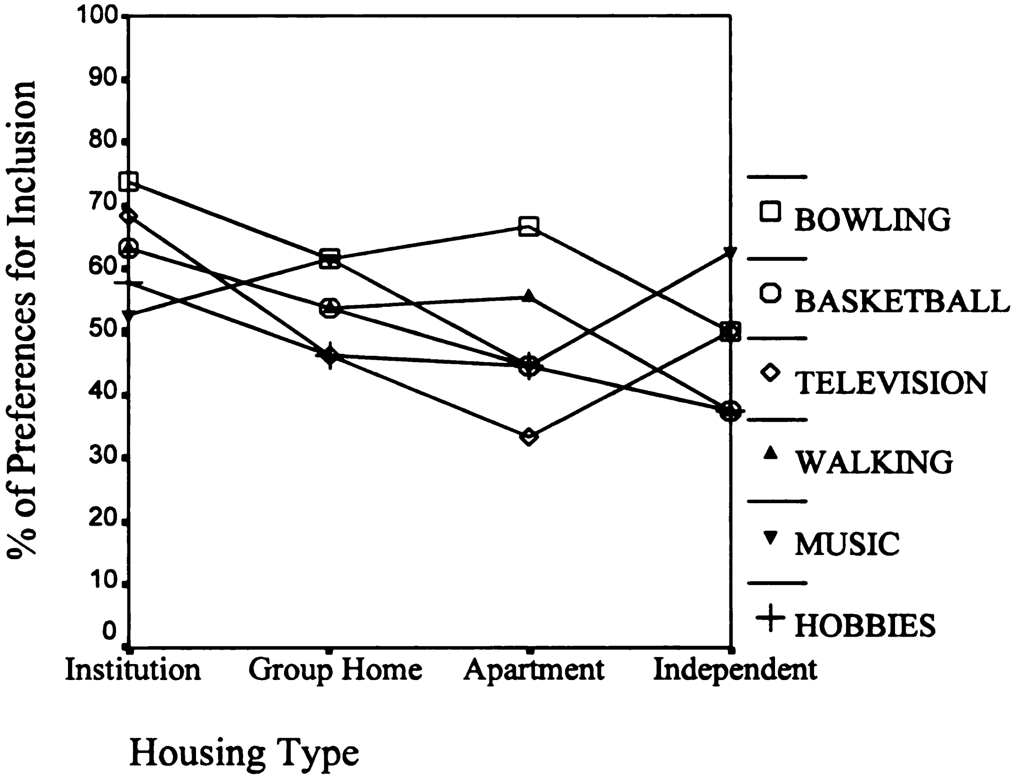


Figure 4.1: Consumers' preference for inclusive recreation according to type of current residence.

Table 4.6: *Consumers' preferences for inclusive recreation according to type of current residence.*

Activity	**Resident of a State Institution (n = 19)**	**Resident of a Group Home (n = 26)**	**Resident of an Apartment Complex (n = 9)**	**Independent or Living With Parent (n = 8)**
Bowling	73.7%	61.5%	66.7%	50%
Basketball	63.2%	53.8%	44.4%	37.5%
Going for a Walk	63.2%	53.8%	55.6%	37.5%
Watching Television	68.4%	46.2%	33.3%	50%
Listening to Music	52.6%	61.5%	44.4%	62.5%
Working on a Craft	57.9%	46.2%	44.4%	37.5%

state home residents overwhelmingly preferred inclusion while bowling (73.7%), watching television (68.4%), playing basketball (63.2%), going for a walk (63.2%), working on crafts (57.9%), and listening to music (52.6%). Similar results were noted for individuals who lived in group homes or adult foster care facilities (n = 26). Group home residents preferred inclusion while bowling (61.5%), listening to music (61.5%), playing basketball (53.8%), and going for a walk (53.8%). Inclusion was less preferred by these individuals while working on crafts (46.2%) or watching television (46.2%). Residents of apartment complexes (n = 9) reported a preference for inclusion in bowling (66.7%) and walking (55.6%). These residents least preferred inclusion while playing basketball

(44.4%), listening to music (44.4%), working on crafts (44.4%), and watching television (33.3%). Participants who lived by themselves or with parents (n = 8) had varying preferences for inclusive recreation. They preferred inclusion only when listening to music (62.5%). Equal preferences were expressed for inclusive bowling (50%) and watching television (50%). Inclusion was least preferred when playing basketball (37.5%), going for a walk (37.5%), and working on crafts (37.5%).

Hypothesis 6: There is no relationship between consumers' preferences for inclusive recreation services and their age.

The hypothesis was rejected. A point-biserial correlation test, at the .05 level of significance (2-tailed), was used to determine whether there was a significant relationship between consumers' age and their preference for inclusion. Consumers' age appeared to have an overwhelming influence on their preference for inclusive or noninclusive recreational experiences. Specifically, for all activities, a negative correlation was found between consumers' age and preference for inclusive experiences (see Table 4.7). The younger the participant, the greater the preference for inclusion. Conversely, the older the person, the greater the preference for noninclusion. Using the point-biserial correlation test, comparing raw age and preference for inclusion, age was found to be significantly correlated with preference for inclusion in bowling and television viewing.

Table 4.7: *Correlation between age and preference for inclusive recreation.*

Activity	**Correlation**	**Significance**
Bowling	$r = -.256$*	.046
Basketball	$r = -.177$	.171
Television viewing	$r = -.263$*	.041
Going for a walk	$r = -.118$	.365
Listening to music	$r = -.046$	.715
Working on a craft	$r = -.075$	.563

*Correlation is significant at the .05 level (2-tailed).

Furthermore, when data related to consumer age were pooled, into 10-year increments, an increased likelihood of preferring inclusion was found. As shown in Table 4.8 and Figure 4.2, 100% of those persons 18 to 30 years of age reported

Table 4.8: *Preferences for inclusive recreation, according to age groupings.*

Activity	**18-20 years ($n = 1$)**	**21-30 years ($n = 13$)**	**31-40 years ($n = 11$)**	**41-50 years ($n = 23$)**	**51-60 years ($n = 8$)**	**61-70 years ($n = 2$)**	**71-73 years (n = 3)**
Bowling	100%	100%	63.6%	47.8%	50.0%	50.0%	66.7%
Basket-ball	100%	84.6%	27.3%	47.8%	37.5%	50.0%	66.7%
Walking	100%	76.9%	45.5%	43.5%	37.5%	100%	66.7%
Watching television	100%	69.2%	72.7%	34.8%	37.5%	100%	0%
Listening to music	100%	76.9%	45.5%	43.5%	50.0%	100%	66.7%
Craft work	100%	76.9%	27.3%	39.1%	37.5%	100%	66.7%

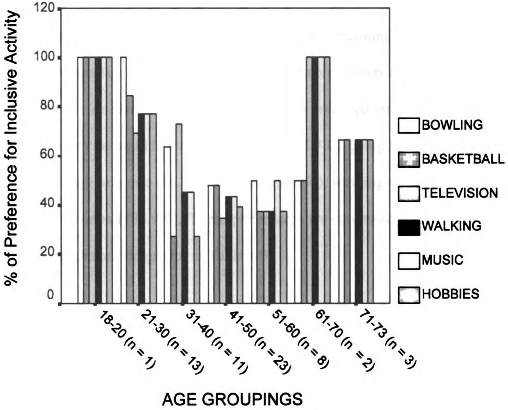


Figure 4.2: Preference for inclusive recreation, based on age of caregiver.

a preference for inclusive bowling opportunities, and a large majority of this group preferred inclusion in all of the activities presented. On the other hand, persons over 30 expressed less preference for inclusion especially with reference to basketball and working on a craft. This pattern of declining preference for inclusion continued through the 60s but again tended toward inclusion among those over 70.

Hypothesis 7: Caregivers do not prefer inclusive recreation services over noninclusive recreation services.

Hypothesis was not supported. There was overwhelming descriptive evidence that caregivers preferred inclusive recreation experiences for the people under their care. As shown in Table 4.9, caregivers preferred inclusion for their clients while they engaged in television viewing (95.7%), going for a walk (95.7%), listening to music (95.7%), bowling (93.5%), working on crafts (91.3%), and playing basketball (88.9%). These preferences are compared with those of consumers (by diagnostic group) in Table 4.9.

Table 4.9: *Caregivers' and consumers' preferences for inclusion.*

Activity	**Mild (*n* = 30)**	**Moderate (*n* = 32)**	**Caregivers (*n* = 46)**
Bowling	60.0%	68.8%	93.5%
Basketball	56.7%	50.0%	88.9%
Walking	46.7%	62.5%	95.7%
Watching television	53.3%	50.0%	95.7%
Listening to music	50.0%	62.5%	95.7%
Completing crafts	50.0%	46.9%	91.3%

Caregivers were congruent and definitive in their reported preferences for inclusive recreation. Specifically, the majority (82.6%) were 100% congruent in their preference for inclusion in all of the activities presented. Nine percent (8.7%) indicated they preferred inclusion in five out of the six activities presented. Nearly 7% reported a preference for inclusion in three out of the six activities, and 2.2% of the caregivers preferred inclusion in only one of the six activities presented.

The support for inclusive recreation was also evident in the subjective comments caregivers added to their survey instrument. Caregivers were noted to state "I've met people with developmental disabilities who . . . know more about TV than me . . . have better taste in music than me . . . have a better average (in bowling) than me . . . are more creative than me . . . are better sportsman than me . . . notice more when they walk than me". Based on these statements and the descriptive statistics it was clearly apparent that caregivers overwhelmingly preferred inclusive recreation opportunities for the consumers under their care.

Hypothesis 8: Consumers and caregivers do not differ in their preferences for inclusive recreation services.

The hypothesis was rejected. Comparing sums of preferences of consumers and caregivers related to inclusion, a statistically significant difference was found ($p < .000$) using a one-sample t-test at the .05 level of significance. This analysis can further be described through the use of descriptive statistics. Specifically, caregivers preferred inclusion for individuals under their care while bowling (93.5%), playing basketball (88.9%), going for walks (95.7%), viewing television (95.7%), listening to music (95.7%), and working on hobbies or crafts (91.3%). Conversely, consumers preferred inclusion but to a lessor extent than caregivers. Specifically, consumers preferred inclusion while bowling (64.5%), playing basketball (53.2%), going for walks (54.8%), watching television (51.6%), listening to music (56.5%), and working on a hobby or craft (48.4%).

These descriptive and statistical findings support the overwhelming difference between caregivers and consumers in their preferences for inclusive recreational activity.

Hypothesis 9: There is no difference in caregivers' preferences for inclusive recreation services, based on their past involvement in inclusive recreation services.

The hypothesis was not rejected. Using a chi-square test at the .05 level of significance, no statistically significant relationship was found when comparing caregivers' preferences for inclusive recreation for the people under their care and their past involvement in inclusive recreation experiences. However, descriptive statistics show that caregivers who had more experience with inclusive programming were found to be least likely to prefer inclusion for the wards under their care. As shown in Table 4.10, caregivers who said they had no experience with inclusion preferred inclusion for their wards 100% of the time when bowling, watching television, going for a walk, listening to music, or working on

Table 4.10: *Caregivers' experience with inclusive recreation and their preference for inclusion.*

Level of Experience With Inclusion	**Bowling**	**Playing Basketball**	**Walking**	**Watching TV**	**Listening to Music**	**Working on Crafts**
No experience (*n* = 3)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Some experience (*n* = 9)	90.5%	90.0%	95.2%	95.2%	95.2%	85.7%
Much Experience (*n* = 33)	95.0%	85.0%	95.0%	95.0%	95.0%	95.0%

crafts. Those caregivers reporting some experience with inclusion preferred inclusion least when their wards engaged in craft activities (85.7%). Caregivers who reported much experience with inclusive recreation preferred inclusion the least with playing basketball (85%).

Hypothesis 10: *There is no relationship between caregivers' preference for inclusive recreation services and their years of experience as a caregiver.*

The hypothesis was not rejected. No statistically significant relationship was found between years as a caregiver and preference for inclusion. Using a point-biserial correlation test, at the .05 level of significance (2-tailed), a negative relationship was found between years as a caregiver and preference for inclusion in television viewing, listening to music, and going for a walk. Even though the results were not significant, the data suggest that the fewer the years of caregiving, the more likely caregivers were to prefer inclusion when their wards engaged in listening to music, going for a walk, and watching television. Conversely, a positive relationship was found with reference to inclusion in playing basketball, working on crafts, and bowling. That is, more experienced caregivers had a greater likelihood of preferring inclusion when their wards engaged in bowling, working on crafts, and playing basketball.

Hypothesis 11: *There is no relationship between caregivers' preferences for inclusive recreation services and their age.*

The hypothesis was not rejected. In assessing the relationship between caregiver age and preference for inclusion, no statistically significant relationship was found, using a point-biserial correlation test, at the .05 level of significance

(2-tailed). However, as with years of caregiving, negative correlations were found with television viewing, going for walks, and listening to music, whereas positive correlations were found with playing basketball, working on crafts, and bowling. Similar conclusions can be drawn from these data as were stated for length of caregiving. In other words, the younger the caregivers, the more they preferred inclusive television viewing, listening to music, and going for walks. On the other hand, older caregivers were more likely to prefer inclusive bowling, working on crafts, and playing basketball for the wards under their care.

This analysis was further described by pooling caregiver data related to age in 10 year increments. Caregivers 20-29 (*n* = 15) preferred inclusion for the consumers under their care while bowling (93.3%), playing basketball (92.9%), watching television (100%), going for walks (100%), listening to music (100%), and working on crafts (86.7%). Caregivers 30-39 years (*n* = 9) preferred inclusion for the individuals under their care while bowling (88.9%), playing basketball (66.7%), watching television (100%), going for walks (100%), listening to music (100%), and working on crafts (88.9%). Caregivers 40 - 49 (*n* = 11) years of age preferred inclusion for the people under their care while bowling (90.9%), playing basketball (100%), watching television (90.9%), going for walks (90.9%), listening to music (90.9%), and in craft work (90.9%). Caregivers 50- 59 (*n* = 6) preferred inclusion while their wards bowled (100%), played basketball (83.3%), watched television (83.3%), went on walks (83.3%), listened to music (83.3%), and worked on crafts (100%). Finally, the caregiver 60 years and older (*n* = 1) preferred inclusive recreation for the individuals under their care when bowling (100%), playing basketball (100%), watching television (100%), going for walks (100%), listening to music (100%), and working on crafts (100%).

Hypothesis 12: *There is no relationship between caregivers' preferences for inclusive recreation, based on the extent of training related to inclusion.*

The hypothesis was rejected. Using a chi-square, nonparametric test, at the .05 level of significance (2-tailed), a statistically significant relationship was found between caregiver training and preference for inclusive bowling ($x^2 = .002$), basketball ($x^2 = .029$), and crafts ($x^2 = .010$). These data suggest that formal training had a significant influence on caregivers' preference for inclusion for the wards under their care. A significant relationship was not found between caregiver training and preference for inclusive television viewing, walking, or listening to music.

The majority of caregivers (80.4%) reported having received formal classroom training to perform their jobs. Nine percent (8.7%) of caregivers reported no training, another 8.7% reported on-the-job training, and 2.2% reported having other relevant training (e.g., certified nurses-aide training). Caregivers who reported receiving formal instruction indicated they had received training in least restrictive services (58.7%), normalization (56.5%), age-appropriate activity (54.3%), integration (52.2%), and inclusion (50%). Appropriate to the changes in service delivery models, caregivers reported less training in mainstreaming (i.e., 34.8% received this training).

Summary

Caregivers (*n* = 46) overwhelmingly preferred inclusion for the wards under their care. Consumers (*n* = 62) appeared to prefer inclusive recreation, but not to the degree that caregivers did. A significant difference ($p < .000$) was found between caregivers' and consumers' preferences for inclusion. It appeared that caregivers' preferences for inclusion were directly correlated with the type of training they had received. In fact, statistical significance was noted when comparing differences in caregivers' preferences for inclusion in bowling, playing basketball, and working on crafts, based on their formal classroom training related to inclusion. No significance was found when comparing caregivers' preferences for inclusion and their age, years of experience as a caregiver, or past involvement in inclusive recreation services. The analysis did, however, suggest a correlation between caregivers' years of caregiving, and age, and their preference for inclusion in bowling, playing basketball, and working on crafts.

Consumer data suggested a preference for inclusion over noninclusion but not enough to be statistically significant. In addition, no significance was found when comparing differences in preferences, based on level of cognitive impairment, gender, past involvement in inclusive recreation services, and type of residence. However, based on descriptive statistics, it appeared that more males than females preferred inclusion, and that consumers living in group homes or state institutions preferred inclusive recreation to a greater degree than those living in less restrictive home environments. Statistical significance was found when comparing the relationship between consumers' age and their preference for inclusion in bowling and television viewing.

CHAPTER V

Conclusions and Discussion

Purpose

My purpose in this study was to identify consumers' and caregivers' preferences for inclusive over noninclusive recreation services. Preferences for inclusion were compared with consumers' level of cognitive impairment, gender, past involvement in inclusive recreation services, type of residence, and age. Preferences for inclusion also were compared with caregivers' years of experience as a caregiver, past involvement in inclusive recreation services, age, and extent of training related to inclusion. Comparisons also were made between the sum of preference for inclusion by consumers and the sum of preference for inclusion by caregivers.

Conclusions

Caregivers Preferences for Inclusive Recreation

Caregivers overwhelmingly preferred inclusive versus noninclusive recreation services for the individuals under their care. Specifically, descriptive statistics revealed that caregivers preferred inclusive recreation activities 89% - 96% of the time. The majority (82.6%) were 100% congruent in their preferences for inclusive versus noninclusive recreation services. In addition, subjective data from caregivers revealed an advocacy for consumer abilities versus limitations. The hypothesis related to caregiver preference for inclusion was rejected therefore providing supportive evidence of the attitudinal impact of the literature related to legislation advocating inclusion (i.e., ADA, 1990; IDEA 1997) and the conceptual framework of person-centered planning (O'Brien et al, 1997; Hewitt & O'Nell, 1998), self-determination (Head, 2003), social role valorization (Wolfensberger, 1983), and normalization (Wolfensberger, 1972).

Self-determination, normalization, and social role valorization are conceptually grounded on the premise that people with developmental disabilities should be empowered to be active contributing members of their community. In this study caregivers preferred inclusive versus noninclusive recreation experiences suggesting that caregivers perceive greater opportunities for enhanced social roles when consumers are provided with inclusive recreation opportunities. This assumption suggests that caregivers believe that inclusion enhances ones' social image and social role. Therefore, supporting the constructs of social role valorization and person-centered planning, the desire for inclusive recreation is perceived by caregivers as an opportunity to demonstrate consumer skills and abilities versus deficits and disabilities thus enhancing their social role and social image.

Further conclusions can be drawn from activity based descriptive statistics. Regardless of the activity presented, caregivers preferred inclusive over noninclusive recreation services. Caregivers indicated they preferred inclusion most when consumers watched television, listened to music, and went for a walk. On the other hand, caregivers were least likely to prefer inclusion when consumers played basketball. This assumption is suggestive that caregivers prefer inclusion when activities are passive and implemented in environments close to home. This result was consistent with the literature that suggests that consumers *engage in* activities which are passive and implemented indoors in their place of residence (Dattilo & Hoge, 1995; Malik, 1990; Sparrow & Mayne, 1990). However, the same result was inconsistent with the literature which suggests that consumers *prefer* to engage in activities which are physical in nature and implemented in the out-of-doors or in community-based environments (Dattilo & Hoge, 1995; Sarrow & Mayne, 1990). In addition, the literature on leisure constraints suggests that consumers do not engage in community activities due to a lack of opportunity, transportation, activity skills, equipment, decision-making, companions, and finances (Hawkins et al., 1999; Sparrow & Mayne, 1990; Verpillot & Dattilo, 1995).

Based on the literature and the results of this study, it appears that caregivers preferences could have an overwhelming influence on the recreation participation patterns of consumers. Even though caregivers report a preference for inclusive recreation, they may control the type inclusive recreation experiences made available to the consumers under their care. This pattern of caregiver control is inconsistent with the conceptual framework of person-centered planning and self-determination. Therefore, suggesting the need for formal training to provide caregivers with the skills and knowledge necessary to successfully implement community-based leisure activities.

Caregivers Preferences Based on Past Experience With Inclusive Recreation

Even though not statistically significant, caregivers reporting experience in programming inclusive recreation were least likely to prefer inclusion for the individuals under their care. Specifically, caregivers reporting *much* and *some* experience programming inclusive recreation preferred inclusion for the individuals under their care 85% to 95% of the time. Conversely, those caregivers (n = 3) with no reported experience providing inclusive recreation preferred inclusive activities 100% of the time. Those caregivers reporting *some* experience programming inclusive recreation were least likely to prefer inclusive crafts and most likely to prefer inclusive television viewing, music listening, and walks. Those caregivers identifying *much* experience programming inclusive recreation were least likely to prefer inclusive basketball.

On the surface, the results suggests that past experiences with inclusive recreation had limited impact on caregivers' preferences for inclusive services. However, this interpretation should be guarded since only 3 of the participating caregivers reported *no* experience and 9 reported *some* experience in programming inclusive recreation services. By combining the data from the majority of caregivers more logical conclusions may be drawn. The data from caregivers with *much* (n = 33) and *some* (n = 9) experience suggests that caregivers are least likely to prefer inclusion when activities are physically challenging and complex in nature. In addition, the data from those caregivers with *some* experience suggests that caregivers were more likely to prefer inclusion when recreational pursuits were passive in nature and able to be implemented close to the consumers home. These results are similar to previous results and further support the need for enhanced caregiver training to assist in fostering a variety of positive community-based leisure opportunities that are based on consumer choice and empowerment.

Caregivers Preferences Based on Years of Experience

Caregivers with the most experience caregiving identified a greater preference for inclusive bowling, basketball, and crafts. Caregivers with the least experience caregiving identified a greater preference for inclusion in passive, home based, and easy to implement activities (i.e., listening to music, watching television, and going for a walk). This data suggests that experienced caregivers perceive greater comfort in implementing inclusive experiences that are active, more complex, and community-based. Conversely, caregivers with limited experience perceive greater comfort in implementing inclusive experiences that are passive, less skilled, and may be implemented in locations close to home.

These results continue to suggest that caregivers are advocates of inclusion but may be unsure of implementation strategies needed to successfully program inclusive recreation opportunities for the individuals under their care. This appears to be especially true when caregivers are expected to implement recreation activities that are physically active, complex, and community-based. The results suggests this was particularly true in caregivers with limited years of experience caring for individuals with developmental disability.

Caregivers Preferences Based on Caregiver Age

The results of this study reveal that older caregivers have a greater preference for inclusion when their consumers bowl, play basketball, and work on crafts. Conversely, younger caregivers identify a greater preference for inclusion when consumers watch television, listen to music, and go for a walk. As with years of experience in caregiving, the younger caregiver appears to advocate inclusion in passive, home-based activities that are relatively easy to implement. On the other hand, the older caregiver appears to advocate inclusion in more active, complex, and community-based activities (i.e., basketball, bowling, crafts). The data continues to reveal that caregivers value inclusion, regardless of age and years of experience. However, the less experienced, younger caregiver supports inclusion in activities that are passive and home based. Whereas the older, more experienced caregiver supports inclusion in active, community-based recreation pursuits. Concluding that younger caregivers have enhanced need for training that would support their abilities to implement recreation in physically active, community-based, leisure pursuits.

Caregiver Preference and Degree of Training

Finally, a statistically significant difference was found between caregiver training (i.e., formal classroom) and their preference for inclusive bowling, basketball, and crafts. This data suggests that formal education, versus on-the-job training, positively impacts the caregivers preferences for inclusive recreation services which are physically active, complex, and often implemented in community-based facilities. This, combined with literature related to leisure constraints and consumer participation patterns, provides further evidence that formal education related to inclusive recreation will positively influence the preference for inclusion in challenging community-based leisure activities.

Summary of Caregiver Preferences

Based on the results of this study, caregivers overwhelmingly preferred inclusive recreation for the individuals under their care. Conclusions drawn from subjective data suggests that caregivers perceived that inclusive experiences foster positive social images due to a focus on consumers' abilities versus disabilities. However, caregivers of younger age and less experience preferred inclusion most when consumers watched television, listened to music, or went for walks. Conversely, caregivers with increased experience and age preferred inclusion most when consumers played basketball, bowled, or worked on crafts. Thus concluding that caregivers value inclusion but younger caregivers and caregivers of limited experience would benefit from enhanced formal training to better supervise and instruct persons under their care in community-based recreation activity that is physically active and complex in nature. In addition, this study revealed that formal classroom instruction was the most effective training strategy influencing caregiver preference for inclusion.

Consumer Preference for Inclusive Recreation

Descriptive statistics suggests that consumers with developmental disabilities prefer inclusive recreation but not to the same extent as their caregivers. Consumers reported a near 50% or greater preference for inclusion with all presented activities. Interesting conclusions were drawn when comparing the preference for inclusion and noninclusion as it relates to specific activities. Consumers were more likely to prefer inclusion when bowling and less likely to prefer inclusion when working on crafts. This outcome appears logical since bowling is available in most communities, is relatively easy to perform (i.e., gross motor versus fine motor), and provides opportunities for socialization and off-task behavior. On the other hand, craft work involves increased fine motor skills, concentration, on-task behavior, is implemented at home, and is outcome versus process based. These results suggests that consumers prefer inclusion when activities are social, gross motor in orientation, and provide opportunity for off-task behavior.

In addition, since bowling is available in most communities, people with developmental disabilities have greater opportunities to participate in bowling, perceiving increased competencies and skills and thus having an increased desire for inclusive bowling experiences. This outcome supports the principle of mainstreaming (Smith et al., 1996; Vaughan & Winslow, 1979), which advocates skill development before inclusive opportunities.

Consumer Preferences and Gender

Contrary to previous literature (Sparrow & Mayne , 1990), descriptive statistics suggested that gender influenced consumers' preferences for inclusive recreation services. Males preferred inclusion to a greater extent than did females. This outcome could be the result of the fewer female (*n* = 19) participants involved in this study and the comparative age range of female participants (i.e., 25 to 58 years). However, the results may also suggest that gender inequities have affected people with disability to a similar extent as people without disabilities. The historical belief that males are more competitive may influence their desire for increased inclusive opportunities. Conversely, the historical notion that females avoid risk taking and prefer to engage in activities in their homes may also influence females' preferences for noninclusive recreational experiences. Gender choices may also be explained through caregiver influences. As with other areas of gender identity, the influences of caregivers on leisure preference and patterns may have an overwhelming impact on the directional decision-making of the consumer. In other words, if the caregiver prefers inclusive recreation opportunities the consumer is more likely to be influenced to make similar choices for self.

Consumer Preference Based on Diagnosis

No statistical significance was found when comparing consumers' preference for inclusion with their diagnoses (i.e., moderate or mild mental retardation). That is, similar proportions of consumers with moderate cognitive impairment and those with mild cognitive impairment preferred inclusion.

Persons with mild cognitive impairment reported they preferred inclusion least while walking and most while bowling and playing basketball. Consistent to the leisure preference research of Sparrow and Mayne (1990), the preference for inclusive bowling and basketball suggests a desire for inclusion during activities that are physical, competitive, community-based, and social in nature. The desire to be equal competitors with peers without disabilities may be a consumer interest as evidenced by the preference for inclusive bowling and basketball. The preference for noninclusive walking suggests an effect of previous training and increased freedom of movement given to individuals with less cognitive deficits. Understandably, those with mild cognitive impairment are more likely to independently walk to and from work, receive pedestrian training services, and have greater freedom of movement as compared to persons with greater cognitive deficits.

Comparatively, those persons with moderate cognitive impairment were more likely to prefer inclusion while engaged in bowling, walking, and listening to music. This diagnostic population preferred inclusion the least while engaging in crafts or hobbies. With the exception of bowling, these data suggests that people with increased cognitive deficits prefer inclusion in activities that are implemented closer to home (i.e., listening to music, going for a walk), passive, and less demanding cognitively.

In addition, the fact that both diagnostic groups (i.e., moderate & mild mental retardation) most preferred inclusive bowling suggests the desire for participation with able-bodied peers in a social, gross motor, community-based activity. Conversely, the fact that both diagnostic groups least preferred inclusive crafts reinforces the fact that consumers do not prefer inclusive activities which require increased cognitive effort (i.e., concentration, on-task behavior) and complex physical skills (i.e., fine motor, eye-hand coordination).

Consumer Preference Based on Consumer Age

A significant correlation was found when comparing consumers' age to their preference for inclusion in bowling and television viewing. In addition, the analysis suggested that the younger the consumer, the greater the preference for inclusive recreation services. Conversely, this analysis also suggested a preference for noninclusive recreation among middle aged (i.e., 30 to 60 years) consumers with developmental disabilities. This outcome can be directly related to the inclusive movement and suggests the persuasive influence of changing service delivery models (i.e., self-determination, person-centered planning), legislation related to nondiscrimination (i.e., Rehabilitation Acts of 1973; 1978; ADA of 1990), enhanced training of persons with disabilities, and advocacy of inclusion in schools (i.e., IDEA, 1997), community rehabilitation agencies, and other organizations serving individuals with disabilities. Understandably, the older the consumer the higher the likelihood that they would have engaged in noninclusive services in their youth. Consumers over 30 years of age were more likely to be exposed to self-contained special education classrooms, sheltered employment, special recreation services, and large group or institutional living environments. Since exposure and past practices mold individual preferences I would expect a greater preference for noninclusive recreation services among older consumers. This effect suggests that increased exposure to inclusive opportunities in early life carry over into a desire for a preference for inclusive opportunities with age (Edwards & Smith, 1989; Kleiber et al., 1990; McAvoy et al., 1989; Sowers & Powers, 1992).

Consumer Preference Based on Living Environments

On the basis of descriptive statistics, those individuals living in the most restrictive environments (i.e., state institutions and group homes) were most likely to prefer inclusive recreation services. On the other hand, people who lived in apartments or independently were less likely to prefer inclusion. One might conclude that consumers from apartments and independent living situations had been empowered by increased choices and decision-making opportunities. Conversely, individuals residing in more restrictive living environments prefer inclusion due to a lack of empowerment and decision-making opportunities. These results provide support of previous research which explores the value of empowerment and decision-making (Phillips, 1992) on the lives of persons with developmental disability.

When preferences were analyzed per activity, individuals living in apartments preferred inclusion most when bowling and least when viewing television, playing basketball, listening to music, or working on crafts. Based on current and previous findings, apartment residents appear to prefer inclusion when bowling because it is social and community-based. On the other hand, the fact that the same consumers (i.e., apartment residents) preferred noninclusion in 4 of the 6 activities presented suggests a need for further analysis. Even though not specifically evident in this research, residents of apartments may prefer noninclusive recreation due to difficulty negotiating the constraints that are associated within maintaining a home, working, and scheduling and organizing leisure experiences. Previous research indicates that transportation (Hawkins et al., 1999; Sparrow & Mayne, 1990), finances (Hawkins et al., 1999; Sparrow & Mayne, 1990; Taylor et al., 1986) fatigue (Hawkins et al., 1999), lack of skill, resource awareness (Hawkins et al., 1999; Sparrow & Mayne, 1999), and lack of companions (Hawkins et al., 1999) are common constraints for persons with developmental disability when attempting to pursue leisure activities. These constraints may not only cause barriers to an active leisure lifestyle but in turn cause barriers to inclusive leisure opportunities.

Finally, consumers living with family or independently preferred inclusion most when listening to music and least when playing basketball, going for a walk, or working on a craft. These results suggests that consumers residing in the least restrictive living environments preferred inclusion most with passive activities and least with activities that are more physically complex and require increased on-task behaviors. Concluding that consumers residing independently or with family members may not be empowered to engage in physical, complex, and cognitively oriented activities with able-bodied peers.

Consumer Preference Based Upon Previous Involvement in Inclusive Recreation

In responses to open-ended questions, consumers reported they engaged primarily in activities that were noninclusive. The activities they reported involved participation in leisure pursuits with home staff and other people from their place of residence. However, the majority of caregivers perceived that consumers engaged primarily in inclusive recreation services. This discrepancy in responses might have arisen because caregivers believed that inclusion occurred when they (the caregivers) engaged in community-based activities with the individuals under their care. This perception is contrary to the true spirit of inclusion, which promotes the development of social relationships between people with and without disabilities excluding caregivers. According to the theory of normalization (Wolfensberger,1972; 1983; 1995a), paid caregivers cannot act as substitutes for inclusive partners. The relationships that are established through buddy programs, pen pals, and other partnerships (Bork, 1989; Sable & Gravink,1995; Salzberg & Langford,1981) should foster friendships and enhance the role of persons with disabilities by giving them opportunities to contribute and be valued as members of groups, activities, or communities.

Reliability of Consumer Data

Finally, data obtained from consumers in this study were recognized as congruent and reliable, supporting the principles of consumer empowerment, self-determination, and person-centered planning. In this investigation, reliability was calculated using the percentage of consumer agreement (i.e., preferences for) to inclusive recreation services. A reliability coefficient of .807 was obtained, supporting the use of closed-ended, either-or questioning supported by pictorial cues (Sigelman & Budd, 1986; Sigelman et al., 1982; Wadsworth & Harper, 1991) when interviewing people with cognitive impairments. In addition, the results of this study suggest that people with mental retardation are able to make personal choices for themselves related to their leisure preferences. Therefore, supporting the intention, value, and mission of person-centered planning and self-determination.

Summary of Consumer Preferences

Consumers preferred inclusion but not to the same degree as their caregivers. Consumers preferred inclusion most while bowling concluding that consumers preferred inclusion when activities involved gross motor skills, socialization, and were community-based. Consumers least preferred inclusion when engaged in crafts, concluding that consumers preferred inclusion least when activities were passive, required increased cognitive efforts, and required complex physical skills.

Individuals with mild cognitive impairment were more likely to prefer inclusive activities that were physical, competitive, social, and implemented in community environments (i.e., bowling, basketball). With the exception of bowling, individuals with moderate cognitive impairment were more likely to prefer inclusion in activities that were passive, less cognitively demanding, and implemented close to home (i.e., listening to music, going for a walk).

Even though not statistically significant, there was evidence to conclude that males preferred inclusive recreation to a greater degree than females. This data suggests that gender inequities have affected people with disabilities to a similar extent as people without disabilities.

Younger consumers were more likely to prefer inclusive recreation services while middle-aged (i.e., 30 - 60 years) consumers were more likely to prefer noninclusive recreation services. These results were no doubt the influence of changing service delivery models that advocate and provide inclusive services. Concluding that increased exposure to inclusive opportunities in early life increased the desire for inclusive opportunities in later life.

Individuals with developmental disability living in more restrictive environments were more likely to prefer inclusive recreation services. Conversely, those individuals living in least restrictive environments were more likely to prefer noninclusive recreation services. It may be concluded that those living in more restrictive environments prefer inclusion as it represents decision-making and empowerment. On the other hand, those residing in less restrictive environments have increased opportunities for empowerment and decision-making and are empowered to choose their preferences based on their skills, wishes, and aspirations. However, the concern that emerges with this conclusion was that consumers residing in apartments have increased barriers to leisure activity which may negatively impact their preference for inclusive leisure opportunities.

Finally, the results of this study clearly suggest that consumers with moderate and mild cognitive impairment are reliable decision makers. Concluding that individuals within these diagnostic groups should be encouraged to be active decision makers involving leisure choices, training, and service evaluation.

Discussion, Implications, and Recommendations

Contributions to the Body of Knowledge

This was the first known study which explored consumers' preferences for inclusive versus noninclusive recreation services. The consumers participating in this investigation had diagnoses of either moderate or mild mental retardation. In addition, this study explored and compared the preferences of caregivers for inclusive versus noninclusive recreation services.

The findings revealed that consumers generally preferred inclusive recreation but not to the degree that a statistically significant relationship was found between the consumers' preferences for inclusion and their diagnosis, gender, past experience with inclusive recreation, and housing. However, a statistically significant relationship was found when comparing consumers age and their preferences for inclusive bowling and television viewing. Descriptive statistics revealed that younger (18 - 30 years) consumers reported a preference for inclusion while middle aged (31 - 60 years) consumers reported a preference for noninclusion. This data reveals the significant influence of legislation which have, over the past 30 years, advocated inclusion and changed consumer service delivery models for persons with developmental disabilities. Descriptive data revealed that males preferred inclusive recreation to a greater extent than females. In addition, consumers that lived in group homes and state institutions were more likely to prefer inclusion when compared to individuals that lived in apartment complexes or by self or with family members. In responses to open-ended questions, consumers revealed they did not participate in inclusive recreation activities. On the contrary, the majority of consumers reported they engaged in activities with home staff and other people from their place of residence or employment. Finally, when calculating the percent of consumer agreement to inclusive recreation services a reliability coefficient of .807 was obtained. This data overwhelmingly supports the fact that consumers with diagnoses of moderate and mild cognitive impairment are reliable sources of information related to personal choice and preferences in leisure.

This study additionally revealed that caregivers overwhelmingly preferred inclusive recreation services for the consumers under their care. However, no statistically significant relationship was found between caregivers' preferences for inclusion and their experience implementing inclusive recreation, years of experience as a caregiver, and their age.

Descriptive statistics revealed that younger caregivers and caregivers with less experience were more likely to prefer inclusion when consumers listened to music, watched television, and went for a walk. On the other hand, older caregivers and caregivers with more experience were more likely to prefer inclusion when consumers played basketball, bowled, and worked on crafts. Suggesting that caregivers with increased experience and age were more likely to prefer inclusive recreation when activities were physical, social, and community-based. Conversely, those caregivers with fewer years of experience were more likely to prefer inclusive recreation when activities are passive, less complex, and implemented close to home.

In addition, descriptive statistics revealed that the majority of caregivers reported *much* experience in programming inclusive recreation services. Yet, data from consumers revealed that they engaged primarily in noninclusive recreation opportunities. This outcome suggests that caregivers may not fully understand the definition of inclusion as it was defined for this investigation.

A statistically significant relationship was found when comparing caregiver preference for inclusive recreation to formal classroom training related to inclusion. This result suggests that formal classroom training is an effective training when empowering the attitudes of caregivers related to consumer services.

Finally, when comparing the sum preferences of caregivers to consumers, related to inclusion, a statistically significant difference was found. This data reveals that both study groups (i.e., caregivers and consumers) preferred inclusive recreation but caregivers' preferences for inclusive recreation was much greater than consumers' preferences for inclusive recreation.

Theoretical Contributions

On the basis of caregiver inquiry, the results of this investigation support the influence of legislation advocating inclusion, the evolution of person-centered planning and self determination, and the theories of normalization and social role valorization. Caregivers overwhelmingly preferred inclusion with all activities presented. Subjectively, caregivers supported the abilities versus limitations and disabilities of consumers. Caregivers preferred inclusion at a statistically greater rate than their consumers. These results revealed that caregivers are advocates of inclusive recreation but may not be able to implement well rounded community-based leisure activities for the consumers under their care. The fact that younger caregivers and caregivers with less experience prefer inclusion with passive, home-based recreational pursuits suggests that these caregivers may not possess the skills and knowledge necessary to successfully implement inclusive activities that are physically active, complex, or community-based. The investigator must also question caregiver insight related to the philosophical principals that guide and direct the inclusive process. The principals of mainstreaming and inclusion are grounded on assuring that services are implemented in the most normal and least restrictive environments. In addition, the principals of normalization and social role valorization are grounded on evidence that people are valued based on their social role and contributions to activities, groups, and their communities.

Caregivers preferring the implementation of inclusive recreation in their home are not allowing individuals with disability to become active contributing members of their communities. The results of this investigation suggests that younger, less experienced caregivers are well meaning but may not have the skills, knowledge, and resources needed to successfully implement community-based inclusive recreation services. The residual effect is that consumers are more likely to be denied access to a variety of functional, life-long, community-based, inclusive leisure opportunities.

Another noted concern revealed in this investigation is the fact that the majority of caregivers reported much experience programming inclusive recreation while the majority of consumers revealed minimal experience with inclusive recreation. The investigator concludes that caregivers may be unclear of the true definition of inclusion as it was used in this investigation. One can conclude that caregivers believed that inclusion occurred when they (the caregivers) engaged in community-based activities with the consumers under their care. This perception is contrary to the true spirit of inclusion, which promotes the development of social relationships between people with and without disabilities. According to the theory of normalization, paid caregivers are not legitimate substitutes for inclusive partners.

Implications and Recommendations for Recreation Services for People with Developmental Disabilities

On the basis of the results from the consumer inquiry, community-based therapeutic recreation services should provide a combination of special recreation and inclusive recreation programs. Special recreation (i.e., noninclusive recreation) may be geared to middle-aged or older individuals with developmental disabilities. Inclusive services should be the primary focus of services delivered to persons 30 years and younger. Best buddies, pen pals, and organizational partnerships are supported in the literature as successful inclusive recreation strategies and should be continued.

Past service delivery models for community-based therapeutic recreation have focused on the process of mainstreaming (Broida, 1995; Richardson et al., 1987; Schleien & Green, 1992; Vaughan & Winslow, 1979), with the goal to ensure the development of prerequisite recreation and social skills prior to moving a person into an inclusive model of service delivery. Past history and the nature of developmental disability have shown that these approaches, even though well intended, rarely enable a person with a disability to move beyond segregated (i.e., noninclusive) programming. The buddy system (Salzberg & Langford, 1981) has been effective, but it requires considerable self-direction from the able-bodied buddy to facilitate a continuation in services. Therefore, the buddy approach remains effective only when the person without a disability is committed to the relationship he or she has with the person with a disability and has the time and energy to direct recreational activities without intervention from the recreation or therapeutic recreation department.

Therefore, it is recommended that practical approaches to inclusive recreation services be implemented and evaluated for effectiveness. Pilot programs that combine the best practices of the current literature are encouraged.

Evaluation that assures the input of the involved consumers with disabilities and partners without disabilities are highly recommended.

As with person-centered planning, individual wishes, aspirations, and skills should be considered when providing services to people with and without developmental disabilities. Consumers should be asked what they prefer in regards to recreational activities offered by therapeutic recreation or recreation departments. Recreation professionals should consider consumers' opinions and wishes by actively engaging them in interest surveys, needs assessments, and other forms of program review and evaluation. Practitioners are reminded that consumer data in this study were considered highly reliable suggesting that consumers with diagnosis of moderate or mild mental retardation should be empowered to assist in decision making related to programming and recreation service delivery. Practitioners are also encouraged to consider the role consumer might play on departmental advisory and policy-making boards.

Implications and Recommendations for Services to Caregivers

Based on the results of caregiver inquiry, therapeutic recreation specialists, inclusion specialists, home supervisors, case managers, and supervisors of caregivers are encouraged to create opportunities to educate caregivers about alternate types of inclusive recreation services. Providing inservice training, to group home staff and others, is one strategy professionals could take to enhance the knowledge of caregivers related to inclusive recreation services. In particular, training should be provided to caregivers with minimal experience caregiving and those of younger age. Training should focus on strategies to successfully facilitate inclusion in activities that are physically active, social, cognitively complex, require fine motor effort, and are implemented in community-based environments.

In addition, caregiver training should focus on the true definition of inclusion and its' applications in a recreation setting. Caregivers should be educated that inclusion occurs when consumers engage in activity with able-bodied peers. Caregivers should be reminded that they (i.e., the caregiver) cannot act in the capacity of a leisure buddy and meet the expectations of inclusion, normalization, and social role valorization.

Implications for Research

Future research is needed to further investigate the degree to which consumers with developmental disabilities prefer inclusive recreation services. The results of this study suggest that consumers prefer inclusion most in bowling and least in crafts. Future research, at local levels, should explore the preferences for inclusion in a variety of programming areas. Research should also represent preferences of individuals within broader age groups with a focus on adolescents and teens since these age groups were not represented in the current study.

Future researchers may also wish to explore the constraints or barriers that inhibit a consumer from actively engaging in inclusive recreation experiences. This study suggests that consumers in apartment complexes may experience increased constraints secondary to the responsibilities associated with maintaining a home. Research exploring the barriers and negotiation patterns of individuals within various living accommodations should be explored to better assist persons with disabilities in managing their leisure time.

Research should also explore the variables that foster a successful inclusive experience. An appropriate investigation would explore the support mechanisms that are most successful in fostering inclusion for consumers with developmental disabilities. Research should explore the type of activities that are best in fostering a successful inclusive experience (e.g. competitive versus noncompetitive, passive versus active, community-based versus non community-based, clinics versus extended programs).

On the other hand, research should explore the strategies that facilitate positive experiences for persons without disabilities or inclusive buddies. Researchers should focus on the effectiveness of specific partner training and support mechanisms that assist in assuring a successful inclusive experience for people without disabilities. Research should also explore the motives that initially encourage individuals to become inclusive buddies. In addition, research should explore the benefits and constraints of being an inclusive buddy. With this knowledge, programs can be designed to enhance the benefits of such partnerships for both the consumer and the person without disability.

In addition, it is important to compare the various forms of inclusion that are advocated in the literature and are recommended as a result of this study (e.g., buddy programs, transitional services, zero exclusion). Research comparing the success of these strategies will develop best- practice techniques that can be used to successfully foster inclusion for people with developmental disabilities. As stated previously, a thorough evaluation of these programs should involve the consumers, able-bodied participants, and caregivers.

Finally, this study offers additional evidence that consumers with moderate and mild cognitive impairment are reliable reporters of their preferences. Future research should explore the leisure wishes, desires, and aspirations of persons with developmental disability through consumer interviews including closed-ended and open-ended questioning. In particular, future research examining the validity of open-ended questioning with this consumer group is highly recommended. In addition, consumers with more severe cognitive impairments should be included in future research and evaluated for reliability and validity of self report.

APPENDIX A

Photograph Release

Inclusive Recreation Services
The Preferences of Consumers and Caregivers
A Comparison Study

Consent to Photograph

You agree to allow Mary Lou Schilling to take and use photographs of yourself (or your ward) as part of a research project related to inclusive recreation services. The photographs to be taken will show you participating in bowling, listening to music, watching television, working on a craft or hobby, taking a walk, and playing basketball. Your name will not be used with any of the photographs or in any published documents about this research project.

It is expected that it may take up to 2 hours to complete all the photographs. To thank you for your time and involvement in this project you will receive a small gift from the investigator. Your participation is voluntary and you may quit at any time. If you remove yourself from this project, all photographs taken of you will be destroyed. Having yourself photographed presents no known risks.

The photographs will be used throughout a research investigation (May 2002 through September 2002) asking people if they would prefer to engage in inclusive or non-inclusive recreation. The photographs will be published in Mary Lou Schilling's dissertation. They will be stored in a locked cabinet and password protected computer, in the locked office of Mary Lou Schilling. The photographs may also be used in state, national, or international publications for up to 5 years following the completion of this research project. The photographs will be appropriately destroyed (shredded) and deleted 5 years following the completion of this project.

If you have any questions about this project, do not hesitate to contact the primary investigators at:

Mary Lou Schilling
1058 W. Deerfield Rd.
Mt. Pleasant, MI, 48858
Phone: (989) 773-2151

Dr. Richard Paulsen
131 Natural Resources Building, M.S.U
East Lansing, MI, 48824-1222
Phone: (517) 353-5190 ext. 114

If you have any questions regarding your rights as a participant, or are dissatisfied with this project, you may contact:

Ashir Kumar, M.D.
Chair of the University Committee on
Research Involving Human Subjects (UCRIHS)
202 Olds Hall, M.S.U.
East Lansing, MI, 48824
Phone: (517) 355-2180
Fax: (517) 432-4503
e-mail: <ucrihs@msu.edu>

Your signature below indicates that you voluntarily agree to participate in this study. Your signature also allows Mary Lou Schilling to take and use the completed photographs for only the purposes stated above.

Participant Signature: ______________________ Date:______
Responsible Party: ___________________________ Date:______

(Necessary if participant is 17 years or not his/her own guardian)

Person presenting or reading this document to the participant:

____

Date:_____________

cc: participant

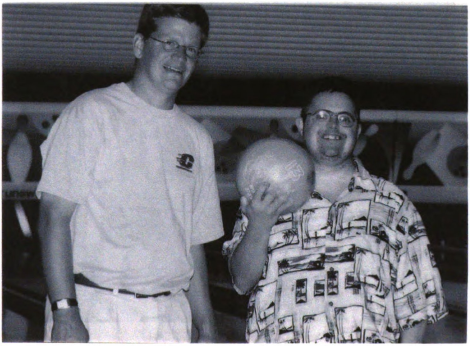
APPENDIX B

Pictorial Cues (Photographs)

Appendix B: Photographs 1 and 2

Photograph 1

Photograph 2



Photographs 3 & 4.

Photograph 3

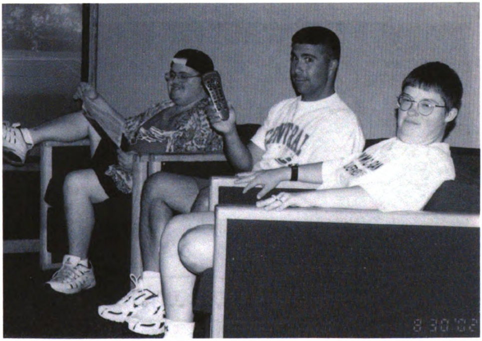
Photograph 4

Photographs 5 & 6

Photograph 5

8 30

Photograph 6



8 30 '02

Photographs 7 & 8.

Photograph 7

Photograph 8

Photographs 9 & 10.

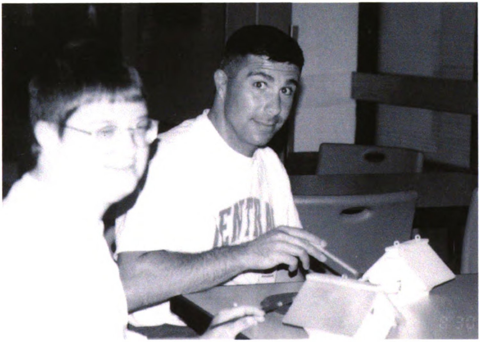
Photograph 9

Photograph 10

Photographs 11 & 12.

Photograph 11

Photograph 12



APPENDIX C

Panel of Experts Survey Tool

Appendix C: Panel of Experts Survey Tool

Introduction and Instructions:

You are asked to assist in the development of a tool which will be used when questioning people with mental retardation. The purpose of the inquiry is to investigate whether people with mental retardation prefer inclusive or non-inclusive recreation experiences. The attached photographs will be used as pictorial cues in the questioning process.

Since you have a great deal of experience in servicing people with mental retardation, I'd like your input on the clarity of the photographs represented. Please look at each photograph separately and respond to all questions presented below. The photographs are numbered 1 through 12.

This survey is expected to take approximately 15 minutes to complete. Please return your responses to me in the enclosed, self-addressed envelope, by (date). Your participation in this investigation is greatly appreciated.

Photograph #1: People bowling:

1. It is obvious that both people bowling have disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that people in the photograph have disability? Yes No

3. What feature is most emphasized in this photograph?
   - ( ) the people
   - ( ) the activity
   - ( ) the environment
   - ( ) other, please identify ________________

4. Does this photograph represent a non-inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement.

Photograph #2: People bowling:

1. It is obvious that one person bowling has a disability and the other is without disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that one person in this photograph has a disability while the other person does not have disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify ________________

4. Does this photograph represent an inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement.

Photograph #3: People playing basketball:

1. It is obvious that both people playing basketball have disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that people in the photograph have disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify ________________

4. Does this photograph represent a non-inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement.

Photograph #4: People playing basketball:

1. It is obvious that one person playing basketball has a disability and the other is without disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that one person in this photo has a disability while the second person has no disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify ________________

4. Does this photograph represent an inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement

Photograph #5: People watching television:

1. It is obvious that the people watching television have disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that people in the photograph have disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify ________________

4. Does this photograph represent a non-inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement.

Photograph #6: People watching television:

1. It is obvious that two people watching television have disability while the third person is without disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that 2 people in this photo have disability while the third person is without disability? Yes No

3. What feature is most emphasized in this photograph?
   - ( ) the people
   - ( ) the activity
   - ( ) the environment
   - ( ) other; please identify ________________

4. Does this photograph represent an inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement

Photograph #7: Going for a walk.

1. It is obvious that all people in this photograph have disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that people in the photograph have disability? Yes No

3. What feature is most emphasized in this photograph?
   - ( ) the people
   - ( ) the activity
   - ( ) the environment
   - ( ) other; please identify ________________

4. Does this photograph represent a non-inclusive recreation experience? Yes No

5. If you responded ‘no’ to question #4, please provide suggestions for photo improvement.

Photograph #8: Going for a walk.

1. It is obvious that two people in this photo are without disability while the third person has a disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that 1 person in this photo has a disability while the others are without disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify ________________

4. Does this photograph represent an inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement

Photograph #9: Listening to music.

1. It is obvious that both people in this photograph have disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that the people in this photograph have disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify________________

4. Does this photograph represent a non-inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement.

Photograph #10: Listening to music.

1. It is obvious that one person in this photo has a disability while the other person is without disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that 1 person in this photo has a disability while the other has no disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify________________

4. Does this photograph represent an inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement

Photograph #11: Craft or hobbies.

1. It is obvious that both people in this photograph have disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that the people in this photograph have disability? Yes No

3. What feature is most emphasized in this photograph?
   - ( ) the people
   - ( ) the activity
   - ( ) the environment
   - ( ) other; please identify ________________

4. Does this photograph represent a non-inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement.

Photograph #12: Craft or hobbies.

1. It is obvious that one person in this photo has a disability while the other person is without disability? Yes No

2. Do you believe a person with moderate or mild cognitive impairment will recognize that one person in this photo has a disability while the other has no disability? Yes No

3. What feature is most emphasized in this photograph?
   ( ) the people
   ( ) the activity
   ( ) the environment
   ( ) other; please identify ___________________

4. Does this photograph represent an inclusive recreation experience? Yes No

5. If you responded 'no' to question #4, please provide suggestions for photo improvement

APPENDIX D

Consumer Panel

Appendix D: Consumer Panel

"Hi. I'm here to ask your help with a project. I'm going to use pictures to help people answer questions about the things that they do for fun. I need to make sure that the pictures are clear and easy to understand. I'd like you to help me evaluate the pictures. Could you look at my pictures and answer some questions I have about them? Does that sound O.K. with you? Do you have any questions?"

"Before we start, I want you to know that answering my questions won't hurt you in any way and your answers won't change the services you receive. I also want you to know that your name won't be used with any of the information you share with me. If you want to quit or need a break, just let me know. We can stop and take a break whenever you need to."

"All right, here's what we're going to do. I'm going to ask you some questions about these photographs (show photos). I'm going to write your answers down on this piece of paper (show the interview instrument). Sometimes I'm going to use a tape recorder (show the tape recorder). I'm taping so that I can be sure I write down exactly what you say."

"Do you understand?"
"Do you have any questions?"

1. Tool evaluation:

   The interviewer will hold upright, toward the participant, the photographs in pairs. The following open-ended questions will be asked to determine if the participant can recognize unique differences in the people in the photographs. Specifically, the investigator wishes to know whether the participant can distinguish the people, in the photographs, with and without disability. The investigator will record, verbatim, the responses of the participant for each photo set. This segment of the interview will be tape-recorded, and later replayed for accuracy.

A. Present photo #1 (in left hand) and #2 (in right hand) and ask the following questions in progression. The interviewer can proceed to the last question (# 5) once the participant indicates that they recognize people with and without disability in the photographs.

1. "Look at the people in the pictures. Do you see a difference in the people in the photographs. Tell me about the difference."

2. "What are the differences in the people in the photographs?"

3. "Look at the people, how are they different?"

4. "Do any of the people in the photograph have a disability?"

5. "Point to the people in the photograph that have a disability."

B. Present photo #3 (in left hand) and #4 (in right hand) and ask the following questions in progression. The interviewer can proceed to the last question (# 5) once the participant indicates that they recognize people with and without disability in the photographs.

1. "Look at the people in the pictures. Do you see a difference in the people in the photographs. Tell me about the difference."

2. "What are the differences in the people in the photographs?"

3. "Look at the people, how are they different?"

4. "Do any of the people in the photograph have a disability?"

5. "Point to the people in the photograph that have a disability."

C. Present photo #6 (in left hand) and #5 (in right hand) and ask the following questions in progression. The interviewer can proceed to the last question (# 5) once the participant indicates that they recognize people with and without disability in the photographs.

1. "Look at the people in the pictures. Do you see a difference in the people in the photographs. Tell me about the difference."

2. "What are the differences in the people in the photographs?"

3. "Look at the people, how are they different?"

4. "Do any of the people in the photograph have a disability?"

5. "Point to the people in the photograph that have a disability."

D. Present photo #8 (in left hand) and #7 (in right hand) and ask the following questions in progression. The interviewer can proceed to the last question (# 5) once the participant indicates that they recognize people with and without disability in the photographs.

1. "Look at the people in the pictures. Do you see a difference in the people in the photographs. Tell me about the difference."

2. "What are the differences in the people in the photographs?"

3. "Look at the people, how are they different?"

4. "Do any of the people in the photograph have a disability?"

5. "Point to the people in the photograph that have a disability."

E. Present photo #9 (in left hand) and #10 (in right hand) and ask the following questions in progression. The interviewer can proceed to the last question (# 5) once the participant indicates that they recognize people with and without disability in the photographs.

1. "Look at the people in the pictures. Do you see a difference in the people in the photographs. Tell me about the difference."

2. "What are the differences in the people in the photographs?"

3. "Look at the people, how are they different?"

4. "Do any of the people in the photograph have a disability?"

5. "Point to the people in the photograph that have a disability."

F. Present photo #12 (in left hand) and #11 (in right hand) and ask the following questions in progression. The interviewer can proceed to the last question (# 5) once the participant indicates that they recognize people with and without disability in the photographs.

1. "Look at the people in the pictures. Do you see a difference in the people in the photographs. Tell me about the difference."

2. "What are the differences in the people in the photographs?"

3. "Look at the people, how are they different?"

4. "Do any of the people in the photograph have a disability?"

5. "Point to the people in the photograph that have a disability."

The panel participant will be thanked for their participation and returned to their caregiver (as appropriate).

APPENDIX E

Consumer Interview Instrument

Appendix E:

Consumer Interview Instrument #1

Demographic data (obtained from chart review immediately prior to the interview)

1. Consumer primary diagnosis (✓ the appropriate box):
   - ☐ Mild Mental Retardation
   - ☐ Moderate Mental Retardation

2. Consumer age:__________

3. Participants type of residence (✓ the appropriate box):
   - ☐ State operated institution
   - ☐ Group home/adult foster care home
   - ☐ Semi-independent apartment
   - ☐ Private home (with biological or adopted parents)
   - ☐ Other (identify):________________________

4. Gender (✓ the appropriate box):
   - ☐ Male
   - ☐ Female

Introduction:

"Hi. My name is Mary Lou Schilling. I am wondering if you would be willing to answer some questions about recreation activity. Your guardian (name) have agreed to your participation. There are no right or wrong answers. It will take approximately 15 minutes to complete. You can quit at any time. What you tell me is confidential. Your answers will not change the services you receive from the referring agency. If you'd like to participate, please sign the release form, next to the name of your guardian".

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

5. What recreational activities do you participate in?

☐ Special Olympics (non-inclusive)
☐ Special Olympics Unified Sports (inclusive)
☐ Best Buddies (inclusive)
☐ Family activities - with family members without disability (inclusive)
☐ Family activities - with group home members (non-inclusive)
☐ Combination (50-50)
☐ Other:____________________________

Comments:

6. "I'm going to show you some photographs of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most?"

Question:	Picture # in left hand	Picture # in right hand	
Bowling	# 2	# 1	
Basketball	# 4	# 3	
Watching Television	# 5	# 6	
Going for a walk	# 7	# 8	
Listening to music	# 10	# 9	
Craft	# 11	# 12	

Debriefing:

To assure complete disclosure of the interview intent the following will be reviewed with the consumer. "Do you know what inclusion is?" and "How do you define inclusion?" If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

"For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services."

The interviewer will assure consumer is under the care of the caregiver and answer any questions either might have. Thank both consumer and caregiver for their participation.

Appendix E:

Consumer Interview Instrument #2

Demographic data (obtained from chart review immediately prior to the interview)

1. Consumer primary diagnosis (✓ the appropriate box):
   - ☐ Mild Mental Retardation
   - ☐ Moderate Mental Retardation

2. Consumer age:___________

3. Participants type of residence (✓ the appropriate box):
   - ☐ State operated institution
   - ☐ Group home/adult foster care home
   - ☐ Semi-independent apartment
   - ☐ Private home (with biological or adopted parents)
   - ☐ Other (identify):_________________________

4. Gender (✓ the appropriate box):
   - ☐ Male
   - ☐ Female

Introduction:

"Hi. My name is Mary Lou Schilling. I am wondering if you would be willing to answer some questions about recreation activity. Your guardian (name) have agreed to your participation. There are no right or wrong answers. It will take approximately 15 minutes to complete. You can quit at any time. What you tell me is confidential. Your answers will not change the services you receive from the referring agency. If you'd like to participate, please sign the release form, next to the name of your guardian".

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

5. What recreation activities do you participate in?
   - ☐ Special Olympics (non-inclusive)
   - ☐ Special Olympics Unified Sports (inclusive)
   - ☐ Best Buddies (Unified Sports)
   - ☐ Family activities - with family members without disability (inclusive)
   - ☐ Family activities - with group home members (non-inclusive
   - ☐ Combination (50 - 50)
   - ☐ Other:__________________________________

   Comments:

6. "I'm going to show you some photographs of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most?"

Question:	Picture # in left hand	Picture # in right hand	Comments
Bowling	# 2	# 1	
Basketball	# 3	# 4	
Watching Television	# 6	# 5	
Going for a walk	# 8	# 7	
Listening to music	# 10	# 9	
Craft	# 11	# 12	

Debriefing:

To assure complete disclosure of the interview intent the following will be reviewed with the consumer. "Do you know what inclusion is?" and "How do you define inclusion?" If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

"For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services."

The interviewer will assure consumer is under the care of the caregiver and answer any questions either might have. Thank both consumer and caregiver for their participation.

Appendix E:

Consumer Interview Instrument #3

Demographic data (obtained from chart review immediately prior to the interview)

1. Consumer primary diagnosis (✓ the appropriate box):
   - ☐ Mild Mental Retardation
   - ☐ Moderate Mental Retardation

2. Consumer age:___________

3. Participants type of residence (✓ the appropriate box):
   - ☐ State operated institution
   - ☐ Group home/adult foster care home
   - ☐ Semi-independent apartment
   - ☐ Private home (with biological or adopted parents)
   - ☐ Other (identify):_________________________

4. Gender (✓ the appropriate box):
   - ☐ Male
   - ☐ Female

Introduction:

"Hi. My name is Mary Lou Schilling. I am wondering if you would be willing to answer some questions about recreation activity. Your guardian (name) have agreed to your participation. There are no right or wrong answers. It will take approximately 15 minutes to complete. You can quit at any time. What you tell me is confidential. Your answers will not change the services you receive from the referring agency. If you'd like to participate, please sign the release form, next to the name of your guardian".

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

5. What type of recreation activities do you participate in?
- ☐ Special Olympics (non-inclusive)
- ☐ Special Olympics Unified Sports (inclusive)
- ☐ Best Buddies (Unified Sports)
- ☐ Family activities - with family members without disability (inclusive)
- ☐ Family activities - with group home members (non-inclusive
- ☐ Combination (50 - 50)
- ☐ Other:____________________________________

Comments:

6. "I'm going to show you some photographs of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most?"

Question:	Picture # in left hand	Picture # in right hand	Comments
Bowling	# 1	# 2	
Basketball	# 4	# 3	
Watching television	# 6	# 5	
Going for a walk	# 7	# 8	
Listening to music	# 10	# 9	
Craft	# 12	# 11	

Debriefing:

To assure complete disclosure of the interview intent the following will be reviewed with the consumer. “Do you know what inclusion is?” and “How do you define inclusion?” If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

“For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services.”

The interviewer will assure consumer is under the care of the caregiver and answer any questions either might have. Thank both consumer and caregiver for their participation.

Appendix E:

Consumer Interview Instrument #4

Demographic data (obtained from chart review immediately prior to the interview)

1. Consumer primary diagnosis (✓ the appropriate box):
   - ☐ Mild Mental Retardation
   - ☐ Moderate Mental Retardation

2. Consumer age:___________

3. Participants type of residence (✓ the appropriate box):
   - ☐ State operated institution
   - ☐ Group home/adult foster care home
   - ☐ Semi-independent apartment
   - ☐ Private home (with biological or adopted parents)
   - ☐ Other (identify):__________________________

4. Gender (✓ the appropriate box):
   - ☐ Male
   - ☐ Female

Introduction:

"Hi. My name is Mary Lou Schilling. I am wondering if you would be willing to answer some questions about recreation activity. Your guardian (name) have agreed to your participation. There are no right or wrong answers. It will take approximately 15 minutes to complete. You can quit at any time. What you tell me is confidential. Your answers will not change the services you receive from the referring agency. If you'd like to participate, please sign the release form, next to the name of your guardian".

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

5. What type of recreation activities do you participate in?

- ☐ Special Olympics (non-inclusive)
- ☐ Special Olympics Unified Sports (inclusive)
- ☐ Best Buddies (Unified Sports)
- ☐ Family activities - with family members without disability (inclusive)
- ☐ Family activities - with group home members (non-inclusive
- ☐ Combination (50 - 50)
- ☐ Other:____________________________________

Comments:

6. "I'm going to show you some photographs of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most?"

Question:	Picture # in left hand	Picture # in right hand	Comments
Bowling	# 2	# 1	
Basketball	# 3	# 4	
Watching television	# 5	# 6	
Going for a walk	# 8	# 7	
Listening to music	# 10	# 9	
Craft	# 12	# 11	

Debriefing:

To assure complete disclosure of the interview intent the following will be reviewed with the consumer. "Do you know what inclusion is?" and "How do you define inclusion?" If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

"For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services."

The interviewer will assure consumer is under the care of the caregiver and answer any questions either might have. Thank both consumer and caregiver for their participation.

Appendix E:

Consumer Interview Instrument #5

Demographic data (obtained from chart review immediately prior to the interview)

1. Consumer primary diagnosis (✓ the appropriate box):
   ☐ Mild Mental Retardation
   ☐ Moderate Mental Retardation

2. Consumer age:___________

3. Participants type of residence (✓ the appropriate box):
   ☐ State operated institution
   ☐ Group home/adult foster care home
   ☐ Semi-independent apartment
   ☐ Private home (with biological or adopted parents)
   ☐ Other (identify):________________________

4. Gender (✓ the appropriate box):
   ☐ Male
   ☐ Female

Introduction:

"Hi. My name is Mary Lou Schilling. I am wondering if you would be willing to answer some questions about recreation activity. Your guardian (name) have agreed to your participation. There are no right or wrong answers. It will take approximately 15 minutes to complete. You can quit at any time. What you tell me is confidential. Your answers will not change the services you receive from the referring agency. If you'd like to participate, please sign the release form, next to the name of your guardian".

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

5. What type of recreation activities do you participate in?
   - ☐ Special Olympics (non-inclusive)
   - ☐ Special Olympics Unified Sports (inclusive)
   - ☐ Best Buddies (Unified Sports)
   - ☐ Family activities - with family members without disability (inclusive)
   - ☐ Family activities - with group home members (non-inclusive
   - ☐ Combination (50 - 50)
   - ☐ Other:______________________________________

   Comments:

6. "I'm going to show you some photographs of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most?"

Question:	Picture # in left hand	Picture # in right hand	Comments
Bowling	# 1	# 2	
Basketball	# 4	# 3	
Watching television	# 6	# 5	
Going for a walk	# 8	# 7	
Listening to music	# 10	# 9	
Craft	# 11	# 12	

Debriefing:

To assure complete disclosure of the interview intent the following will be reviewed with the consumer. "Do you know what inclusion is?" and "How do you define inclusion?" If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

"For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services."

The interviewer will assure consumer is under the care of the caregiver and answer any questions either might have. Thank both consumer and caregiver for their participation.

Appendix E:

Consumer Interview Instrument #6

Demographic data (obtained from chart review immediately prior to the interview)

1. Consumer primary diagnosis (✓ the appropriate box):
   - ☐ Mild Mental Retardation
   - ☐ Moderate Mental Retardation

2. Consumer age:___________

3. Participants type of residence (✓ the appropriate box):
   - ☐ State operated institution
   - ☐ Group home/adult foster care home
   - ☐ Semi-independent apartment
   - ☐ Private home (with biological or adopted parents)
   - ☐ Other (identify):_________________________

4. Gender (✓ the appropriate box):
   - ☐ Male
   - ☐ Female

Introduction:

"Hi. My name is Mary Lou Schilling. I am wondering if you would be willing to answer some questions about recreation activity. Your guardian (name) have agreed to your participation. There are no right or wrong answers. It will take approximately 15 minutes to complete. You can quit at any time. What you tell me is confidential. Your answers will not change the services you receive from the referring agency. If you'd like to participate, please sign the release form, next to the name of your guardian".

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

5. What type of recreation activities do you participate in?

☐ Special Olympics (non-inclusive)
☐ Special Olympics Unified Sports (inclusive)
☐ Best Buddies (Unified Sports)
☐ Family activities - with family members without disability (inclusive)
☐ Family activities - with group home members (non-inclusive
☐ Combination (50 - 50)
☐ Other:________________________________

Comments:

6. "I'm going to show you some photographs of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most?"

Question:	Picture # in left hand	Picture # in right hand	Comments
Bowling	# 2	# 1	
Basketball	# 3	# 4	
Watching television	# 6	# 5	
Going for a walk	# 7	# 8	
Listening to music	# 10	# 9	
Craft	# 11	# 12	

Debriefing:

To assure complete disclosure of the interview intent the following will be reviewed with the consumer. "Do you know what inclusion is?" and "How do you define inclusion?" If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

"For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services."

The interviewer will assure consumer is under the care of the caregiver and answer any questions either might have. Thank both consumer and caregiver for their participation.

APPENDIX F

Consumer Pilot

Appendix F

Consumer Pilot

Demographic data: (obtained from the referring agency, per the permission of the guardian):

1. Consumer primary diagnosis (✓ the appropriate box):
   - ☐ Mild Mental Retardation
   - ☐ Moderate Mental Retardation

2. Consumer age:__________

3. Participants type of residence (✓ the appropriate box):
   - ☐ State operated institution
   - ☐ Group home/adult foster care home
   - ☐ Semi-independent apartment
   - ☐ Private home (with biological or adopted parents)
   - ☐ Other (identify):____________________

4. Gender (✓ the appropriate box):
   - ☐ Male
   - ☐ Female

Introductions:

"Hello. My name is Mary Lou Schilling. You must be (consumer name). You must be (consumer's first name) caregiver/parent/guardian. Thank you so much for agreeing to take part in my project. I'd like to meet with (caregiver's first name) for just a minute before we begin the interview. O.K. (consumer's name). We'll be just a minute, could you have a seat here and we'll come get you when we're ready. Would you like to look at a magazine while you're waiting?" Hand consumer magazine. Assure consumer comfort.

Meet with caregiver in quiet area:

"Hi, thanks again. The purpose of this project is to look at inclusion. I want to find out whether your client (or child) prefers to engage in recreational activity with people with disabilities or with people without disabilities.

The information you give me today is actually part of the pilot study. Have you ever been involved in a pilot?" Explain the purpose of a pilot. "The purpose of this pilot is to make sure that the questions I ask in this survey are clear and easy to understand. I'd like you to answer the questions in the survey and then respond to the questions on the last page. The last page includes questions related to the clarity of the survey itself. (Consumer name) is also a part of the pilot study. I will be having him/her complete an interview today and then repeat it again in one week. I ask that you do not discuss this survey and interview with him/her until after he/she take it a second time. Do you understand? Can you do that for me? Do you have any questions?"

"I want to make sure you understand inclusion, as I'm interpreting it for this study. How would you define inclusion?" (Await response and clarify as stated below if incorrect or different).

"For purposes of this study, I want you to define inclusion as participation in recreation activity directly with people with and without disability. For inclusion to occur there must be social interaction. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people without disability, is not considered inclusive. Do you understand? Do you have any questions? O.K. I have one question I'd like you to answer for me before we bring in <u>(consumer's first name)</u>. What has been <u>(consumer's first name)</u> past involvement in recreation activities outside of his/her home? Has it primarily been inclusive, special recreation (non-inclusive), or a combination?

☐ Special recreation or non-inclusive
☐ Inclusive recreation
☐ Combination (50-50)

Comments:

Meeting with caregiver and consumer:

"Hi (insert consumer's first name). Thanks so much for waiting. You can come in now. I'm here today to ask your help with a project. I'm going to be asking a lot of people about the activities they do for fun. You know the activities that you do when you're not a work. I need someone to help me make sure that I'm asking the questions the right way. I have some photographs that I need you to also look at and tell me what you think about them."

"Before we start, I want you to know that answering my questions won't hurt you in any way and your answers won't change the services you receive. I also want you to know that your name won't be used with any of the information you share with me. If you want to quit or need a break, just let me know. We can stop and take a break whenever you need it."

"All right, here's what we're going to do. I'm going to ask you some questions about these pictures (show photos). I'm going to write your answers down on this piece of paper (show this interview instrument). Sometimes I'm going to use a tape recorder (show tape recorder). I'm tape recording so that I can be sure I write down exactly what you say."

"Do you understand? Do both of you understand?"

"Do either of you have any questions?"

"I'm going to give (caregiver name) some questions. He/she is going to answer some questions for me too." The caregiver is directed to an adjacent table to complete his/her survey. The caregiver is told to help themselves to the refreshment table once they have completed their survey. The caregiver is additionally instructed not to assist the consumer in their responses to the interview questions. However, the caregiver may offer clarity to questions if and when appropriate.

Consumer interview:

"Ready, let's get started."

Rapport building:

"Tell me about yourself, do you work at (participating agency name)? What type of jobs do you do? Do you enjoy your work? What do you like best about work?"

2. Procedures evaluation: The following interview instrument will be presented.

   A. "I'm going to show you some pictures of people participating in fun activities. Looking at the people in the pictures, point to who you want to participate in activities with the most."

Interviewer instructions:

Present photographs of people involved in activity to the pilot participant. Activity photographs will be presented in common pairs; placed upright, side-by-side, facing the interviewee. One photograph will show people with and without disability participating in an activity while the other photograph will show people only with disability participating in the same activity.

Question:	Picture # in left hand	Picture # in right hand	Probing questions to assure clarity (examples): Why did you select this photo? Why didn't you choose this photo? What about the people in the photo made you pick this one? Why did you pick these people over these people? (tape record)

Look at the people bowling. Would you like to play with these people (photo in left hand) or these people (photo in right hand)?	# 2	# 1	Possible responses:
			____ the people
			    ___ more like me
			    ___ not like me
			____ their clothing
			____ their hair
			____ other:
			________________
			________________
			________________

Look at the people playing basketball. Would you like to play with these people (photo in left hand) or these people (photo in the right hand)?	# 3	# 4	Possible responses:
			____ the people
			    ___ more like me
			    ___ not like me
			____ their clothing
			____ their hair
			____ other:
			________________
			________________
			________________

Look at the people watching T.V. Would you like to watch T.V. with these people (photo in left hand) or these people (photo in right hand)?	# 6	# 5	Possible responses: ____ the people ___ more like me ___ not like me ____ their clothing ____ their hair ____ other: ________________ ________________ ________________
Look at the people going for a walk. Would you like to go for a walk with these people (photo in left hand) or these people (photo in right hand).	# 8	# 7	Possible responses: ____ the people ___ more like me ___ not like me ____ their clothing ____ their hair ____ other: ________________ ________________ ________________
Look at the people listening to music. Would you like to listen to music with these people (photo in left hand) or these people (photo in right hand)?	# 10	# 9	Possible responses: ____ the people ___ more like me ___ not like me ____ their clothing ____ their hair ____ other: ________________ ________________ ________________

Look at the people working on this craft project. Would you rather work on a craft project with these people (photo in left hand) or these people (photo in right hand)?	# 12	# 11	Possible responses: ____ the people ___ more like me ___ not like me ____ their clothing ____ their hair ____ other: ________________ ________________ ________________

Interviewer instructions: On the matrix above, circle the number indicating the photo selected by the participant (columns 2 & 3). Following responses to each close-ended question; the interviewer will prompt the interviewee to provide further insights into his/her choice. The following open-ended questions may be presented:

> "Why did you select that picture?"
> "Why didn't you choose the other picture?"
> "What about the people in the photo made you pick the one you did?"
>
> "Why did you pick these people over these people?"

A checklist of possible responses to open-ended questioning is provided for ease in recording. This segment of the interview will be audiotape recorded. The intent of this inquiry is to gather additional data to support responses.

Repeat the above process until the interviewee has been shown all activity photograph sets.

The interviewer will assure the consumer is under the care of the caregiver and answer any questions either might have. Share with the caregiver and consumer that they are requested not to discuss their responses with each other until after the next meeting. Thank both consumer and caregiver for their participation and remind them of the next scheduled interview.

Debriefing:

Upon completion of the second interview, the investigator will assure provide information to the consumer to assure complete disclosure of the interview intent. The following content will be reviewed with the consumer.

"Do you know what inclusion is?" and "How do you define inclusion?" If the consumer response differs from the operational definition used in this investigation the investigator will provide the consumer with the following content.

"For purposes of this study, I am defining inclusion as participation in recreation activity directly with people with and without disability. In example, for bowling to be inclusive, people with and without disability would have to bowl together, on the same lane, on the same team. Just being in the same bowling alley with people with and without disability is not considered inclusive. Do you understand? Do you have any questions? This study was to see whether you prefer inclusive or non-inclusive recreation services."

The interviewer will assure the consumer is under the care of the caregiver and answer any questions either might have. Both will be thanked for their participation in the pilot study.

APPENDIX G

Consent to Participate

Appendix G

Recreation Services
The Preferences of Consumers and Caregivers
A Comparison Study
Consent to Participate

You agree to participate in a research project that will explore what you like about recreation activities. In particular, this study will explore who (what people) you prefer to participate with while doing things that are fun or when not at work. The results of this study will help recreation professionals provide you with better recreation services.

You will be interviewed and the interview will take approximately 15 to 20 minutes of your time. Participation in the interview is voluntary and you can stop at any time. Participation will cause no known harm or risk to you. There are no right or wrong answers. To assure that the investigator records information accurately, some of your responses will be audiotape recorded. The audiotape will be replayed following the interview and immediately deleted or destroyed. Your answers will not change the services you receive. Your privacy will be protected to the maximum extent allowed by law. To maintain confidentiality, your name will not be used on any interview information gathered.

If you have any questions about this project, please do not hesitate to contact the investigator at:

Mary Lou Schilling	Dr. Richard Paulsen
1058 W. Deerfield Rd.	131 Natural Resources Building, M.S.U.
Mt. Pleasant, MI, 48858	East Lansing, MI, 48824-1222
Phone: (989) 773-2151	Phone: (517) 353-5190 ext. 114

If you have any questions regarding your rights as a participant, or are dissatisfied with this project, you may contact:

Ashir Kumar, M.D.
Chair of the University Committee on
Research Involving Human Subjects (UCRIHS)
202 Olds Hall, M.S.U.
East Lansing, MI, 48824
Phone: (517) 355-2180
Fax: (517) 432-4503
e-mail: <ucrihs@msu.edu>

Your signature below indicates that you voluntarily agree to participate in this survey or interview.

Participant Signature:__________________________ Date: ___________

Responsible Party: __________________________ Date: ___________
(Necessary if participant is 17 years or not his/her own guardian)

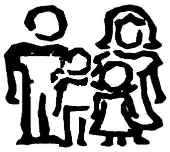
Person presenting or reading
this document to the participant:____________________ Date:_______

cc: participant

APPENDIX H

Caregiver Questionnaire

Appendix H



Inclusive Recreation Services
The Preferences of Consumers and Caregivers
A Comparison Study

Dear Caregiver:

I'm asking for your assistance in completing the following questionnaire, which is part of a larger study comparing the preferences of caregivers and consumers to inclusive recreation services. The results will assist recreation professionals in providing recreation opportunities to individuals with developmental disability. Your participation is voluntary and you can stop at any time. It will take approximately 10 minutes to complete this survey. There are no right or wrong answers. All responses are confidential and anonymous. Your privacy will be protected to the maximum extent allowed by law. By completing this survey you give permission to the investigator to combine your answers with the other responses received and publish the results. You indicate your voluntary agreement to participate by completing and returning this questionnaire. If you have any questions about this project please feel free to contact Mary Lou Schilling at (989) 774-7306 or Dr. Richard Paulsen at (517) 353-5190 ext. 114. If you have any questions regarding your rights as a participant, or you are dissatisfied with this project, you may contact Dr. Ashir Kumar at (517) 355-2180. Thank you for your time. Your participation is greatly appreciated!

Mary Lou Schilling
MSU Graduate Student

Inclusive Recreation - A Caregiver's Perspective

1. Listed below are common activities that people with developmental disabilities may participate in for fun or enjoyment. Please review the list and identify (✓) whether you believe people with disability should engage in these activities inclusively (***with people with and without disability***) or non-inclusively (***only with people with disability***). Please feel free to make comments to explain your responses. ***Only (✓) one box (inclusive, non-inclusive) for each activity.***

Common Activity	Inclusive (✓)	Non-inclusive (✓)	Comments
1. Watching TV			
2. Listening to music			
3. Bowling			

4. Crafts/hobbies			
5. Basketball			
6. Going for a walk			

2. The people under your care participate most in (✓most appropriate response):
   ☐ Inclusive recreation opportunities
   ☐ Recreation opportunities designed specifically for people with disability
   ☐ A combination of inclusive and non-inclusive recreation services

3. In what living environment do you provide care to people with disabilities? (✓most appropriate response)
   ☐ State operated institution
   ☐ Group home/adult foster care home
   ☐ Semi-independent apartment
   ☐ Private home
   ☐ Other (please identify):______________________________

4. The people under your care function at which level of cognitive impairment? (✓all that apply)
   ☐ Moderate mental impairment
   ☐ Mild mental impairment

5. Recalling that inclusion occurs only when people with disability participate directly with (**versus beside**) people without disability. How much experience have you had in programming inclusive recreation activity for people with disability? (✓most appropriate response)
   ☐ no experience in inclusive recreation
   ☐ some experience with inclusive recreation
   ☐ much experience with inclusive recreation

6. How long have you been a caregiver for people with developmental disability?
   ____ years

7. What is your age:_____

8. What type of training did you receive to perform your job? (✓most appropriate response)

☐ no training provided
☐ on-the-job training
☐ formal training (classroom instruction)
☐ other (please describe):____

9. If you have received formal training, which of the following topics were covered in detail? (✓all that apply)

☐ normalization
☐ least restrictive training environment
☐ age appropriate activity
☐ mainstreaming
☐ integration
☐ inclusion
☐ none of the above

Thank you so much for taking the time from your busy schedule to complete this survey. When completed please return this form to the investigator.

APPENDIX I

Caregiver Pilot

Appendix I

Caregiver Pilot

Instructions: Please complete the survey regarding inclusion on the next 2 pages. Once completed, please respond to the questions on the final page. The final page of questions will help make sure the questions are easy to read, understand, and answer. Thanking you, in advance, for your participation in this project!

Inclusive Recreation - A Caregiver's Perspective

1. Listed below are common activities that people with developmental disabilities may participate in for fun or enjoyment. Please review the list and identify (✓) whether you believe people with disability should engage in these activities inclusively (***with people with and without disability***) or non-inclusively (***only with people with disability***). Please feel free to make comments to explain your responses. ***Only (✓) one box (inclusive, non-inclusive) for each activity.***

Common Activity	Inclusive (✓)	Non-inclusive (✓)	Comments
1. Watching TV			
2. Listening to music			
3. Bowling			
4. Crafts/hobbies			
5. Basketball			
6. Going for a walk			

2. The people under your care participate most in (✓most appropriate response):
   - ☐ Inclusive recreation opportunities
   - ☐ Recreation opportunities designed specifically for people with disability
   - ☐ A combination of inclusive and non-inclusive recreation services

3. Recalling that inclusion occurs only when people with disability participate directly with (**versus beside**) people without disability. How much experience have you had in programming inclusive recreation activity for people with disability? (✓ most appropriate response).
   ☐ no experience in inclusive recreation
   ☐ some experience with inclusive recreation
   ☐ much experience with inclusive recreation

4. How long have you been a caregiver for people with developmental disability? ____ years

5. What is your age:_____

6. What type of training did you receive to perform your job? (✓ most appropriate response)
   ☐ no training provided
   ☐ on the job training
   ☐ formal training (classroom instruction)
   ☐ other (please describe):

7. If you have received formal training, which of the following topics were covered in detail? (✓all that apply)
   ☐ normalization
   ☐ least restrictive training environment
   ☐ age appropriate activity
   ☐ mainstreaming
   ☐ integration
   ☐ inclusion
   ☐ none of the above

By answering the questions on the following page you will help me evaluate whether the survey questions need to be changed in any way.

Caregiver Pilot: Survey Evaluation

1. *Was it easy to read the questions on the previous 2 pages? YES NO*
   Please Explain:

2. *Were there any questions that were difficult to understand? YES NO*
   Please Explain:

3. *Are there any questions you would change to make it easier to read or understand? YES NO*

4. *Please identify the questions you would change. Please indicate how you would reword or change for improved clarity.*

Thank you so much for taking time from your busy schedule to complete this survey. Please return this survey to the investigator.

APPENDIX J

Agency Contact Letter

Appendix J: Agency Contact Letter

Name (Administrator, CEO)
Organization name
Street address
City, state, zip code

Date

Dear (administrator or CEO):

As per our recent phone conversion, I'm writing this note requesting your assistance in a research project which will evaluate the recreation preferences of individuals with disabilities. I'm seeking individuals with diagnosis of moderate and mild levels of mental retardation, and their caregivers, to be subjects of this study. I am asking your support in: 1) contacting people with disability and their caregivers; 2) providing demographic information regarding the participants level of cognitive impairment, gender, age, and type of residence; and 3) potentially providing space where participants can be interviewed.

I would be more than happy to meet with you to provide additional information about my research methodologies and techniques. I anticipate this project to begin in June, 2002 and end in August, 2002. This project is part of my Ph.D. program at Michigan State University.

I'd additionally like you to know that the privacy of your agency and the participants will be protected to the maximum extent allowable by law. All data obtained will remain confidential and neither the agency or participant names will be revealed in any documentation. There are no known risks of participation. All participants will be assured that there are no right or wrong answers. I will personally complete all interviews with participants and allow their caregivers to be present in the interview area. Finally, all participants will be assured that their responses will not impact the services they receive from your organization.

Thank you for considering this project. I'm excited to begin data collection and believe your agency is a perfect site for its implementation. Additionally, if you are interested, an executive summary of the results of this project will be made available to you upon project completion.

Sincerely,

Mary Lou Schilling, MA, CTRS
Ph.D. student MSU

BIBLIOGRAPHY

BIBLIOGRAPHY

American Association on Mental Retardation. (2002). *Definition of mental retardation*. Retrieved September 13, 2002, http://161.58.153.187/Policies/faq_mental_retardation.shtml

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 327 (1990).

Anderson, L., Brown, C., & Soli, P. (1996). The rural recreation integration project: Reaching out with interactive video technology, *Parks and Recreation, 31*(5), 38-43.

Anderson, R. (Ed.). (1996). *A look back: The birth of the Americans with Disabilities Act*. New York: Haworth Press.

Anderson, R., & Greer, J. (1976). *Educating the severely and profoundly retarded.* Baltimore, MD: University Park.

Anderson, L., & Heyne, L. (2000). A statewide needs assessment using focus groups: Perceived challenges and goals in providing inclusive recreation services in rural communities. *Journal of Park and Recreation Administration, 18*(4), 17-37.

APRS/NTRS Joint Committee. (1997, February). *Community recreation for people with disabilities: attitudes, experience, support, and related issues.* Report to the NTRS Board of Directors. Arlington, VA: National Therapeutic Recreation Society.

Architectural Barriers Act of 1968, Pub. L. No. 90-480, 82 Stat. (1968).

Austin, D., & Crawford, M. (1996). *Therapeutic recreation: An introduction* (2nd ed.). Boston, MA: Allyn & Bacon.

Babbie, E. (1995). *The practice of social research* (7th ed.). Boston, MA: Wadsworth.

Bannerman, D., Sheldon, J., Sherman, J., & Harchik, A. (1990). Balancing the right to habilitation with the right to personal liberties: The rights of people with developmental disabilities to eat too many doughnuts and take a nap, *Journal of Applied Behavior Analysis, 23*(1), 79-89.

Barker, P. (1990). *Clinical interviews with children and adolescents.* New York: W.W. Norton.

Bauer, E. (1987). *Special education: An advocate's manual.* Lansing: Michigan Protection and Advocacy Service.

Bendini, L., & Wu, Y. (1994). A methodological review of research in therapeutic recreation journal from 1986 to 1990, *Therapeutic Recreation Journal, 28*(2), 87-98.

Berrigan, C. (1987, October 29-30). *Integration in Italy: A dynamic movement.* Paper presented at the 14th Annual Conference of the Association for the Severely Handicapped, Chicago, IL. (ERIC Document Reproduction Service No.ED 294 341)

Biklen, S., & Moseley, C. (1988). "Are you retarded?" "No, I'm Catholic": Qualitative methods in the study of people with severe handicaps. *Journal of the Association of Persons with Severe Handicaps, 13*(3), 155-162.

Blakers, C. (1981). The disabled person and the community. In *The preparation of disabled young people for adult society.* Canberra: Australian Schools Commission. (ISBN-0-642-89523-6)

Blinde, E., & McCallister, S. (1998). Listening to the voices of students with physical disabilities: Experiences in the physical education classroom. *Journal of Physical Education, Recreation and Dance, 69*(6), 64-68.

Block, M. (1994). *A teacher's guide to including students with disabilities in regular physical education.* Baltimore, MD: Paul H. Brookes.

Block, M., & Etz, K. (1995, March). The pocket reference--A tool for fostering inclusion. *Journal of Physical Education, Recreation and Dance*, pp. 47-51.

Block, M., & Malloy, M. (1998). Attitudes on inclusion of a player with disabilities in a regular softball league. *Mental Retardation, 36*(2), 137-144.

Bork, K. (1989). Easy access with trail partners, *Parks and Recreation, 24*(12), 22-26.

Braso;e, F., Skalko, T., & Burlingame, J. (1998). *Perspectives in recreation therapy: Issues of a dynamic profession.* Ravensdale, WA: Idyll Arbor.

Broida, J. (1995). Community options for all individuals. *Parks and Recreation, 30*(5), 54-59.

Browder, D., & Cooper, K. (1994). Inclusion of older adults with mental retardation in leisure opportunities. *Mental Retardation, 32*(2), 91-99.

Bullock, C. & Johnson, D. (1998). Recreation therapy in special education. In F. Brasile, T. Skalko, & J. Burlingame (Eds.), *Perspectives in recreation therapy: Issues of a dynamic profession* (pp. 107-124). Ravensdale, WA: Idyll Arbor.

Bullock, C., & Mahon, M. (1997). *Introduction to recreation services for people with disabilities: A person-centered approach.* Champaign, IL: Sagamore.

Bullock, C., & Mahon, M. (1992). Decision making in leisure: Empowerment for people with mental retardation. *Journal of Physical Education, Recreation and Dance, 63*(8), 36-40.

Bullock, C. & Mahon, M. (1997). *Introduction to recreation services for people with disability: A person centered approach.* Champaign, IL: Sagamore.

Burlingame, J., Blaschko, T., & Skalko, T. (2001). Idyll arbors therapy dictionary (2nd ed.). Ravensdale, WA: Idyll Arbor.

Burlingame, J., & Skalko, T. (1997). *Idyll Arbor's glossary for therapists.* Ravensdale, WA: Idyll Arbor.

Carter, M., Browne, B., LeConey, S., & Nagle, C. (1991). *Designing therapeutic recreation programs in the community.* Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.

Chubon, R., & Bowe, F. (1994). *Social and psychological foundations of rehabilitation.* Springfield, IL: Charles C. Thomas.

Commission on Civil Rights. (1983, September). *Accommodating the spectrum of individual abilities.* Washington, DC: Author.

Compton, D. (Ed.). (1997). *Issues in therapeutic recreation: Toward the new millennium* (2nd ed.). Champaign, IL: Sagamore.

Coyne, P. & Rics, D. (1980). Recreation and Public Law 94-142: A guide for recreation and leisure education for handicapped children. Eugene Department of Parks and Recreation, Oregon; Oregon State Division of Mental Health, Salem; Oregon University, Portland. Health Sciences Center. (Eric Document Reproduction Service No. ED 193 855).

Craft, D. (1994). Inclusion: Physical education for all. *Journal of Physical Education, Recreation and Dance*, January, 22-23.

Crowe, W., Auxter, D., & Pyfer, J. (1981). *Principles and methods of adapted physical education and recreation* (4th ed.). St. Louis, MO: C. V. Mosby.

Dattilo, J. (1994). *Inclusive leisure services: Responding to the rights of people with disabilities*. State College, PA: Venture.

Dattilo, J., & Hoge, G. (1995). Perceptions of leisure by adults with mental retardation. *Annual in Therapeutic Recreation, 5*, 27-37.

Dattilo, J., Hoge, G., & Malley, S. (1996). Interviewing people with mental retardation: Validity and reliability strategies. *Therapeutic Recreation Journal, 30*(3), 163-178.

Dattilo, J., & Jekubovich-Fenton. (1995). Leisure services trends for people with mental retardation. *Parks and Recreation, 30*(5), 46-52.

Dattilo, J., & Rusch, F. (1985). Effects of choice on leisure participation for persons with severe handicaps. *Journal of the Association for Persons with Severe Handicaps, 10*(4), 194-199.

Dattilo, J., & Schleien, S. (1994). Understanding leisure services for individuals with mental retardation. *Mental Retardation, 32*(1), 53-59.

Dent, H. (1986). An experimental study of the effectiveness of different techniques of questioning mentally handicapped child witnesses. *British Journal of Clinical Psychology, 25*(1), 13-17.

Devine, M. A. (1997). [Report to the NTRS board of directors: Community recreation for people with disabilities: Attitudes, experience, support, and related issues]. Unpublished raw data.

Devine, M., & Kotowski, L. (1999). Inclusive leisure services: Results of a national survey of park and recreation departments, *Journal of Park and Recreation Administration, 17*(4), 56-72.

Devine, M. & McGovern, J. (2001). Inclusion of individuals with disabilities in public parks and recreation programs: Are agencies ready? *Journal of Park and Recreation Administration, 19*(4), 60-82.

Dickinson, C. (1980). *Attitudes of recreation administrators toward the mainstreaming of recreation and leisure services for the mentally retarded in Pennsylvania.* Unpublished master's thesis. Pennsylvania State University, State College, PA.

Downs, P., & Williams, T. (1994). Student attitudes toward integration of people with disabilities in activity settings: A European comparison. *Adapted Physical Activity Quarterly,* 11, 32-43.

Education for All Handicapped Children Act of 1975, Pub. L. No. 94-142, 89 Stat. 773 (1975).

Edwards, D., & Smith, R. (1989). Social interaction in an integrated day camp setting. *Therapeutic Recreation Journal, 23*(3), 71-78.

Elks, M. (1994). Valuing the person or valuing the role? Critique of social role valorization theory. *Mental Retardation, 32*(4), 265-271.

Everson, J., & Zhang, D. (2000). Person-centered planning: Characteristics, inhibitors, and supports. *Education and Training in Mental Retardation and Developmental Disabilities, 35*(1), 36-43.

Flynn, M. (1986). Adults who are mentally handicapped as consumers: Issues and guidelines for interviewing. *Journal of Mental Deficiency Research, 30*(4), 36-377.

Foley, P. (1979). *The effects of participation in a mainstreamed group on the swimming achievement of handicapped children, using a competency-based, instructional aquatic program.* Unpublished master's thesis. Pennsylvania State University, State College, PA.

Fraenkel, J., & Wallen, N. (1996). *How to design and evaluate research in education* (3rd Ed.). New York: McGraw-Hill.

Friedman, P. (1976). *The rights of mentally retarded persons*, New York: Avon.

Gelb, S. (1995). The beast in man: Degenerationism and mental retardation, 1900-1920. *Mental Retardation, 33*(1), 1-9.

Germ, P., & Schleien, S. (1997). Inclusive community leisure services: Responsibilities of key players. *Therapeutic Recreation Journal, 31*(1), 22-37.

Gravetter, F., & Wallnau, L. (1996). *Statistics for the behavioral sciences* (4th ed.). Minneapolis, MN: West.

Grosse, S. (1995). Danger ahead for students with disabilities: Beware the swinging pendulum. *Journal of Physical Education, Recreation and Dance*, January, 1995, p. 4-5.

Hansen, R., & Atchison, B. (Eds.). (1993). *Conditions in occupational therapy.* Philadelphia, PA: Williams & Wilkins.

Hastings, R. (1994). On "good" terms: Labeling people with mental retardation, *Mental Retardation, 32*(5), 363-365.

Hawkins, B., Ardovino, P., & Hsieh, C. (1998). Validity and reliability of the Leisure Assessment Inventory, *Mental Retardation 36*(4), 303-312.

Hawkins, B., Peng, J., Hsieh, C., & Eklund, S. (1999). Leisure constraints: A replication and extension of construct development. *Leisure Sciences, 21*(3), 179-192.

Hayden, M., Soulen, T., Schleien, S., & Tabourne, C. (1996). A matched, comparative study of the recreation integration of adults with mental retardation who moved into the community and those who remained at the institution. *Therapeutic Recreation Journal, 30*(1), 41-63.

Head, M. (2003). *Self-determination initiative.* Retrieved February 20, 2003, http://www.michigan.gov

Heal, L., & Sigelman, C. (1990). Methodological issues in measuring the quality of life of individuals with mental retardation. In R. Schalock & M. Begab (Eds.), *Quality of life: Perspectives and issues* (pp.161-176). Washington, DC: American Association on Mental Retardation.

Heikinaro-Johansson, P., Sherrill, C., French, R., & Huuhka, H. (1995). Adapted physical education consultant service model to facilitate integration. *Adapted Physical Activity Quarterly, 12*, 12-33.

Hewitt, A., & O'Nell, S. (1998). *I am who I am.* Retrieved December 5, 1998, from President's Committee on Mental Retardation Web site: http://www.acf.dhhs.gov/programs/pcmr.htm

Holburn, S., Jacobson, J., & Vietze, P. (2000). Quantifying the process and outcomes of person-centered planning. *American Journal on Mental Retardation, 105*(5), 402-416.

Humphrey, F. (1973). *An analysis of goal congruency in a diverse membership normative organization-The National Recreation and Park Association.* Unpublished doctoral dissertation. Pennsylvania State University, State College.

Kazdino, A., Matson, J., & Senatore, V. (1983). Assessment of depression in mentally retarded adults. *American Journal of Psychiatry, 40,* 1040-1043.

Kennedy, D., Austin, D., & Smith, R. (1987). *Special recreation: Opportunities for persons with disabilities.* New York: Saunders.

Kennedy, D., Smith, R., & Austin, D. (1991). *Special recreation: Opportunities for persons with disabilities.* Dubuque, IA: Wm. C. Brown.

Kleiber, D., Ashton-Shaeffer, C., Malik, P., Lee, L., & Hood, C. (1990). Involvement with special recreation associations: Perceived impacts in early adulthood. *Therapeutic Recreation Journal, 24*(3), 32-44.

Krebs, P., & Block, M. (1992). Transition of students with disabilities into community recreation: The role of the adapted physical educator. *Adapted Physical Activity Quarterly, 9,* 305-315.

LaMaster, K., Gall, K., Kinchin, G., & Siedentop, D. (1998). Inclusion practices of effective elementary specialists. *Adapted Physical Activity Quarterly, 15,* 64-81.

Levitz, M. (2001). American Association on Mental Retardation. Fact sheet: Self-advocacy. Retrieved March 27, 2001, http://161.58.153.187/Policies/faq_advocacy.shtml

Logan, A. (1970). *An investigation of the factors which deter the inclusion of disabled children and youth in programs of recreation service.* Unpublished doctoral dissertation, Oregon University, Eugene.

Malik, P. (1990). Leisure interests and perceptions of group home residents. *Annual in Therapeutic Recreation, 1,* 67-73.

Malik, P., Ashton-Shaeffer, C., & Kleiber, D. (1991). Interviewing young adults with mental retardation: A seldom used research method. *Therapeutic Recreation Journal, 25*(1), 60-73.

Manpower Administration (DOL). (1974). *Interviewing guides for specific disabilities. Mental retardation.* Washington, DC: Manpower Administration (DOL), (Eric Document Reproduction Service No. ED 132 398)

McAvoy, L., Schatz, E., Stutz, M., Schleien, S., & Lais, G. (1989). Integrated wilderness adventure: Effects on personal and lifestyle traits of persons with and without disabilities. *Therapeutic Recreation Journal, 23*(3), 50-64.

Mutchnick, R., & Berg, B. (1996). *Research methods for the social sciences: Practice and applications.* Boston, MA: Allyn & Bacon.

National Organization on Disability (2000). *Harris Survey on Americans with Disabilities.* Retrieved February 20, 2001, http://www.nod.org/hs2000.html

National Recreation and Parks Association. (1997). *NRPA position statement on inclusion.* Retrieved December 3, 1997, from http://www.nrpa.org/branches/ntrs/inclusion.htm

O'Brien, C., O'Brien, J., & Mount, B. (1997). Person-centered planning has arrived... or has it? *Mental Retardation, 35*(6), 480-484.

Oppenheim, A. (1966). *Questionnaire design and attitude measurement.* New York: Basic Books.

Paul, J., Stedman, D., & Neufeld, G. (1977). *Deinstitutionalization: Program and policy development.* Syracuse, NY: Syracuse University Press.

Peterson, C., & Gunn, S. (1984). *Therapeutic recreation program design: Principles and procedures* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Petrovello, L., & Sullivan, N. (1989). *Special education: An advocate's manual* (2nd ed.) , Lansing: Michigan Protection and Advocacy.

Philips, P. (1992). *Societal conceptualization of mental retardation: A contrived darkness.* Unpublished manuscript, Lynchburg College, Lynchburg, VA.

President's Committee on Mental Retardation. (1997) *Mission.* Retrieved March 27, 2001, from : http://www.acf.dhhs.gov/programs/pcmr/mission.htm

Prout, H., & Schaeffer, B. (1985). Self-reports of a depression by community based mildly retarded adults. *American Journal of Mental Deficiency, 90,* 220-222.

Prouty, R., & Lakin, K. (Eds.). (1996). *Residential services for persons with developmental disabilities: Status and trends through 1995.* Minneapolis: Research and Training Center on Community Living, Institute on Community Integration/UAP, University of Minnesota.

Rehabilitation Act of 1973, Pub. L. No. 93-112, 87 Stat. (1973).

Reid, D., Everson, J., & Green, C. (1999). A systematic evaluation of preferences identified through person-centered planning for people with profound multiple disabilities. *Journal of Applied Behavior Analysis, 32*(4), 467-477.

Richardson, D., Wilson, B., Wetherald, L., & Peters, J. (1987). Mainstreaming initiative: An innovative approach to recreation and leisure services in a community setting. *Therapeutic Recreation Journal, 21*(2), 9-19.

Sable, J., & Gravink, J. (1995). PARTNERS: Promoting accessible recreation. *Parks and Recreation, 30*(5), 34-40.

Salzberg, C., & Langford, C. (1981). Community integration of mentally retarded adults through leisure activity. *Mental Retardation, 19*(3), 127-131.

Satcher, J., & Dooley-Dickey, K. (1991, February 8-9). *The Americans with Disabilities Act of 1990: implications for rehabilitation counselors, employers, and persons with disabilities.* Paper presented at the National Rehabilitation Counseling Association's Eighth Annual Professional Developmental Symposium, Cincinnati, OH.

Scherschligt, O., Chiunti, H., & Burkhour, C. (1992). *Inclusive recreation: Planning recreation opportunities for people of all abilities.* Lansing: Michigan Department of Natural Resources.

Schleien, S., Fahnestock, M., Green, R., & Rynders, J. (1990). Building positive social networks through environmental interventionism integrated recreation programs. *Therapeutic Recreation Journal, 24*(4), 42-52.

Schleien, S., Germ, P., & McAvoy, L. (1996). Inclusive community leisure services: Recommended professional practices and barriers encountered. *Therapeutic Recreation Journal, 30*(4), 260-273.

Schleien, S., & Green, F. (1992) Three approaches for integrating persons with disabilities into community recreation. *Journal of Park and Recreation Administration, 10*(2), 51-66.

Schleien, S., Ray, M. T., & Green, F. (1997). *Community recreation and people with disability: Strategies for inclusion* (2nd ed.). Baltimore, MD: Brookes.

Schleien, S., Rynders, J., Heyne, L., & Tabourne, C. (1995). *Powerful Partnerships: Parents and professionals building inclusive recreation programs together*, (Available from the Therapeutic Recreation Leadership Training Grant Project Office, University of Minnesota, 110 Cooke Hall, 1900 University Avenue S.E., Minneapolis, MN, 55455)

Sherrill, C. (1993). *Adapted physical activity, recreation and sport: Crossdisciplinary and lifespan* (4th ed.). Madison, WI: Brown & Benchmark.

Sherrill, C., Heikinaro-Johansson, P., & Slininger, D. (1994). Equal-status relationships in the gym. *Journal of Physical Education, Recreation and Dance, 56*, 27-31.

Sigelman, C., & Budd, E. (1986). Pictures as an aid in questioning mentally retarded persons. *Rehabilitation Counseling Bulletin, 29*(3), 173-181.

Sigelman, C., Budd, E., Spandel, C., & Schoenrock, C. (1981a). Asking questions of retarded persons: A comparison of yes-no and either-or formats. *Applied Research in Mental Retardation*, 2, 347-357.

Sigelman, C., Budd, E., Spandel, C., & Schoenrock, C. (1981b). When in doubt, say yes: Acquiescence in interviews with mentally retarded persons. *Mental Retardation, 19*(2), 53-58.

Sigelman, C., Budd, E., Winer, J., Schoenrock, J., & Martin, P. (1982). Evaluating alternative techniques of questioning mentally retarded persons. *American Journal of Mental Deficiency, 86*(5), 511-518.

Sigelman, C., Schoenrock, C., Spanhel, C., Hromas, S., Winer, J., Budd, E., & Marting, P. (1980). Surveying mentally retarded persons: Responsiveness and response validity in three samples. *American Journal on Mental Deficiency, 84*(5), 479-486.

Sigelman, C., Schoenrock, C., Winer, J., Spanhel, C., Hromas, S., Martin, P., Budd, E., & Bensberg, G. (1981). Issues in interviewing mentally retarded persons: An empirical study. *Monographs. American Association on Mental Deficiency (NIK), 4*, 114-129.

Sigelman, C., & Werder, P. (1975). The communication skills of the mentally retarded: A new analysis. *Journal of Developmental Disabilities, 1*, 9-16.

Sigelman, C., Winer, J., & Schoenrock, C. (1982). The responsiveness of mentally retarded persons to questions. *Education and Training of Mentally Retarded*, 17, 120-124.

Sigelman, C. and others (1983). *Communicating with mentally retarded persons: Asking questions and getting answers.* (ERIC Document Reproduction Service No. ED 234 533).

Smith, R., Austin, D., & Kennedy, D. (1996). *Inclusive and special recreation: Opportunities for persons with disabilities* (3rd ed.). Madison, WI: Brown & Benchmark.

Sneegas, J. (1989). Social skills: An integral component of leisure participation and therapeutic recreation services. *Therapeutic Recreation Journal, 23*(2), 30-40.

Sommer, R. & Sommer, B. (1986). *A practical guide to behavioral research: Tools and techniques.* New York: Oxford University Press.

Sowers, J., & Powers, L. (1995). Enhancing the participation and independence of students with severe physical and multiple disabilities in performing community activities. *Mental Retardation, 33*(4), 209-220.

Sparrow, W., & Mayne, S. (1990). Recreation patterns of adults with intellectual disabilities. *Therapeutic Recreation Journal, 24*(3), 45-49.

Stein, J. (1994). Total inclusion or least restrictive environment. *Journal of Physical Education, Recreation and Dance,* November-December, 21-25.

Taylor, H., Kaagay, M., & Leichenko, S. (1986). *The ICD survey of disabled Americans: Bringing disabled Americans into the mainstream. A nationwide survey of 1,000 disabled people.* New York: Louis Harris and Associates.

Thiboutot, A., Smith, R., & Labanowich, S. (1992). Examining the concept of reverse integration: A response to Brasile's "new perspective" on integration. *Adapted Physical Activity Quarterly, 9*, 283-292.

Tuckman, B. (1972). *Conducting educational research.* New York: Harcourt Brace Javanovich.

University of Maryland Medicine. (2001). *Mental Retardation.* Retrieved March 27, 2001, from: http://umm.drkoop.com/conditions/ency/article/001523.htm

Vaughan, J., & Winslow, R. (Eds.). (1979). *Guidelines for community based recreation programs for special populations.* Arlington, VA: National Therapeutic Recreation Society.

Verpillot, A., & Dattilo, J. (1995). An exploratory study of constraints to leisure choices for adults with mental retardation. *Annual in Therapeutic Recreation, 6*, 45-54.

Wadsworth, J., & Harper, D. (1991). Increasing the reliability of self-report by adults with moderate mental retardation. *Journal of the Association for Persons with Severe Handicaps, 16*(4) 228-232.

Walsh, W., & Anson, J. (1981). Sport and recreation for the disabled: A discussion paper. In: *The preparation of disabled young people for adult society*, pp. 217-236. Australian Schools Commission, Canberra. (ISBN-0-642-8923-6)

Wehman, P. (Ed.). (1993). *The ADA mandate for social change.* Baltimore, MD: Paul H. Brookes.

West, P. (1984). Social stigma and community recreation participation by the mentally and physically handicapped. *Therapeutic Recreation Journal, 18*(1), 40-49.

Wiersma, W. (1995). *Research methods in education* (6th ed.). Boston, MA: Allyn and Bacon.

Wilhite, B., & Kleiber, D. (1992). The effects of special olympics participation on community integration. *Therapeutic Recreation Journal, 26*(4), 9-20.

Wolfensberger, W. (1972). *The principle of normalization in human services.* Toronto, Canada: National Institute on Mental Retardation

Wolfensberger, W. (1975). *The origin and nature of our institutional models.* Syracuse, NY: Human Policy Press.

Wolfensberger, W. (1983). Social role valorization: A proposed new term for the principle of normalization. *Mental Retardation, 21*(6), 234-239.

Wolfensberger, W. (1995a). An "if this, then that" formation of decisions related to social role valorization as a better way of interpreting it to people. *Mental Retardation, 33*(3), 163-169.

Wolfensberger, W. (1995b). Of "normalization," lifestyles, the special olympics, deinstitutionalization, mainstreaming, integration, and cabbages and kings. *Mental Retardation*, *33*(2), 128-131.

Wolfensberger, W., & Thomas, S. (1994). Views on values: Obstacles in the professional human service culture to implementation of social role valorization and community integration of clients. *Care in Place, 1*(1), 53-56.

Wyngaarden, M. (1981). Interviewing mentally retarded persons: Issues and strategies, *Monographs. American Association on Mental Deficiency (NIK), 4*, 107-113.

Yamamoto, M. (1993). Developmental disabilities. In R. Hansen, & B. Atchison (Eds.), *Conditions in occupational therapy.* Philadelphia, PA: Williams & Wilkins.

Zoerink, D., & Rosegard, E. (1997). Social justice through inclusive leisure services. In D. Compton (Ed.), *Issues in therapeutic recreation: Toward a new millennium* (2nd ed.). (pp. 17-38). Champaign, IL: Sagamore.