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Social Interaction Patterns between Children with and without Disabilities during Recreation Activities

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Abstract

Children are spending more time in community care facilities (i.e., after-school programs, day camp, etc.) and are interacting with other children of mixed abilities on a more consistent basis. Therefore, acceptable social skills and possessing the ability to interact and communicate effectively are of vital importance. The basis of this study was to examine and identify key components that generated positive and reciprocated social interactions between children of all abilities in an inclusive recreational program. Participants selected for this study were school-aged children of varying physical and/or cognitive abilities. All children utilized the services of the Family YMCA of Black Hawk County Together We Play (TWP) program, a multi-agency inclusion service during the summer of 2006. TWP "coordinates the inclusion process that best serves the child, parent, and recreation agencies." The analysis of the data consisted of two primary tools: (a) the Analysis of Social Interactions (ASI) form, and (b) the Daily Interaction reconciliation form. The ASI examined the type, quality and attributes of each communicative and/or social interaction that occurred between the children with disabilities and other program participants within a specific timeframe. The Daily Interaction reconciliation form examined the quantitative aspects of the interactions that transpired. The results of this study indicate positive social interaction patterns increased between all program participants when active, positive, and direct one-on-one contact occurred.

SOCIAL INTERACTION PATTERNS BETWEEN CHILDREN WITH AND
WITHOUT DISABILITIES DURING RECREATION ACTIVITIES

An Abstract of a Research Paper
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

Mary A. Parramore
University of Northern Iowa
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ABSTRACT

Children are spending more time in community care facilities (i.e., after-school programs, day camp, etc.) and are interacting with other children of mixed abilities on a more consistent basis. Therefore, acceptable social skills and possessing the ability to interact and communicate effectively are of vital importance. The basis of this study was to examine and identify key components that generated positive and reciprocated social interactions between children of all abilities in an inclusive recreational program. Participants selected for this study were school-aged children of varying physical and/or cognitive abilities. All children utilized the services of the Family YMCA of Black Hawk County *Together We Play* (TWP) program, a multi-agency inclusion service during the summer of 2006. TWP “coordinates the inclusion process that best serves the child, parent, and recreation agencies.” The analysis of the data consisted of two primary tools: (a) the Analysis of Social Interactions (ASI) form, and (b) the Daily Interaction reconciliation form. The ASI examined the type, quality and attributes of each communicative and/or social interaction that occurred between the children with disabilities and other program participants within a specific timeframe. The Daily Interaction reconciliation form examined the quantitative aspects of the interactions that transpired. The results of this study indicate positive social interaction patterns increased between all program participants when active, positive, and direct one-on-one contact occurred.

This Research Paper By: Mary Ann Parramore

Entitled: Social Interaction Patterns Between Children With and Without Disabilities
During Recreation Activities

has been approved as meeting the research project requirement for the
Degree of Masters of Youth and Human Services Administration.

4/11/08
Date

Dr. Kathleen Scholl, Chair, Research Committee

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Date

Dr. Joe Wilson, Research Committee Member

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CHAPTER 1

INTRODUCTION

In our fast-paced culture, dual income families are commonplace. Children are spending more time in community care facilities (i.e., after-school programs, day camp, etc.) and are interacting with other children on a more consistent basis. Therefore, learning acceptable social skills and possessing the ability to interact and communicate effectively are of vital importance. Concerns may arise when children with disabilities are placed in a group setting and “do not possess the necessary social skills to enter or maintain satisfying interactions with peers” (Kemple, 2004). The key to positive social interactions between children with and without disabilities begins with a committed and collaborative effort between parent(s) and/or caregiver(s) and knowledgeable, caring professionals.

PURPOSE OF STUDY

The purpose of this study was to investigate the social interaction and engagement patterns between children with and without disabilities during inclusive recreational activities. This evaluation will provide local recreation agencies with measurable results regarding how recreation environments might influence the nature of social interactions among youth. With these results, agencies will have information of the social interactions occurring, or not occurring for youth participating in their programs. In addition, agencies will be better informed to design relevant inclusion recreation programming that boost social support behaviors during recreation activities.

PROBLEM STATEMENT

It is estimated there are over 63 million people in the United States who have at least one disability (U.S. Census, 2002). The United States Department of Education's Office of Special Education and Rehabilitative Services (2003) maintains there are 66,881 school-aged children with disabilities living in Iowa. Of that 66,881, more than 3,000 are children living in the Cedar Valley region (Family YMCA of Black Hawk County, n.d.). There is no doubt children with disabilities will constitute a major influence in our community and nation of tomorrow. With that in mind, what will that future look like? Will it be a cohesive group of people of various ages, races, and abilities? We can only hope so – the promise of inclusion for people with disabilities into all facets of community life has been a slow process even though the Americans' with Disabilities Act (ADA) was mandated into law on July 26, 1990. The delay in the progression of inclusion may be attributed to bureaucracy or maybe something as simplistic as our human tendency to resist change.

In North American society, the dominant culture has a long history of ignoring or avoiding individuals who are physically or psychologically different than what mainstream society ascertains as *normal*. Schleien, Ray, and Green (1997) found “the inclusion of people with disabilities mirrored the impact the Civil Rights Act had on the inclusion of people of color – [the passage of access laws] did not guarantee social acceptance” (p. 1).

How can we move toward a more tolerant and inviting future? There is no doubt education and the willingness to change is at the crux of alleviating and hopefully

eliminating the invisible barriers that have slowed down the progression of full inclusion and acceptance in our nation, society, and community. In the rush of our everyday lives it is easy to forget that every person *needs* and deserves to feel accepted and valued (Maslow, 1954), not only as a person of talent and skills, but as a necessary part of a larger unified group.

Being identified by peers as a valued part of the group is not an easy task for most people to accomplish, especially for a person who has limited social interaction skills. Therefore, a clear understanding of the social interaction patterns that occur between children with and without disabilities in a recreational setting is necessary.

Documented research studies provide in-depth analyses of interaction patterns and social acceptance (Evans, Salisbury, Palombaro, Berryman, & Hollowood, 1992; Hunt, Farron-Davis, Beckstead, Curtis, & Goetz, 1994; Kennedy & Ikonen, 1994) between children with and without disabilities. Schleien et al., (1997) suggested positive and reciprocated communication is accomplished by mainstreaming people with and without disabilities in inclusive environments. They believe the exposure and ongoing interactions with people with disabilities may dispel the fears and uncertainties many individuals without disabilities possess, allowing them to “gain knowledge and become more sensitive to individual differences, and develop more accepting attitudes, giving them the opportunity to broaden their chance for friendship” (p. 20). On the other hand, MacCuspie (1996) inferred that placing children (with and without disabilities) in a group setting without prior formal intervention has resulted in “tolerance . . . rather than inclusive or accepting relationships” (p. 13). While both findings are relevant, the overall

goal of leisure and recreational practitioners is to establish an inclusive experience that is welcoming and accepting, and that embraces the needs of all children.

SIGNIFICANCE OF THE STUDY

The significance of this study resides in the basic rudimentary need to be recognized and respected as a person of varying talents and abilities. For many individuals with disabilities, it is the disability that is seen first. Unfortunately, sometimes it is the *only* thing they see. Middleton (1999) believes the aim of tomorrow's leisure and recreation professionals should be to "widen the boundaries of what is construed as acceptable and normal" (p. 63). Examining and identifying key components that generate positive and reciprocated social interaction between children of all abilities in an inclusive recreational program is a good start, and is the basis of this study.

Recreational programs that facilitate "inclusion are structured in ways that support social interaction, emphasize teamwork, and offer individuals a chance to share information about themselves provide a starting point for the development of social relationships" (Gaylord, Lieberman, Abery & Lais, 2003). Participation in fun, play activities offers all participants an excellent opportunity to meet people and make friends.

Benefits of Inclusion

Inclusion, mainstreaming or integration has been around for several decades. According to Schleien et al., (1997) "the actual beginning . . . occurred during the early 1800's when drives for education and political reform (for people with disabilities) became widespread in the Western world" (p. 3). However, in the framework of recreation inclusion is "in its infancy" (Devine & King, 2006). Regardless of the

discipline, the intended essence of inclusion remains the same: acceptance, mutual respect and friendship. Aside from the ethical perspective, there are other and equally important issues that inclusive recreation addresses. Inclusion and inclusive recreational environments are beneficial for all participants by addressing the physical, cognitive, emotional and social needs that every person needs in order to attain a healthy quality of life.

Physical Benefits of Inclusion

Physical activity is important for everyone, regardless of culture, religion, or abilities. In today's automated society, many vigorous outdoor activities of the past have been replaced by computers, mp3 Players, and X-boxes. Our newly acquired indoor sedentary lifestyle may be linked to our nation's increased obesity rate. Therefore, a rigorous exercise regiment is strongly recommended for **all** children. The benefits of physical activity include: increasing the body's ability to fight off disease, strengthening muscle tone, and lowering body weight, all of which can lead to an increased quality of life for all participants.

Cognitive Benefits of Inclusion

While physical activity is important, the cognitive aspect of inclusion in community life is of equal importance. Theorists believe that the cognitive benefit of inclusive recreational activities for children with and without disabilities will increase their "ability to comprehend the feelings and circumstances of others" (MacCuspie, 1996, p. 18). The cognitive benefits of inclusion within an inclusive recreational setting allows children without disabilities to model appropriate interaction and behavior patterns for

children without disabilities who may not have all the necessary skills to maintain positive communication with their peers. Schleien et al. (1997) believes that children “teach each other social skills (i.e., how to communicate, be tactful, handle conflict) and give each other a sense of selfhood . . . which lays the foundation for developing friendships later in life” (p. 130).

Social Benefits of Inclusion

Humans are social beings by nature; therefore, friends play an important part in our lives. However, the emotional aspect of inclusion carries a much deeper implication. The ramifications are similar to social acceptance: when a person is accepted, they feel welcomed, acknowledged, and appreciated. On the contrary, *social exclusion* leads to “fear, pity, and negative images . . . preventing [children with disabilities] from being viewed as individuals with abilities as well as disabilities” (MacCuspie, 1996).

Children with disabilities may not possess the necessary social skills needed in order to interpret and respond to various social cues. Therefore, inclusive recreational exposure allows all children the opportunity to develop and increase their aptitude in creating and maintaining friendships. All children have the right to a life that is as normal as possible, reiterating the need for a committed and collaborative effort between parents/caregivers and knowledgeable, caring professionals. Recreation activities provide physical, cognitive, emotional and social benefits for all participants. However, this study focuses solely on the social interactions that occur during recreation activities when a child with a disability is included in a recreation program.

Research Questions

1. What interaction patterns are occurring between the children with disabilities and the others involved in the recreational activity?
2. Who is initiating the interaction?
3. What is the quality of the interaction?
4. What is the child (with disabilities') level of engagement during the inclusive recreational activity?
5. Which activities are more likely to support/encourage positive social interaction between youth?

Delimitations of the Study

The study was delimited to the following:

1. Participants were selected from the *Together We Play* program in the Cedar Valley region.
2. Participants were observed during the Summer of 2006.

Limitations of the Study

The study was limited by the following:

1. Participants were not randomly selected; generalizations cannot be made with the results of this study.
2. This study utilized a revised observation tool to examine social interaction patterns between participants. The validity and reliability of the pilot measurement instrument (ASI) may necessitate revisions in the future.

3. Each child varied in disabilities and age, no comparisons can be made between the different children in this study.

Assumptions

This study was conducted under the following assumptions:

1. Social interactions will occur during recreation activities.
2. The measurement tools used provides an effective analysis of social interaction patterns that occurred.

Definition of Terms

Disability: “an umbrella term that includes three key dimensions: (1) impairment: a loss or abnormality of body structure or of a physiological or psychological function, (2) activity: the level of functioning of the person, which can be limited in nature, duration and quality, and (3) participation: the person’s engagement in the activities of life, as function of their impairment(s), health conditions, and contextual factors” (Bullock & Mahon, 2000).

Inclusion: “the involvement and full acceptance of persons with special needs into a wide range of community settings” (Russell, 2002, p. 303).

Inclusive recreation: “offers all individuals tasks that are equally interesting, equally important, and equally engaging during recreation activities” (Sherrill, 2004).

Social acceptance: “a sense of group belonging and value—it is a feeling that participation is welcomed and not ridiculed when skills look different from peers without disabilities (Devine & Datillo, 2001).

Social competence: “the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across situations” (Rubin & Rose-Krasnor, 1995).

Social inclusion: “reciprocal social acceptance and direct contact with everyone present and specific social behaviors like knowing and using each other’s names, sharing power and resources, cooperating, offering support and praise, and appreciating and respecting diversity” (Sherrill, 2004).

Social interaction: “the fallible process of communication . . . by verbal and non-verbal cues between two or more individuals” (Burgoon & Bacue, 2003).

CHAPTER 2

REVIEW OF LITERATURE

This study investigates the social interaction that occurs between children with and without disabilities in a recreational setting. Therefore, this chapter will examine and discuss the importance of: (a) recreation for children of all abilities, (b) social acceptance, tolerance, friendship and inclusion, (c) social interaction and engagement, (d) related theories, and lastly (e) exceptional inclusive recreation programs.

Importance of Recreation for Children with Disabilities

As children with and without disabilities slowly familiarize themselves into the facets of community life, a clear understanding of the benefits of inclusive recreation is important. The advantages of inclusive recreation for children with disabilities include increased motor skills acquisition, strength/flexibility improvement, and more social interaction opportunities with their non-disabled peers. Fine and gross motor skills are sharpened through recreational activities. For example, swimming or participating in a soccer game requires the use and movement of the participants' arms and legs, which increases and improves gross motor skills. Fine motor skills are enhanced by games or toys that require the use of the hands and fingers. Through repetitive leisure activities (games and sports), strength and flexibility are increased, leading to the development of stronger, more agile bodies.

Recreation for children with disabilities is especially important in the realm of enhancing social interaction skills. Involvement in recreational activities allows children with disabilities to observe and learn how their non-disabled peers interact with each

other. Partaking in inclusive recreational activities opens the door for all children, enabling them to play, socialize, and laugh together. Social skills are learned and practiced primarily through the give and take of peer play (Kemple, 2004).

One of the strongest and most compelling arguments regarding the importance of recreation for children with disabilities comes from the moral assertion of Odom and Diamond (1998), who stress that all children have the right to “a life that is as normal as possible: children with disabilities should experience the same high quality childhood programs as children without disabilities and should be supported to develop positive relationships within that community.” Inclusive recreational play experiences are also important in the development of free choice, enabling children of all abilities to discover what *their* personal preferences are. The concept of *choice* is a freedom that most of us take for granted. Most of us do not think twice about when and how we will partake in an activity we enjoy. However, for some individuals with disabilities, choice and the ability to choose is a skill learned almost exclusively through inclusive environments.

Importance of Recreation for Children without Disabilities

Inclusive recreation for children without disabilities has the same multitude of advantages as for children with disabilities (increased motor skills, strength, flexibility, and agility improvement). Additional and equally important benefits for children without disabilities include increased social sensitivity and respect for others. Social sensitivity in children without disabilities is increased when negative stereotypes of their disabled peers are dispelled. Roberts (2005) reported that children without disabilities expressed a more positive impression of their peers with disabilities after a play experience. The

dismissal of pessimistic attitudes creates a new-found respect for similarities and differences between peers. Siperstein, Parker, Bardon, and Widaman (2007) conducted a recent national study that examined the attitudes of non-disabled school aged children towards their disabled peers. Their findings suggest the inclusion of peers with disabilities had a “positive impact on them by making them more accepting of differences and teaching them differences are acceptable. Youth may understand the moral and societal message that acceptance of diversity is important” (p. 451).

Importance of Social Acceptance, Tolerance, and Friendship

As mentioned earlier, every person *needs* and deserves to feel accepted and valued (Maslow, 1954), not only as a person of talent and skills, but as a necessary part of a larger unified group. Social acceptance, tolerance, and friendship are skills the leaders of tomorrow must possess in order to be effective in our diversified world.

According to MacCuspie (1996), social acceptance is attained when the group believes the child (with disabilities) understands their peer group values and is able to display a range of social skills. After this point, the child is deemed an appropriate playmate, and should be routinely included in playground activities. In other words, social acceptance occurs between a child and their peer group when active and spontaneous interaction occurs. Kemple (2004) asserted that “mastering the necessary (social interaction) skills for functioning effectively in society requires, time, growth, and a variety of social experiences.”

What about the countless children with disabilities who do not possess the necessary social skills to communicate appropriately and effectively? Various studies

(Kemple, 2004; MacCuspie, 1996) suggest the physical placement of children with disabilities in an inclusive environment without the necessary social interaction skills does not encourage social acceptance – on the contrary, it promotes only tolerance.

Tolerance is generally defined as having an indifference to or the ignoring of one's presence, which is precisely why inclusive recreation is important for all children. An inclusive environment would facilitate the acquisition of appropriate social interaction skills for the child with disabilities. It would also address possible stigmas and fears some children without disabilities would experience if the inclusion did not occur. Katz and McClennan (1997) believe one way to combat the stress experienced by children without disabilities is to introduce them to inclusive environments during their early childhood years. Interventions occurring during the preschool years had greater effects than those occurring in middle or later childhood years. When a child is young, it is a powerful time for nurturing the development of positive peer relationships in children of all abilities (Schneider and Byrne, 1985). When children of all abilities are exposed to each other at an early age it may decrease high levels of anxiety, which might otherwise lead to social avoidance. Integrated experiences can motivate children to behave morally and ethically in regard to the treatment of others who are perceived as different, and can ease in the development of friendship (Brown and Bergen, 2002).

What facilitates friendship between children with and without disabilities? Friendship occurs more frequently when positive reciprocated communication and mutual interests occur between two or more individuals despite their physical and/or psychological abilities and differences. Rubenstein (1984) noted “childhood friendships

allow children to share affection, support, companionship, and assistance. In fact, children are resources for each other in ways that adults cannot be (p. 130).” Heyne, Schleien and McAvoy (1993) conducted a three year study to investigate how friendships develop between children with and without disabilities. Their findings resulted in positive feedback from all participants, especially the children. “For children with disabilities, friends have enabled them to take part in everyday, growing-up experiences (belonging, sharing, and playing) that only their peers could offer them.” For the children without disabilities, their experience in inclusive recreation can hopefully lay the foundation for an optimistic and diversified future. “Children without disabilities learned about the talents and abilities of their friends, discovered that they can receive the gifts of friendship back from their friends, and acquired new information about differences in people.” This study by all accounts, seems to reaffirm the belief that properly structured programs joined with family and community involvement can make a difference in changing the viewpoint of a group, the neighborhood, and ultimately the community.

Importance of Inclusion

What makes inclusion and inclusive programs indispensable in our future as a community lies in “embracing differences where all people have their needs met; where people learn to live with one another; where basic values are important to each child, not just some of the children” (Strully & Strully, 1991). Inclusion is not only relative in the educational and recreational sectors of community life; it also builds important life skills. One of the most eloquent and insightful explanations of inclusion comes from Bullock and Mahon (1997), who articulated “the fundamental principle of inclusion is the valuing

of diversity within the human community. We abandon the idea that children or adults have to become 'normal' in order to contribute to the world" (p.62). There should be no doubt that every person has varying talents and skills; it is those abilities that ought to be looked at and allowed to be contributed to the community.

Social Interaction and Engagement

A growing number of studies examined the social interaction patterns of school aged children in order to determine the level of activity, level of engagement and the degree of fulfilling the individualized education plan (IEP) objectives (Evans, Salisbury, Palombaro, Berryman, & Hollowood, 1992; Hunt, Farron-Davis, Beckstead, Curtis, & Goetz, 1994; Kennedy & Itkomen, 1994; Hunt & Farron-Davis, 1992, Hunt, Alwell, Farron-Davis, & Goetz, 1996). Studies have also examined the importance of social interaction between children of all abilities in inclusive recreation programs that are based on the premise of "participation in leisure and recreational activities is important for people with disabilities in order to achieve normalization" (Block, 1994; Moon, Hart, Komissar, Friedlander, Stierer, & Johnson Brown, 1994; Schleien, 1988; Schleien, Ray, & Green, 1997; Fennick & Royle, 2003).

First, Evans et al. (1992) investigated the types of interactions expected in mainstream classrooms. A total of sixteen students participated in the study; eight students without disabilities and eight students with severe disabilities. The students with disabilities received more social approaches than they initiated. As the school year progressed, their interactions became more like those of their non-disabled peers. Three assessment tools were utilized: (a) Assessment of Social Competence (ASC) scale, (b)

Sociometric analysis, and (c) direct observation. The results indicated the student's social acceptance and opportunity for interactions were not based on their status as individuals with disabilities, and suggest the implicit standards and values of the students may play a significant role. Whereas Hunt et al. (1992) examined the quality and curriculum content of Individualized Education Programs (IEP) created by eleven teachers for twenty-two students with severe disabilities (twice). The first set of IEP's was created while the students with disabilities attended a special class program. The second (comparison) set examined the students after they were placed into a general education classroom. Evaluations and assessments were based on IEP quality and content. The study found no differences in the curriculum content of IEP's written for the students while they participated in the special class program. However, the IEP's for students with disabilities improved when they participated full-time in a general education class. In an additional study, Hunt et al. (1994) investigated the effects of placing thirty-two elementary aged students (sixteen with more disability, and the other sixteen students with less disability) in a fully inclusive or special education model of integration. Sixteen elementary education programs in the state of California participated in this study. Two assessment tools were used: (a) IEP's of the participating students, and (b) direct observation of students in their school programs. Results suggest higher levels of overall quality in IEP's for full-time members of general education classes; also there were increased interactions between students with and without disabilities. A study by Kennedy and Itkonen's (1994) examined the social life of three high school students with severe disabilities after they were placed in regular education classroom. The

research was designed to analyze the social contacts and networks of the focus students. Three assessment tools were used: (a) Social Contact Assessment Form (SCAF), (b) School-based Social Network Form (SSNF), and (c) direct observation. The primary results indicate regular class participation increased the students' social contact with peers without disabilities. A new effort by Hunt et al (1996) examined the effectiveness of an intervention designed to facilitate the social inclusion of three elementary-aged students with significant physical and intellectual challenges. The individualized assessment was comprised of four major components: (a) on-going information to necessary participants, (b) identification and utilization of various media that could assist in interactive exchanges between the focus students and others, (c) on-going facilitation by education staff or "buddy system" between students and their classmates, and (d) Interactive Partnership Scale (IPS). The findings suggest the study was effective in producing positive changes in the nature of interactive exchanges between the focus students and others. Additional results included increased reciprocated social interaction with peers and less assistive interactions from paraprofessionals. Finally, in an inclusive recreational study Fennick and Royle's (2003) pilot program sought to include six children and youth with developmental disabilities in community recreation activities with non-disabled peers. Each participant was matched with an activity coach who met with the child's family to plan specific activities. Assessment was measured by (a) coach journals, (b) parental feedback, (c) surveys, and (d) direct observation. The results suggest: community recreation involvement for children and youth with developmental

disabilities is worthwhile, and social interaction between participants with and without disabilities occurred at an appropriate level.

Early research suggests the integration of children and youth with disabilities into general education classes or inclusive recreational activities possess the common ground of (a) social interaction between the participants became more typical, like those of their non-disabled peers, (b) interactions were not based on their status as individuals with disabilities, (c) increased reciprocated social interaction occurred (d) resulting in less professional and/or adult interaction assistance needed. Participation in inclusive environments (educational or recreational) can result in positive social interactions between children and youth with and without disabilities.

The process of creating welcoming and inclusive environments does not occur by simple trial and error. Inclusion and inclusion practices are based on processes and techniques that are derived from theories. The inclusion process is a systematic means of making accommodations so that all can participate in inclusive settings (Devine, O'Brien, & Crawford, 2004).

Related Theories

Three theories propelled this study: a) contact theory, b) the normalization principal and, c) spiral theory. Contact theory is based on the belief that intergroup contact typically reduces inner group prejudices. Normalization theory is grounded in human rights and is central to improving the quality of life for individuals with disabilities. Lastly, spiral theory is driven by overcoming the barrier of change. The

theories that drove this research were founded on the premise that all people, regardless of abilities or disabilities, are entitled to be treated equally and fairly.

Contact Theory

Slinger, Sherrill, and Jankowski (2000) conducted a study that examined the attitudes of children in a physical education class towards peers with severe mental retardation who used wheelchairs. The theory chosen to guide the study was *contact theory* (Allport, 1954). The researchers believe contact theory is the gold standard in designing school and community practices that reduce prejudice and discrimination among people who perceive themselves and others as different. The participants consisted of 131 elementary aged students; 62 females and 69 males. During the experimental period (4 weeks, 20 sessions, each 25 minutes), two children in wheelchairs were integrated into each contact class, and a special helper model was implemented. The study concluded: (a) females have better attitudes towards peers with severe mental retardation in wheelchairs in a physical education setting than males, (b) four weeks of daily contact in cooperative games and rhythms significantly improved the attitudes of males, and (c) structured group contact improved.

Normalization Principle

In 2003, Jennifer B. Mactavish and Maureen J. Dowds created an article titled *Physical Activity and Sport for Individuals with Intellectual Disability* examining how physical activity professionals can help individuals with disabilities participate in sports and recreation. The article is geared specifically towards service providers who assist participants (directly or indirectly) in the actual activity. It is an overall synopsis of

information for professionals who take an inclusive approach to the delivery of their services for participants. The author sought a theory grounded in human rights and central to the quality of life and equality, their theory of choice was the *normalization principle* (Wolfensberger, 1972). The normalization principle is about ensuring that individuals with disabilities have opportunities in life: to make decisions, attend school, have a job, participate in sports, and to be recognized as a member of society.

Wolfensberger's position has been instrumental in increasing the availability of programs and services to people with disabilities. The article concluded with a reflective look at the difficulties many people with disabilities may confront on a daily basis.

Spiral Theory

DePauw and Doll-Tepper (2000) collaborated to create *Toward Progressive Inclusion and Acceptance: Myth or Reality? The Inclusion Debate and Bandwagon Discourse*. The article is a discussion directed towards adapted physical activity professionals on the subject of progressive inclusion and acceptance of individuals with disabilities. The author's began by examining the historical aspect of adapted physical activity (APA) and how it changed and will continue to evolve as we enter a new and more diversified millennium. "Adapted physical activity must be viewed as a service, more so that a place, placement, or even a program" (p. 140). The researchers anchored their viewpoint in the concept of Spiral Theory which responds to societal change (i.e., actions, behaviors, and events). As changes occur, the overall trend (movement) will appear to halt. The cessation is only temporary as it forces society to critically analyze and redirects their viewpoints; moving itself forward and upwards (See Figure 1).

DePauw and Doll-Tepper (2000) assert spiral theory is an accurate reflection of the continued role APA professionals have and continue to have in providing meaningfulness and inclusive services for all individuals.

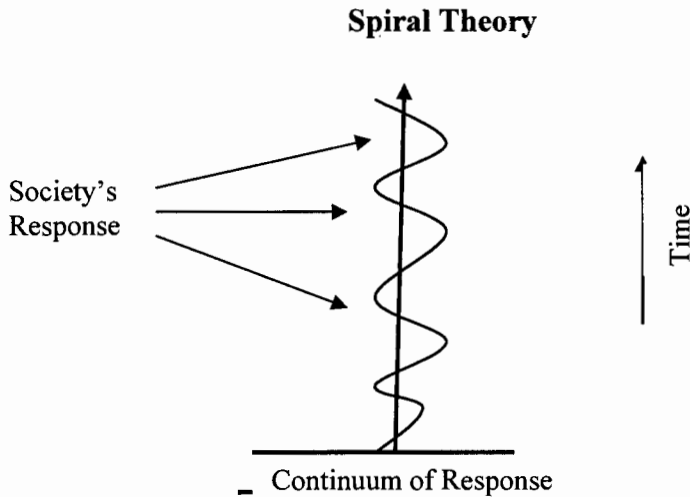


Figure 1. Spiral Theory

The above depicted theories share in the overall goal of improving the lives of people who have disabilities. The hypothesis' also illustrates the belief that **all** people within the human community can make a valuable contribution to society. Leisure professionals of today have a moral responsibility to help in the facilitation of reducing (and eventually eliminating) negative and/or patronizing attitudes towards individuals with disabilities. Therefore, a strong proactive approach to the inclusion process should be incorporated into all applicable recreation programs. When inclusion is fully embraced in recreational programs and society, we (as a community) will be able see past our differences and focus in on our common ground – one of which would be inclusive recreational programs. Schleien et al. (1997) believed that “some of the most effective

strategies for inclusion (in recreational environments) have been the results of collaborative efforts among a variety of professionals” (p. 179).

Exceptional Inclusive Recreation Programs

The following inclusive community recreation programs share in three equally important characteristics: a) realizing the importance of training their employees b) reaching out and working with the community, and c) collaborating with community agencies and professionals to meet the recreational needs of all participants. The differences in each *exceptional inclusive recreation program* are found in their desire to meet each of their community’s unique and specific needs.

Jewish Community Center of the Greater St. Paul Area. The St Paul Jewish Community Center (JCC) is a non-profit organization which began serving people of all ages and abilities in 1984. The children’s program was designed to integrate children and youth of all abilities into age appropriate activities. Some of the offered activities include swimming, gymnastics, basketball, modern dance, and summer camp. One unique aspect of the JCC lies in its Intergenerational Inclusive Preschool Program, a collaborated effort between the University of Minnesota and three separate divisions *within* the JCC: (a) Early Childhood, (b) Senior Adult, and (c) Special Needs. The program places young children with and without disabilities in inclusive classroom environments wherein trained older adults (from the community) assist the inclusion staff members (Schleien et al., 1997). The inclusion staff is trained by a Certified Therapeutic Recreation Specialist (CTRS) utilizing a group approach to problem-solving. Every three years, the JCC asks the community to complete a program evaluation. The assessments serve multiple

purposes; encouraging the community to become involved by offering suggestions for improvements and they in turn, receive valuable feedback on their existing programs. The evaluations also enable the JCC to determine if the needs of the community are being met (A. Hoffer, personal communication, September 17, 2007).

The Cincinnati Model. The Cincinnati Recreation Commission (CRC) began serving people with disabilities in 1967. The passage of the Americans with Disabilities Act (ADA) in 1990 advocated the CRC's "Recreation for All" philosophy and thus began educating their employees about the ADA. The Inclusion Team consists of an Inclusion Coordinator, Inclusion Specialist, Certified Therapeutic Recreation Specialists (CTRS) and community support staff. The delivery of inclusion services is comprised of seven key components. In the first component, the Inclusion Specialist facilitates the process of inclusion by assessing, planning, and implementing various accommodations or services for participants. Some of the services may necessitate the use of adaptive equipment, architectural modifications, or activity adaptation. The second component is the Disability Awareness Program (DAP), an educational program for school-aged children promoting knowledge, acceptance, and support for people with disabilities. The third component is staff training. When a child with a disability is enrolled into the general program, the inclusion team provides verbal and written information about the disability and the implications for recreation to the necessary inclusion staff member(s). The last four components are internal and external marketing, advocacy, integration, and inclusion council. The inclusion council consists of members of various community centers who

meet once a month to discuss issues which may arise in the programming for individuals with disabilities (Montgomery & Kazin, n.d.).

Together We Play. The concept of a multi-agency inclusion service was created in 2001, when a coalition of concerned parents, human service, education, and recreation professionals came together to examine the existing challenges and opportunities for inclusion programs being offered to children and youth with disabilities within their Midwest community. The primary goal of the coalition was to connect people to the community resources and to facilitate the sharing of these resources among agencies; the result of their efforts was later named Family YMCA of Black Hawk County “*Together We Play*” (TWP). TWP employed a Certified Therapeutic Recreation Specialist (CTRS) as their Inclusion Director to assist the community with the inclusion process. Some of the Inclusion Director’s responsibilities consist of: (a) assisting recreation agencies in the adaptation of their programs and/or equipment in order to provide the least restrictive and most inclusive environment, (b) working directly with education, medical, and social service professionals to provide a team-oriented approach to deliver inclusion services, and (c) hiring and training qualified college students as a *leisure companion* to the child or youth with disabilities. The Inclusion Director is primarily a resource coordinating the child, parents, and recreation agencies, to promote inclusive recreation services for all individuals (Scholl, Dieser, & Davison, 2005).

Summary

Inclusive recreation does more than simply incorporate children of mixed abilities into uniform play; it exposes all participants to an environment where mutual and

reciprocal relationship can develop and flourish. Throughout this chapter the literature has presented the benefits inclusive recreation can provide for all participants and the impact inclusive environments can play in challenging and dispelling the negative labels placed on individuals with disabilities.

CHAPTER 3

METHODOLOGY

The purpose of this study was to identify how inclusive recreation programs facilitate the social interaction and engagement of children with and without disabilities. This study was adapted from an intervention study designed to facilitate the social inclusion of youth with significant physical and intellectual challenges (Hunt, Alwell, Farron-Davis, & Goetz, 1996).

Research Design

A non-obtrusive observational study was employed in order to identify specific interactions that may or may not be occurring between participants during recreation activities. The Analysis of Social Interactions (ASI) was created and designed to identify, evaluate, and determine the type and quality of interaction that occurs. The original instrument, Educational Assessment of Social Interaction (EASI) (Goetz, Haring, & Anderson, 1983) measured the occurrence of social interactions between elementary school students with and without disabilities. An expanded version of the EASI was created by Hunt et al. (1996); the Interactive Partnership Scale (IPS) which measured the type and quality of social interactions between students with and without disabilities in educational settings. Although the IPS is a valuable measurement tool, the Analysis of Social Interactions (ASI) was adapted to capture an increased number of communicative functions that could occur during a recreational activity. The additional functions (or social support behaviors) used in the ASI were derived from the work of Kennedy, Shukla and Frywell (1997) who created the Social Interaction Checklist (SIC). The SIC

allows the researcher to record assistive behaviors that may take place during an interaction. The enhanced social support behaviors of the ASI will add an in-depth, clearer look into reciprocated social interactions.

Research Participants

The six participants selected for this study were school-aged children ranging in age from 4 to 16 years old. Three male and three female children of varying physical and/or cognitive needs participated in the study. The types of disabilities identified included pervasive developmental disorder – not otherwise specified (PDD-NOS), obsessive compulsive disorders (OCD), developmental delays, autism, down and tourette syndrome.

All children in this research utilized the services of the Family YMCA of Black Hawk County *Together We Play* (TWP) program, a multi-agency inclusion service. TWP “coordinates the inclusion process that best serves the child, parent, and recreation agencies” (Scholl, Dieser, & Davison, 2005). The program provides each participant the opportunity to partake in recreational activities with their non-disabled peers. Each participant (of this study) was assigned a leisure companion or respite worker, depending on their physical and/or medical needs. The role of the leisure companion was to “provide overall guidance so that children with or without disabilities could become comfortable and accepting of each other” (Together We Play, n.d.).

Social Interaction (ASI) Form

The adapted study design utilized Hunt et al. (1996) modified version of Goetz et al. (1983) Educational Assessment of Social Interaction (EASI) tool as the foundation for

the Analysis of Social Interaction (ASI). The differences in the instrument variables are defined in Table 1.

Table 1: *The Creation of a Qualitative Observational Recreation Assessment Tool*

Source	Tool	What it records	Communication Functions
Goetz, Haring, & Anderson (1983)	Educational Assessment of Social Interaction (EASI)	- Interactive variables	<ul style="list-style-type: none"> ≈ Communicative initiations by the student with disabilities to others ≈ Communicative initiations from others to the std w/disabilities ≈ Reciprocal interactions between the focus student and others in which there was both an initiation and an acknowledgement ≈ Identification of the interaction as either social or task related
Hunt, Alwell, Farron-Davis & Goetz (1996)	Interactive Partnership Scale (IPS)	<ul style="list-style-type: none"> - Interactive variables PLUS - Increased communicative function of each interaction - Quality/emotional characteristics 	<ul style="list-style-type: none"> ≈ R: Request ≈ P: Protest ≈ C: Comment ≈ A: Assistance
Kennedy, Skukla, & Frywell (1997)	Social Interaction Checklist (SIC)	- Interactive variables (social support behaviors)	<ul style="list-style-type: none"> ≈ G: Greeting ≈ I: Information ≈ A: Access to others ≈ M: Material aid ≈ E: Emotional support ≈ C: Companionship
Parramore (Unpublished Master's Paper)	Analysis of Social Interactions (ASI)	<ul style="list-style-type: none"> - Interactive variables PLUS - Increased communicative function from Kennedy's et al. (1997), social support behaviors - Decreased identity of the partner (<i>Who</i>) 	<ul style="list-style-type: none"> ≈ G: Greeting ≈ I: Information ≈ A: Access ≈ M: Material aid ≈ E: Emotional support ≈ C: Companionship ≈ P: Protest ≈ O: On-task (focus student only)

Educational Assessment of Social Interaction

The function of the EASI was to search for the occurrence of interactive variables occurring between the focus child and others: (a) communicative initiations by the student with disabilities to others, (b) communicative initiations from others to the student with disabilities, (c) reciprocal interactions between the focus student and others

in which there were both an initiation and acknowledgement, and (d) identification of the interaction as either social or task related. Although effective in measuring social interaction, it did not capture the qualitative and emotional aspects of the encounter.

Interactive Partnership Scale

IPS defined the following interactions or engagements occurring between the focus student and their interaction partner. The IPS measures: (a) the identity of the interaction partner (teacher, another student, the instructional assistant), (b) the communication function of the interaction (request, protest, comment, and assist), (c) the quality of the interaction (positive, neutral, or negative), (d) the level of engagement (active, passive, or not engaged), and (e) the grouping pattern (student alone or with a group). While the IPS is successful in capturing qualitative and emotional aspects of the interaction, it does not depict the social support behaviors that were or were not occurring.

Social Interaction Checklist

The SIC examined the duration time and the type of social support behaviors that transpired during each interaction between the focus student their peer without disabilities. The social support behaviors include: (a) greeting, (b) information, (c) access to others, (d) material aid, (e) emotional support, and (f) companionship. While the SIC is informative, it did not illustrate interactive exchanges.

Analysis of Social Interaction

The function of the ASI was to utilize the interactive exchanges of Hunt et al.'s work and fuse it with Kennedy et al. social support behaviors. The augmented

observation tool (ASI) reveals a clearer, better defined qualitative picture of the social support behaviors that were or were not occurring between the participants (See Appendix A for ASI tool).

Another modification of Hunt et al.'s (1996) study was in the identity of the focus child's interaction partner(s) which was based in the field of education. This study is embedded in recreation; therefore the intercession mediators are understandably different. The differences are defined in Table 2.

Table 2: *Identification of Companion*

Source	Tool	Who (identity of partner)
Hunt, Alwell, Farron-Davis & Goetz (1996)	Interactive Partnership Scale (IPS)	≈ P: Paraprofessional ≈ T: General education teacher ≈ Ts: Special education teacher ≈ Th: Therapist (related services personnel) ≈ S: Student without disabilities ≈ Sd: Student with disabilities
Parramore (Unpublished Master's Paper)	Analysis of Social Interactions (ASI)	≈ L: Leisure companion/respite worker ≈ R: Recreation leader/instructor/coach ≈ A: Other adult ≈ S: Student without disabilities ≈ Sd: Student with disabilities

Additional tools used in this study consisted of a digital tape recorder and headphones. The purpose of the tape recorder with headphones served two purposes. The first allows the researcher the ability to fully concentrate on the social interaction occurring within the observation time without the need to simultaneously watch the clock. The tape recorder contained a pre-recorded message, the 10-minute recording gave verbal directives to the researcher every 15 seconds to "observe" (who was the participating child interacting with) and "record" (what communicative function was observed). Second, the headphones allowed the researcher to record the interaction in

consistent observation intervals, while simultaneously reducing the surrounding noise distractions.

Data Analysis Tools

The observation procedures for this study were replicated from the work of Hunt et al. (1997) and documented as follows:

1. The ASI form was used to measure the communicative functions and/or social interactions that occurred (for each participating child) during a specific timeframe. Each ASI sheet recorded a 10 minute observational period; consisting of 20 intervals of 15 seconds to observe and 15 seconds to record. During each interval, the researcher recorded the first communicative initiation, which was either from the child with disabilities to another (noting who the “other person” was) or from the initiated action from “another” to the child with disabilities. In addition to identifying the interactive partner, the social support behaviors were recorded.
2. The use of the tape recorder and headphones permitted the researcher to remain inconspicuous and able to focus on the task at hand. The verbal directives of the pre-recorded message assisted the observer to maintain timely, accurate, and consistent observation intervals.
3. The Structured Field Notes were logged immediately after each entire observation(s) session. The importance and purpose of the Structured Field Notes was to record interactions or situations not captured in the ASI form.

Procedures for Collecting Data

The procedures in filling out and completing the Analysis of Social Interactions form, the Structured Field Notes, and the Daily Interactions form is as follows:

Analysis of Social Interactions

At first glance, the Analysis of Social Interactions appears complicated; but once practiced, is relatively easy to understand. As mentioned earlier, each ASI sheet consists of 20 intervals (the table below displays two of the twenty intervals). The researcher is ready to begin their observation once they are seated and have the tape recorder and headphones ready. At the push of the “play” button on the tape recorder, the researcher will wait for the “observe” command and take their eyes off the paperwork and look at the focus child. Since the researcher has only 15 seconds to observe, they should give their full attention to what is transpiring with and around the focus child. The following two scenarios should assist in explaining the first two intervals of the example ASI table below.

Scenario A (focus child alone):

After the command “observe” is given via the tape recorder, the researcher looks for the focus child and notices the child is alone, reading a book. The researcher also notices all the other children are in the middle of “quiet time” and are reading as well. The next step would be to see if the child remains alone or if they interact with another person within the “observe” time frame. When the directive “record” is heard, the process of recording begins. The first 15 seconds revealed the focus child was alone, reading a book. Since all the other children were reading as well, the child was “on-

task”; doing what they were asked to do. Henceforth, the form is filled out (from left to right) accordingly: Under *Int (Interval) #1*, there were **no** interaction partners, therefore *Who* is left blank. The focus child was on-task; a circle is placed around “O” under *Focus Student Initiated Action*. *Acknowledgement and Quality Reciprocated Interaction* were not witnessed, therefore, not recorded. Under *Engagement Categories*, the child was “Pass” (passive) and “SA” (student alone) and are consequently circled. Under *Notes*, a short comment can be recorded to help the researcher recollect what transpired “Read book” was documented. Scenario A should appear as indicated below (See Table 3). The researcher is made aware it is time to move on to the second interval when the sound of “observe” is heard.

Table 3: *Interval #1*

Int#	Who	(Focus Std) Initiated Actions	Ack	(Other Person) Initiated Actions	Ack	Quality Reciprocated Interactions	Engagement Categories	Notes
1		GIAMECPO	A	GIAMECPO	A	Pos Neut Neg	Act Pass NE Sa Sg	Read book
2		GIAMECPO	A	GIAMECPO	A	Pos Neut Neg	Act Pass NE Sa Sg	

Scenario B (social interaction with another child):

The researcher notices all the children are now sitting in a circle. A recreation leader blows the whistle and informs the group to “go to the table for snacks.” The focus child remains seated and is passively watching the other children proceed to the table. A student without disabilities notices the focus child and walked over to her and extended his hand to help her walk to the table. She looked at his hand, then looked up at him and took his hand. She walked with him to the table to join the group. The sound “record” is

heard and the process of recording begins all over again. That short, simple social interaction is recorded in Int #2, “S” (student without disabilities) is entered under *Who*. The “A” (acknowledgement) right after *Focus Student Initiated Action* is circled: S initiated the interaction and the focus child acknowledged the interaction by taking his hand. Under *Other Person Initiated Action*: “M” (material aid; physical assistance) is circled: S offered the focus child physical assistance and she accepted. The “A” (acknowledgment) after *Other Person Initiated Action* is not circled because the focus child acknowledged their social interaction. Below *Quality Reciprocated Interaction*, “Pos” (positive) is circled: the focus child willingly took student’s hand. Under *Engagement Categories*: the focus child was “Pass” (passive) - not smiling or laughing and “SG” (Student with group) - the focus child was with the group. Lastly, under *Notes* a few cryptic words can assist the researcher in recalling the incident, in this case the researcher recorded “S took FC hand/table” which translates into “student without disabilities took the focus child’s hand and brought her to the table”. Table 4 reflects the ASI after both scenarios.

If any researcher is attempting to replicate this study or use this tool, they need to keep in mind that 15 seconds is an extremely short amount of time. Therefore, unwavering attention to detail is of the utmost importance.

Table 4: *After Scenarios A and B*

Int#	Who	(Focus Std) Initiated Actions	Ack	(Other Person) Initiated Actions	Ack	Quality Reciprocated Interactions	Engagement Categories	Notes
1		GIAMECPO	A	GIAMECPO	A	Pos Neut Neg	Act Pass NE Sa Sg	Read Book
2	S	GIAMECPO	A	GIAMECPO	A	Pos Neut Neg	Act Pass NE Sa Sg	S took FC hand/table

Structured Field Notes

The Structured Field Notes consists of eight questions that further explore the interactions that just occurred (See Appendix C). All of the questions are centered on the duration, quality, and limitations of the interactions that just transpired. The purpose of the Structured Field Notes was to capture events and situations that the ASI was unable to depict within its short recording time-frame. The queries were based on the work of Salend (2000) who examined the interactions between students of various abilities within an inclusive classroom.

Daily Interactions Form

The Daily Interactions (DI) form (See Appendix D) takes a quantitative look at the percentage of interactions that transpired between the child with disabilities and the program participants. The purpose of the DI form is to analyze the occurrences of: (a) reciprocated interaction between the focus child and the recreation participant, (b) acknowledgement of the interaction by both parties, (c) the quality of the interactions, (d) whether the focus child spent their time alone or within a group, and (e) the total percentage of interaction that occurred that day.

The reconciliation information for the DI is obtained directly from the ASI forms. Each *Initiated Action* or communicative function (see Table 1) (G, I, A, M, E, C, P, and O), *Acknowledgements* (by both interaction participants), *Quality Reciprocated Interactions* and *Engagement Categories* are tallied individually and totaled at the bottom of each ASI sheet (see Table 1 or 7 for operational definitions). Note: *Who* and their identity are **not** noted at this time. During this phase, we are only interested in the

interactions that transpired between the focus child and the “other” participant. Once all the actions have been calculated on each sheet, the totals are combined and placed into their appropriate columns on the DI form. For clarity purposes, we will utilize the same two scenarios previously used in the explanation of the ASI. In scenario A; there were no social interactions. The focus child was reading a book: “on-task,” that one incident by the focus child is recorded. In scenario B; social interaction did occur. The student without disabilities (*other*) offered “material aid/physical assistance” to the focus child by extending their hand to help her up. The interaction is noted under *Other* and “M” is recorded (see Table # 5).

Table # 5: Recording Activity or Reciprocated Social Interaction on Daily Interaction Form

	G	I	A	M	E	C	P	O
Focus Student:	0	0	0	0	0	0	0	1
Total(s)	0	0	0	0	0	0	0	1
Other	0	0	0	1	0	0	0	0
Total(s)	0	0	0	1	0	0	0	0

The next section of the DI form pertains to the three boxes located in the middle of the document. The boxes contain main categories, sub-categories and totals. The main categories (from left to right) are: *Acknowledgement* and *Quality Reciprocated Interaction, Engagement* and % (percentage) of *Interaction*. The sub-categories are identified as: (a) *Student/Part I&R and Other I&R*, (b) *Positive, Neutral, Negative*, (c) *Active, Passive, Not Engaged*, (d) *S Alone, S Group* and (e) *Ack/QRI, Engmnt*. All categories will be explained (in detail) using the same two scenarios.

Acknowledgement examines all of the “A’s” documented throughout the day’s observation session. The information is taken directly from each “*Ack*”(acknowledged) column on the ASI form. The “A’s” are broken down into defining groups: *Student/Part I&R* and *Other I&R*. *Student/Part I&R* documents the number of *Acknowledgements* the focus child (or *Student*) responded to during an interaction initiated by the participant. *Other I&R* records the participants *Acknowledgment* of an interaction originating from the focus child. In *Scenario B*, the *S* (student without disabilities) initiated the interaction and the focus child acknowledged the interaction by taking his hand. The recognized interaction is logged onto the DI form by placing a number one (1) next to *Other I&R* and totaled where indicated.

Quality Reciprocated I/A (interaction) examines the characteristics of the reciprocated interactions that occurred throughout the day. In *Scenario B*, the focus child willingly took student’s hand. Since no other reciprocated interactions occurred, number one (1) would be placed next to *Positive*. *Neutral* and *Negative* would be zeroed out. The total of *Quality Reciprocated I/A* would be one (1).

The category of *Engagement* is the only category with two sub-categories: *Active*, *Passive*, *Not Engaged* and *S Alone*, *S Group*. In *Scenario A*, the focus child was reading her book alone. That engagement is noted by placing a number one (1) by *S Alone*. *Scenario B* began with the focus child sitting with the group, which is documented by placing a number (1) by *S Group*.

Before proceeding to % (percentage) of *Interaction*, it is important to note the bracketed totals. The brackets were purposely positioned to draw attention to

Acknowledgement, Quality Recip. I/A and Engagement. The totals of *Acknowledgement* and *Quality Recip. I/A* 's must match. It is important to note that acknowledgement is a reciprocated interaction and a reciprocated interaction must be acknowledged in order to be considered an interaction. In *Engagement*, the focus child was either *Active, Passive* or *Not Eng.* while participating (or not) in an activity or function. The same approach applies when examining whether the focus child was alone or with a group. Therefore under *Engagement* both sub-categories must add up to the same number. Another and equally important reason to have the totals match lies in the final summation of the days activity. If the totals do not match there is an error which allows the researcher the opportunity to go back through their ASI forms and recalculate their figures.

Table 6: *Daily Interactions Form*

	G	I	A	M	E	C	P	O
Focus Student:	0	0	0	0	0	0	0	1
Total(s)	0	0	0	0	0	0	0	1
Other	0	0	0	1	0	0	0	0
Total(s)	0	0	0	1	0	0	0	0

Acknowledgement	
Student/Part I & R	1
Other I & R	0
Total(s)	1

Quality Recip. I/A	
Positive	1
Neutral	0
Negative	0
Total(s)	1

Engagement	
Active	0
Passive	2
Not Eng	0
Total(s)	2

% of Interaction	
Ack/QRI	1
Engmnt	2
% of I/A	0.5

Notes:

The percentage of interaction is calculated by a simple Excel formula: dividing the matching number(s) of *Ack/QRI* by the equally matching *Engagement* numbers. The total is then multiplied by 100 in order to yield a (daily) percentage. In the above example (See Table 6; *Daily Interactions Form*), the matching totals from Ack/QRI are divided into the corresponding number(s) of two (2) from Engmnt. That number 0.5, is multiplied by 100 in order to produce the result of 50, or in other words, 50% of interaction occurred during that day between the focus child and others.

Interrater Reliability

There were two observers in this study. The primary observer for this study was a graduate student fulfilling the requirements for the degree of Master of Arts in Youth, and Human Services Administration. The second observer is an Assistant Professor with 10 years of experience working with adults and children with disabilities through community agencies and organizations. Since this was a pilot tool, ratings were completed and assessed throughout the entire study with most of the focus children partaking in a variety of settings. Interrater agreement during the observations averaged 72% and ranged between 90% to 53%.

Summary

The ASI form coupled with the Daily Interactions form can uniformly provide the researcher and interested agencies with the daily results of the focus child's: (a) reciprocated interactions, (b) acknowledgement of interactions, (c) the quality of the interactions, (d) how they spent their day (alone or with a group), and (e) the total percentage of the actual interactions that occurred that day.

CHAPTER 4

RESULTS

This study included six (6) participants. The analysis provides a concise look into the quality, level of engagement and type of interaction patterns that occurred during recreational activities of the focus child and the other participants.

Participants

During the summer of 2006, six children ranging from ages 4 to 16 were observed during community recreation programs by means of the Family YMCA of Black Hawk County *Together We Play* (TWP) program. Each child was enrolled in a different recreation activity with no children participating in the same program at the same time. Recreation activities included: traditional day camp, art program, soccer day camp, after-school program, and swimming lessons. Due to the different summer programs and scheduling conflicts, the actual observation times for each focus child varied by availability.

Characteristics of Participants

Child 1 was an enthusiastic four year old boy with autism, non-verbal, with no apparent physical disabilities. He participated in a bi-weekly swim class with children within his age group without disabilities. The swim class was structured with children of similar age. He displayed limited interpersonal skills with children, but displayed an open fondness of his leisure companion. His activities included jumping in and out of the pool, holding on to the edge of the pool and retrieving toys from the toy bucket. Occasionally, he would mimic swimming movements with the help of arm floats and his

leisure companion. By the end of his summer swimming lessons, he appeared more confident in the water.

Child 2 was a seven year old girl with developmental delays, seizure disorders, physical impairment of the legs, and was non-verbal. She was involved in a summer day camp program with children without disabilities. She wore braces on both legs which limited the duration and quality of her participation in many activities. She was primarily engaged in solitary repetitive play activities and depended strongly on the assistance of her respite worker.

Child 3, a bright-eyed eight year old girl with developmental delays and Down Syndrome was involved in a two-week soccer league. She initially displayed difficulty in maintaining interaction with her peers and would occasionally run to her mother (seated nearby) for consolation. In time with the help of her leisure companion, she was able to fully participate in the game and was cheered on by her peers.

Child 4, a fourteen year old male with Pervasive Developmental Disorder-Not Otherwise Specified (PDDNOS) and Autism assisted at a local art museum for one week. Although he understood and followed his respite worker's instructions, he displayed difficulty in communicating with others. He was most comfortable when accompanied by his younger sister.

Child 5, a fifteen year old male with Tourette's Syndrome participated in a daily summer camp program. He participated in all activities and kept his leisure companion on their toes by his occasional protests. His infrequent, uncontrollable verbal tics (outbursts) seemed to confuse and isolate him from his peers.

Child 6, a sixteen year old female with developmental delays and Obsessive Compulsive Disorder (OCD), participated in an afternoon summer camp program. She joined in some activities, but not all. Her limited interpersonal skills would cause her at times to leave the group and sit on the sidelines to observe her peers. She seemed most at ease when left alone to her safe haven of books and headphones. The use of the headphones may have been utilized as a noise deterrent.

Data Analysis

The analysis of the data consisted of two primary tools: (a) the Analysis of Social Interactions (ASI) form, and (b) the Daily Interaction reconciliation form (See Appendix A and Appendix D). The ASI was used to examine the type, quality and attributes of each communicative and/or social interaction that occurred between the focus children and the program participants within a specific timeframe. The Daily Interaction reconciliation form examined the quantitative aspects of the interactions that transpired.

Results

The results are summarized in six sections. The first section examines the first communicative initiatives derived from the focus children. The second section identifies the identity of the individual(s) who initiated interaction with the focus child. The third section investigates the quality of the reciprocated interactions that occurred. The fourth segment examines the level of engagement that occurred during the interaction(s). The fifth explores the activities and/or functions that resulted in positive social interaction. The sixth and final section presents a summary of the overall percentage of social interactions that occurred during the 2006 research observations.

INTERACTIVE MEASURES

This section will explain the social interaction patterns that occurred during the recreational activities. Table 7 lists and describes the measures used to observe the social interactions that transpired between the focus children and other participants.

Focus Children Initial Communicative Initiatives

The majority of initiated actions derived from the focus children consisted of the communicative functions of: (a) being *On-task*, (b) providing *Information*, and (c) assistive *Companionship* (See Table 8).

The initiated function of being *On-task* refers to the focus children either observing their peers partake in an activity, or physically participating in the activity themselves. It is important to note, some of the focus children were physically unable to participate in some of the activities or were more comfortable doing things that they enjoyed (i.e., reading a book, or playing with a toy). For example, Child 2 lacked the social, verbal, and physical capacities to participate in most activities. However, her respite worker would routinely sit Child 2 within her peers allowing the researcher(s) to decode her physical *placement* as being *On-task*. In order to provide further clarification, when *all* of the focus children were sitting with their peers and/or group members the researcher(s) interpreted it as being *On-task*.

Table 7: *Analysis of Social Interaction Definitions*

INTERACTION MEASURES	
STRUCTURE	

- I **Initiation:** Any verbal or active nonverbal behavior that engages or attempts to engage another person.
- A **Acknowledgement:** Any verbal or nonverbal behavior that appears to be in response to an initiation. This can include: (a) gazing at the initiator, (b) nodding (yes/no) in response to an initiation, (c) carrying out a direction that has been given, (d) physically or verbally resisting the initiation, (e) significantly changing expression or intentional eye contact, and (f) responding to physical assistance.
- I & A **Reciprocal interaction:** Communicative exchanges in which there is both an initiation and an acknowledgement.

FUNCTION (for initiations only)

- G **Greeting:** acknowledging another person.
- I **Information:** communication regarding upcoming event, comment, request.
- A **Access to others:** introduction to another person.
- M **Material aid:** physical assistance, assistance.
- E **Emotional support:** comforting a person.
- C **Companionship:** interacting – shared activity.
- P **Protest:** to indicate a desire to avoid an undesired stimulus or to escape an ongoing stimulus.
- O **On-task:** Student observing activity/being on-task

QUALITY (reciprocal interactions only)

- Pos **Positive:** One or both partners in the reciprocal exchange demonstrate positive affective (i.e., verbal praise, or compliments, sharing or helping, smiling to indicate pleasure, physical or verbal humor, and/or physical or verbal affection).
- Neut **Neutral:** The reciprocal exchange is made with neither positive nor negative affect (e.g., conversation, discussion, answering teacher’s questions).
- Neg **Negative:** One or both partners in the reciprocal exchange demonstrate negative affective (e.g., anger, irritation, indignation, discourteousness, and/or exasperation).

WHO (identity of partner)

- L **Leisure companion**
- R **Recreation leader/instructor/coach**
- A **Other adult**
- S **Student without disabilities**
- Sd **Student with disabilities**

ENGAGEMENT MEASURES

- Act **Active engagement:** Student is **actively engaged by himself or herself** or **within** a small or large group activity. Student is participating through verbal/alternative communication or physical movement.
- Pass **Passive engagement:** Student is passively engaged by himself or herself in a small or large group activity. Student is participating by attending and waiting for his or her turn, giving direct eye contact, passively listening, and/or attending and waiting for his or her turn, giving direct eye contact, passively listening, and/or attending to the teacher or group members
- NE **Not engaged:** Student is not actively or passively engaged in activity. Student is either not attending to ongoing activity, not being attended to by staff or students, or not assigned to a task or given materials.
- SA **Student alone:** Student is physically alone (e.g., on playground) or working by themselves or with an instructional assistant on an activity unrelated to the activity of other students in the area.
- SG **Student with other students:** Student is engaged in an activity with at least one other student (group).

The function of *Information* suggests communication and/or information was shared between the focus children and other activity participants. Providing *Information* could also imply a need, request or comment. For instance, Child 3 was involved in a two-week summer soccer camp. When the program initially began, she would walk away in the middle of a group activity (i.e., stretching or playing) without any notice or reason. A few days into the camp, she began to inform her Leisure Companion that she needed to stop what she was doing. In most of those cases, the provided *Information* (to her Leisure Companion) was “I want my mom.” She would then run to her mother (seated at the sidelines) for a drink of water or a pat on the back.

Companionship is defined as interacting with another person. *Companionship* may also entail participating in a shared activity or game. During one observation, Child 4 was working on a paper maché project. He could have completed the project by himself, but instead received and benefited from the assistance of his Leisure Companion. The leisure companion held up and moved the balloon around so that the focus child was able to apply the paper maché mixture with ease. Table 8 illustrates the various communicative functions initiated by the focus children.

Table 8: *Focus Children's Initial Communicative Functions*

	On-task	Information	Companion	Protest	Greeting
Child 1	28	0	16	5	2
Child 2	153	0	3	21	8
Child 3	233	39	36	15	8
Child 4	131	42	34	1	1
Child 5	94	42	12	0	0
Child 6	170	1	0	0	0
TOTAL	809	124	101	27	19

The initiated communicative functions were ranked in accordance to number of occurrences. In other words, the higher number of incidences, the greater the significance. Therefore, it is important to note the significance of what being *On-task* was to **all** of the focus children.

Social Interaction Patterns

The first research question asked “*What interaction patterns are occurring between the children with disabilities and the others involved in the recreational activity?*” The data suggests the leisure companion and/or respite worker play an essential role in the initial and overall social interaction of the focus children. By all accounts, the leisure companions/respite workers are the necessary link to possible social interaction patterns between children with and without disabilities (See Table 9). Although the leisure companions/respite workers are an important ingredient in mix of social interaction, they are not the only necessary element.

Reciprocated social interaction was also noted with their recreational peers, the most common communicative functions were: (a) *Material Aid/Physical Assistance*, and (b) *Information*. *Material Aid/Physical Assistance* is defined as one person offering another person material aid or physical assistance. In Chapter 3’s *Scenario B*, the child without disabilities offered Child 6 his hand to help her walk to the table in order to join the group. In this situation, the child without disabilities offered Material Aid/Physical Assistance to the focus child.

Information is defined as one person communicating an upcoming event, comment or request to another person. *Information* (in this portion of the study) entailed

the Leisure Companion/Respite Worker or peers providing instructions or asking questions to the focus children. In one instance, the day camp was involved in a fund raising event. Focus Child 5 was standing away from the group until the leisure companion asked if he would like to help. The focus child shook his head (indicating a response of yes) and participated with the rest of the group. Another situation involving *Information* occurred with Child 3 who participated in a two-week soccer league. In one scenario, her peers shouted informative instructions to the focus child in order to help her make a goal for their team.

Table 9: *Social Interaction Patterns*

	Primary Interaction Partner	Initiated By:	Primary Communicative Function	Recreation Activity	Actions Promoting Social Interaction
Child 1	Leisure Companion	Leisure Companion	Material Aid/Physical Assistance	Swim Class	Assistance with swim instruction and play activities.
Child 2	Respite Worker	Respite Worker	Material Aid/Physical Assistance	Day Camp	ADL required on all day-to-day activities.
Child 3	Leisure Companion	Leisure Companion	Information	Two-week Soccer League	Game instruction and feedback given.
Child 4	Leisure Companion	Leisure Companion	Information	Art Program	Assistance with projects and activities.
Child 5	Leisure Companion	Leisure Companion	Information	Day Camp	Instruction and feedback given when necessary.
Child 6	Leisure Companion	Leisure Companion	Information	Day Camp	Instructions given when necessary.

Quality of Reciprocated Interaction

The second and third research questions raised at the beginning of this study were “*Who is initiating the interaction and what is the quality of the interaction?*” The identity of the primary interaction initiator and the quality of the reciprocated interaction can be examined in Table 10. The results concluded the *Leisure Companion* and/or *Respite Workers* were the primary initiators of most positive, reciprocated interactions. Investigating the initiation and quality of reciprocated interaction between the focus children and their recreational partners entailed undivided attention in observing the facial expressions and/or body language of both the initiator and recipient. (Reminder on observation protocol: interaction is acknowledged first).

The overall qualitative reciprocated interactions of *Positive and Neutral* indicated a strong and optimistic foundation for reciprocated social interaction. *Positive* quality interaction is defined as demonstrating a positive reciprocated exchange (i.e, verbal praise, or compliments, smiling to indicate pleasure, physical or verbal humor). A *positive* reciprocated social interaction may consist of the focus child following previously given instructions and the leisure companion responding by stating “good job!” *Positive* reciprocated social interaction can also be strongly expressed by body language. During one observation session, focus Child 1 climbed out of the pool and stood directly in front of his leisure companion (who was in the pool facing him). The leisure companion held out her arms, smiled, and instructed “Come on, I’ll catch you!” A huge smile appeared on the focus child’s face as he jumped into the water and the waiting arms of his leisure companion. The focus child hugged his leisure companion’s

neck for a long time, all the while with an unmistakable smile of relief and happiness, reiterating the fact that positive social interaction is not restricted to verbal communications.

The definition of *Neutral* in this study was understood as a reciprocated exchange with neither a positive nor negative response. *Neutral* in the context of a social interaction can be explained as the focus child either not hearing or not being able to acknowledge the given instructions. For example, during one day camp trip to a park playground, Child 2's respite worker wanted to apply bug spray. She informed Child 2, "I need to put some bug spray on you so the bugs don't get you." Although Child 2 was not thrilled with the application, she reluctantly complied with the request. Note, a *Neutral* response does not suggest defiance by either social interaction participant.

It is important to note that although the qualitative reciprocated interaction of *Negative* was not represented in Table 10, it does not imply negative reciprocated interactions did not occur. It simply means the occurrences of negative reciprocated interactions were minimal. During one observation, Focus Child 6 (who was normally quiet and compliant) actively displayed her strong protest. The incident occurred during a group walk to a nearby park. The focus child's leisure companion placed his hand on her back and asked "Do you want to come?" The focus child responded by placing her hands over her ears, shook her head (indicating *No*), and made loud sounds.

Table 10: *Initiated and Quality of Interactions*

	Recreation Activity	Initiated By:	Primary Communicative Function	Actions/Shared Activities that Promote Social Interaction	Quality of Reciprocated Interaction
Child 1	Swim Class	Leisure Companion	Material Aid/ Physical Assistance	Assistance with swim instruction and play activities.	Positive
Child 2	Day Camp	Respite Worker	Material Aid/ Physical Assistance	ADL required on all day-to-day activities.	Neutral
Child 3	Two-week Soccer League	Leisure Companion	Information	Game instruction and feedback given.	Positive
Child 4	Art Program	Leisure Companion	Information	Assistance with projects and activities.	Positive
Child 5	Day Camp	Leisure Companion	Information	Instruction and feedback given when necessary.	Neutral
Child 6	Day Camp	Leisure Companion	Information	Instructions given when necessary.	Positive

A student without disabilities interceded by providing the focus child with information which defused the situation. Since this research is a non-obtrusive observational study, the researcher was unable to hear what the child without disabilities said to the focus child.

Engagement Categories

The fourth research question inquired as to what the focus child's level of engagement was during inclusive recreational activities. The engagement categories were broken into two units, specifically: (a) the level of engagement (i.e., active, passive, or negative), and (b) the grouping patterns (i.e., student alone or with the group). The engagement categories allowed the researcher the opportunity to document whether the focus child was actively, passively or simply not engaged in the recreational activities

that took place during the observation sessions. It also examines whether the interactions that occurred during the one-on-one sessions could be defined as *Student Alone* or within a *Student Group* context.

Active engagement is defined as the focus child actively engaged by themselves or within a large or small group activity. *Active* engagement can also occur during alternative communication or physical movement. During a group activity, focus Child 4 was *actively* involved in the painting of a paper maché project he created. His leisure companion assisted him when necessary, but for the most part, it was a task that he willingly undertook himself.

Passive engagement occurs when the focus child is passively engaged by themselves or in a group activity. The focus child is considered *passively* engaged when they are waiting for their turn or passively listening to instructions. For example, Child 6 participated in the game *Bucket-head*. The game called for opposing teams to place buckets from one side of the gym to the other in a timely fashion. As the game commenced, Child 6 stood in line (as instructed) and waited for her turn. Amidst the screams of enthusiasm from all game participants, she stood indifferently until her turn came. She then ran and placed the buckets in the needed location and proceeded to the back of the line until her turn arose again.

Not Engaged occurs when the focus child is not engaged in the group activity. *Not Engaged* may also suggest the child is not being attended to, or the child does not want to participate in an assigned task. During a *Craft Activity* in her day camp, focus Child #2's group was asked to make a *Super Dog Mask*. While most of the campers were

excited to take on the task, Child #2 was not. By this time in the study, it was apparent to the researcher(s) that focus Child #2 did not like to participate in any type of art projects. Child #2's respite worker helped her to sit on the bench with the rest of the group and began to work on the mask. Meanwhile, Child #2 initially shook her head (indicating "No"); eventually placing her head on the table and slept throughout the entire activity. Another portion of the engagement measurements entail whether the focus child was alone or within a group.

Student Alone states the focus child is physically alone or working by themselves with their interaction partner nearby. For example, Focus Child #1 enjoyed playing in the water. There were many observed times when he would jump up and down in the water while resisting the help of his leisure companion who was standing right next to him. He appeared to isolate himself by turning his back on his leisure companion. Eventually, he would turn around and partake in a shared activity with her (leisure companion) once again.

Student Group is defined as being engaged in an activity with at least one other person. During a group activity, Focus Child #3 was sitting on the sidelines watching some of her teammate's race against the opposing team. When her team won, she raised her arm (mimicking her peers) and yelled with excitement. Table 11 depicts the key level of recreation engagement as active.

Table 11: *Levels of Engagement*

	Primary interaction partner	Primary level of engagement	Alone or with group	Primary communicative function
Child 1	Leisure Companion	Active	Group	Material Aid/ Physical Assistance
Child 2	Respite Worker	Passive	Group	Material Aid/ Physical Assistance
Child 3	Leisure Companion	Active	Group	Information
Child 4	Leisure Companion	Active	Group	Information
Child 5	Leisure Companion	Active	Group	Information
Child 6	Leisure Companion	Passive	Group	Information

Positive Social Interactions

The final query in this study, asked the question: “*Which activities are more likely to support and/or encourage positive social interaction between youth?*” The findings, in regards to positive social interactions are interesting. Overall, there were two constant factors that seemed to promote positive reciprocated social interaction between the focus children and their interaction partners. The first was *Group*; all of the focus children appeared to have enjoyed being around or surrounded by their recreational peers. Secondly, and what could quite possibly be the crux of attaining positive social interaction between the subject children with and without disabilities was active, positive, and direct one-on-one contact. This study found no one activity that would promote positive social interactions between the children with and without disabilities. The interactions varied by child and situation. Child #1 partook in positive social interactions when he hugged, swam and played with his leisure companion. Child #2 was attentive

and cooperative while being within a supportive group of girls who hugged and held her hand. Child #3 appeared the happiest when sitting within a group of peers cheering their teammates on. Child #4 was the most responsive while being engaged in paper maché activities with his leisure companion. Child #5 seemed genuinely happy when participating in direct social interaction with peers. Child #6 was smiling and responsive when her leisure companion sat on the floor and read books with her. Table 12 exemplifies actions that precipitate acceptance, social support, and inclusion (i.e., playing, hugging, and laughing).

Average Percentage of Social Interactions

Lastly, Table 13 provides an overview of the six focus children and the average percentage of social interactions that occurred during specific recreational activities during the summer of 2006. As mentioned earlier, the actual observation times for each focus child varied by availability. When examining Table 13, it is important to keep in mind the purpose of this study which was to gain an understanding of the social interaction that occurs between children with and without disabilities in an inclusive recreational environment. The results indicate the actual social interaction each focus child experienced with their same aged peers was extremely low. The marginal results can be attributed to various reasons. However, each result is different because each child is unique. Child 1 had the lowest percentage of social interaction with another child 1%, while his overall social interaction was 81.5%.

Table 12: *Positive Social Interactions*

	Primary Interaction Partner	Alone or Group	Primary Communicative Function	Activities Resulting in Positive Social Interaction
Child 1	Leisure Companion	Group	Material Aid/ Physical Assistance	Playing and swimming with leisure companion in the water.
Child 2	Children without disabilities	Group	Emotional	Hugging, playing and direct contact with children without disabilities.
Child 3	Leisure Companion	Group	Information	Participating in reciprocated conversation and playing with teammates.
Child 4	Leisure Companion	Group	Information	Participating in paper maché projects and engagement in reciprocated social interaction
Child 5	Children without disabilities	Group	Companionship	Talking and laughing with other recreation participants.
Child 6	Leisure Companion	Group	Information	Reading books and participating in reciprocated interaction.

The huge fluctuation may be attributed to two key factors: (a) the low percentage of social interaction with another child may be due to his impairment (autism), and (b) the high percentage of overall social interaction can be attributed to his fondness of his leisure companion. Child 2's social interaction with another child was 21.2% and her overall social interaction was 34.7%. While the percentages are relatively close in numbers, the social interaction itself is low and may be entirely attributed to her impairments (developmental delays, seizure disorders, and physical impairments). Child 3's social interaction with another child was 10.1% and her overall social interaction was the second highest at 43.6%. The low social interaction (with her peers) may also be attributed to her impairments (developmental delays and down syndrome). Child 4's

social interaction with another child was 11.75% and his overall social interaction was 41.8%. Child 4 was diagnosed with autistic tendencies with PDDNOS (Pervasive Development Disorders-Not Otherwise Specified). The symptoms include limited interpersonal skills with peers. Child 5's interaction with same aged peer was 17% and his overall social interaction was 34.2%. Child 5's low social interaction with his peers (during this study) may be directly linked to his diagnosed impairment of tourette syndrome. During this researchers' observation, there were two occasions when his involuntary tics and/or vocal outbursts appeared to confuse his peers which may have precluded more positive social interaction. Child 6's social interaction with another child was 10.4% and her overall social interaction was 24.3%. Child 6 was diagnosed with developmental delays and obsessive compulsive disorder. Although her lack of social interaction with her peers may be strongly attributed to her impairments, another factor could be her quiet and withdrawn demeanor. We can **never** lose sight of the fact that children with disabilities are first and foremost children with emotions, abilities and most especially a personality that makes them unique.

Table 13: *Average Percentage of Social Interactions during Recreation Activities*

Child	Program Type	Number of sessions observed	Average length of each observation	Percent of all social interactions	Percent of social interactions with another child
Child 1	Swim lessons	6	17.2 minutes	81.5%	1%
Child 2	Day camp (municipal agency)	10	30.1 minutes	34.7%	21.2%
Child 3	Soccer camp	8	41.25 minutes	43.6%	10.1%
Child 4	Art program	4	35.87 minutes	41.8%	11.75%
Child 5	Day camp (non profit agency)	5	24.75 minutes	34.2%	17%
Child 6	After-school	5	33.6 minutes	24.3%	10.4%

Summary

The focus children's physical and/or psychological impairments are real barriers that can hamper the facilitation of social interaction between children with and without disabilities. Schleien, et al. (1997) ascertains that "barriers should serve to challenge the creative . . . recreation programmer to incorporate strategies for promoting friendship within the context of community recreation" (p. 129).

CHAPTER 5

DISCUSSION

Summary of Procedures and Data Analysis

This non-obtrusive observational study was employed in order to identify specific social interaction patterns that were or were not occurring between children with and without disabilities in an inclusive recreational program. The participants of this study utilized the services of the Family YMCA of Black Hawk County *Together We Play* (TWP) program.

Summary of Findings

This study was developed to determine the social interaction and engagement patterns between children with and without disabilities during inclusive recreational activities. The research questions that guided this study resulted in the following outcomes:

1. *What interaction patterns are occurring between the children with disabilities and the others involved in the recreational activity?* The interaction patterns that occurred consisted primarily of Material Aid/Physical Assistance and Information. The utilization of *Material Aid/Physical Assistance* and *Information* suggests the children with disabilities looked to others for assistance and guidance during most of the observation sessions.
2. *Who is initiating the interaction?* Throughout this study, the leisure companion and/or respite worker played the role of initiator in most interactions between the children with and without disabilities. The leisure companion/respite worker may

be the necessary link in helping to facilitate social interaction between children with and without disabilities. This statement is reaffirmed by Hunt et al's (1996) study which determined that paraprofessional's (adults) *initial* assistive interactions helped in increasing reciprocated social interaction between children with and without disabilities (p. 53).

3. *What is the quality of the interaction?* The reciprocated interaction between the focus children and other recreation participants was primarily positive and neutral. The response of neutral during this study did not suggest non-responsiveness by either party. The impartiality could be related to: (a) the focus child's inability to express verbal or emotional preferences, or (b) a focus child's character which in some cases, could be defined as quite and passive.
4. *What is the child (with disabilities') level of engagement during the inclusive recreational activity?* The focus children's level of engagement during the majority of inclusive recreational activities was observed as being predominately active and within a group context. There were times when neutral was the level of engagement, which could be due to the focus child's psychological or physical impairments. On the other hand, it could also imply the need for more proactive measures by the leisure companions/respice workers in order to ensure more active participation by the focus children.
5. *Which activities are more likely to support/encourage positive social interaction between youth?* This study found no specific activity that supported and/or encouraged positive social interaction between the children with and without

disabilities. The research did determine that active, positive and direct one-on-one contact resulted in positive, reciprocated interaction between all participants.

The outcome of this study suggests the social interaction and engagement patterns between children with and without disabilities during inclusive recreational activities resembles earlier research findings found within the educational environment (Evans et al., 1992; Hunt et al., 1996, 1994, 1992; Kennedy et al., 1994). The conclusion in those studies found that positive inclusive environments resulted in increased reciprocated interaction between children with and without disabilities.

Children With Disabilities

This study concluded the following: (a) while engaged in recreational activities, most of the focus children remained *On-Task*, (b) their primary interaction and reciprocated interaction partner(s) were the leisure companion/respite workers, and lastly (c) *most* of focus children participated in positive social interaction with their leisure companion/respite worker. Fortunately, a small number of focus children engaged in positive, reciprocated social interaction with their peers (children without disabilities) as opposed to their leisure companion/respite worker. *What were the mitigating circumstances that enabled some and not all of the focus children to engage in positive, social interaction with their non-disabled peers?* One reason why *some* of the children (with and without disabilities) were able to participate in positive social interaction patterns may have been due to some of children without disabilities' ability to accept differences.

During many of the initial observation sessions, all of the children without disabilities were naturally curious about their counterparts (with disabilities). The commonly observed reaction (by the children without disabilities) was to stare, then quickly turn away. However, what was apparent was that a few curious children (without disabilities) seemed to have allowed their inquisitiveness to develop into an instrument of acceptance as opposed to turning away because of their differences.

Children Without Disabilities

As mentioned earlier, all of the children without disabilities displayed an open curiosity about their peers with disabilities, although most were unable and/or unwilling to approach and interact. A small group of participants (without disabilities) allowed their interest to develop into the inclusive and accepting attitude that was displayed and conveyed to a number of the focus children. Most of the children without disabilities who were involved in the observed inclusive recreational program seemed to foster feelings of tolerance towards their peers with disabilities. According to MacCuspie (1996) "tolerance is characterized by an indifference to or the ignoring of one's presence (p.12)." The attitude of tolerance was observed by the indifferent stares or glares, coupled with avoidance (i.e., turning away). From this researcher's perspective, it appeared most of the children without disabilities were unsure of how and what to say to the focus children.

Leisure Companion/Respite Worker

The leisure companions and/or respite workers played a vital role in the initial and overall social interaction of the focus children. Throughout the entire study, **all** of the

children (whether consistently or occasionally) looked to them for direction, guidance, and information. It is important to note that although they were in a position which enabled them to teach and provide informational support to all of the participating children, some were not trained to do so. It should therefore be no surprise that leisure companions and/or respite workers themselves must be knowledgeable in inclusive social practices. The practice of placing children of mixed abilities in a group and/or program does **not** guarantee positive, reciprocated social interaction. That is precisely why the role of leisure companion and/or respite worker *must* evolve.

The concept of change is normally not easily accepted by most individuals and especially for community programs. Therefore, it is this researcher's opinion that if the Family YMCA of Black Hawk County *Together We Play* (TWP) program wants to continue meeting the ever changing needs of the community, more training is of vital importance.

One of the biggest concerns to most non-profit community program and/or organizations would be the financial burdens additional training would place on an (already) over-burdened budget. Implementing a training curriculum does not need to cost the program and/or organization an excessive amount of money. It requires basic research and an interest in serving the needs of all recreation participants.

The recommended training could be developed in four separate components. The first would consist of prior knowledge of the basic characteristics and needs of the focus children that are or will be attending the Family YMCA of Black Hawk County *Together We Play* (TWP) program. Second, researching each participating child's impairment

could be accomplished for free. The local library and various government websites offer free and comprehensive information for any and all interested individuals.

Understanding the basic characteristics and/or symptoms of a disability could help all inclusive leisure participants (especially children without disabilities) understand why one of their peers (with disabilities) may act or react in a certain way during certain conditions. Third, all leisure companions, respite workers, recreation leaders, and other participating adult mediators should attend a *mandatory* meeting. The discussion should encompass a brief, but direct synopsis of each (of the children's) possible impairment (i.e., Autism: limited interpersonal skills, tendency to isolate self from others, etc.).

Lastly, prior to the arrival of the focus child into the program, the recreation leaders and adult mediators should brief the children without disabilities on the focus children that will be participating in their group. As mentioned earlier, change is difficult for most people to grasp. However, it is important to remember that children are resilient. If recreation leaders and adult mediators provide the children with truthful, basic information, they will adjust and hopefully gain a more positive attitude towards their peers with disabilities.

In order for the Family YMCA of Black Hawk County *Together We Play* (TWP) program to continue its assertive promotion of inclusion, they must engage in continuous, systematic approaches to facilitating positive inclusion. It is important to note that the attitudes of children without disabilities towards their peers (with disabilities) **can** be improved if they are provided with honest and factual information. According to

Siperstein, et al. (2007) “attitudes can change—but effort, creativity, and commitment are necessary” (p. 453).

Implications

The results of this study indicate no specific recreational activity and/or program promoted positive social interaction between children with and without disabilities. Furthermore, positive reciprocated social interaction between children with disabilities and other program participants’ occurred when the focus child was acknowledged as a person with varying talents and abilities *first*, and their disability *last*. The implications of this study suggest that social interaction between children with and without disabilities is an attainable goal.

The results also indicate each focus child’s social interaction patterns increased when involved within a group context coupled with active, positive, and direct one-on-one contact. It is this researcher’s hope that this study, together with the piloted tools will entice further research on the overall technicalities of social interaction.

Recommendations for Future Study

The findings have lead to several conclusions and have inadvertently illuminated two additional minor limitations of this study.

Since the observation tools were of an experimental nature, minor adjustments are needed in some of the terminology. For example, the ASI and Daily Interaction forms were adapted from work of Hunt, et. al. (1996), which examined social interaction between children with and without disabilities in an *educational* environment. Therefore,

the word *student* should be changed to *child* which is better suited in a recreational setting.

During some of the observation sessions, there were times when the identity of the Leisure Companion or Recreation Leader was not apparent. In future studies, it would be beneficial for research purposes if the researcher(s) were familiar with all of the leisure companions and/or respite workers that would be working directly with the focus children *prior* to the commencement of the study. It is equally important to know who the recreation and adult leaders are in advance in order to record each interaction accordingly.

In order to provide more accurate and consistent results, the process of observation and recording requires more training time. There also needs to be more trained observers to confer with after each session, in order to come to a higher consensus.

The need for training on all levels of interaction continues to be of vital importance. Training was necessary in the realm of accurate observation. Training was and remains of critical importance to the Family YMCA of Black Hawk County *Together We Play* (TWP) program. Therefore, the *Together We Play* (TWP) program may want to consider taking more proactive measures (training their adult leaders) in order to ensure that children of all abilities can participate in every aspect of an inclusive recreational program.

The overall goal of this research was to understand and illuminate the technicalities involved in the attainment of positive social interaction between children

with and without disabilities. This study found that positive, reciprocated social interaction between children with and without disabilities occurred when children *without* disabilities accepted their peers *with* disabilities and did not “make an ill-conceived attempt to fix their disability” (Hehir, 2007).

In the past, the focus was placed on changing the behavior of the individual with disabilities. However, MacCuspie (1996) found that if “real gains in social acceptance and interaction of children with disabilities are to be realized . . . the social environment in which the interaction occurs must be analyzed and, in most cases, modified” (p. 27). The advantages of understanding how some individuals with disabilities communicate would outweigh any inconvenience that could incur during the training process.

It is this researcher’s hope that this study provided interested recreational agencies with feasible ways to understand and facilitate better communication between children with and without disabilities during inclusive recreational activities. Leisure professionals, parents, and community members are encouraged to educate, and embrace the social inclusion of people of all abilities so that everyone has a place in the social network of the community and greater society

REFERENCES

- Allport, G.W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Block, M. E. (1994). Including preschool children with disabilities. *JOPERD*, 65(6), 45-49.
- Brown, M. & Bergen, D. (2002). Play and social interaction of children with disabilities at learning/activity centers in an inclusive preschool. *Journal of Research in Education* 17(1), 26-36.
- Bullock, C. C., & Mahon, M. J. (1997). *Introduction to recreation services for people with disabilities: A person-centered approach*. Champaign, IL: Sagamore Publishing.
- Bullock, C. C., & Mahon, M. J. (2000). *Introduction to recreation services for people with disabilities a person-centered approach* (2nd ed.). Champaign, IL: Sagamore Publishing.
- Burgoon, J. K., & Bacue, A. E. (2003). Handbook of communication and social interaction skills. In J.O. Greene & B.R. Bursleson (Eds.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.
- DePauw, K.P. & G. Doll-Tepper. (2000). Toward progressive inclusion and acceptance: Myth or reality? The inclusion debate and bandwagon discourse. *Adapted Physical Activity Quarterly*, 17, 135-143.
- Devine, M.A., & Datillo, J. (2001). Social acceptance and leisure lifestyles of people with disabilities. *Therapeutic Recreation Journal*, 34, 306-322.
- Devine, M.A., & King, B. (2006). Research update: The inclusion landscape. *Parks and Recreation* (pp. 22-25). Ashburn, Va: National Recreation and Park Association.
- Devine, M.A., & O'Brien, M.B., & Crawford, T. (2004). Inclusion: Beyond simply sharing the same space. In M.A. Devine (Ed.), *Trends in therapeutic recreation: Ideas, concepts and applications* (pp. 201-232). Ashburn, VA: National Recreation and Park Association.
- Evans, I. M., Salisbury, C.L., Palombaro, M. M., Berryman, & Hollowood, T.M. (1992). Peer interaction and social acceptance of elementary-age children with severe disabilities in an inclusive school. *Journal of the Association for Persons with Severe Handicaps*, 17, 205-212.

- Fennick, E., & J. Royle. (2003). Community inclusion for children and youth with developmental disabilities: *Focus on autism and other developmental disabilities*, 18(1), 20-27.
- Gaylord, V., Lieberman, L., Abery, B. & Lais, G. (Eds.). (2003). *Impact: Feature Issue on Social Inclusion Through Recreation for Persons with Disabilities*, 16(2). Minneapolis: University of Minnesota, Institute on Community Integration. Retrieved on September 17, 2007 from website: <http://ici.umn.edu/products/impact/162/over10.html>
- Goetz, L., Haring, T., & Anderson, J. (1983). The educational assessment of social interaction (E.A.S.I.). Unpublished instrument. San Francisco: California Research Institute, San Francisco State University.
- Hehir, T. (2007). Confronting ableism. *Educational Leadership*, 64 (5), 8-14.
- Heyne, L.A., Schleien, S.J., & McAvoy, L.A. (1993). Making friends: *Using recreation activities to promote friendships between children with and without disabilities*. Minneapolis: School of Kinesiology and Leisure Studies, College of Education, University of Minnesota.
- Hunt, P., Farron-Davis, F. (1992). A preliminary investigation of IEP quality and content associated with placement in general education versus special education classes. *Journal of the Association for Persons with Severe Handicaps*, 17 (4), 247-253.
- Hunt, P., Farron-Davis, F., Beckstead, S., Curtis, D., & Goetz, L. (1994). Evaluating the effects of placement of students with severe disabilities in general education versus special classes. *Journal of the Association for Persons with Severe Handicaps*, 19, 200-214.
- Hunt, P., Alwell, M., Farron-Davis, F. & Goetz, L. (1996). Creating socially supportive environments for fully included students who experience multiple disabilities. *Journal of the Association for Persons with Severe Handicaps*, 21(2), 53-71.
- Katz, L. G., & McClennan, D. E. (1997). *Fostering children's social competence: The Teacher's role*. Washington, DC: National Association for the Education of Young Children.
- Kemple, K.M. (2004). *Let's be friends: Peer competence and social inclusion in early childhood program*. New York, NY: Teachers College Press.

- Kennedy, C.H., & Itkonen, T., (1994). Some effects of regular class participation on the social contacts and social networks of high school students with severe disabilities. *Journal of the Association for Persons with Severe Handicaps*, 19, 1-10.
- Kennedy, C. H. , Skukla, S., & Fry, D. (1997). Comparing the effects of educational placement on the social relationships of intermediate school students with severe disabilities. *Exceptional Children*, 64(1), 31-47.
- Mac Cuspie, A. (1996). *Promoting acceptance of children with disabilities: From tolerance to inclusion*. Nova Scotia, Canada: Atlantic Provinces Special Education Authority.
- Mac Tavish, J.B., & M.J. Dowds. (2003). Physical activity and sport for individuals with intellectual disability. In R.D. Steadward, G.D. Wheeler, & E.J. Watkinson (Eds.), *Adapted Physical Activity* (pp. 559-585). Quebec, Louisville: Transcontinental Printing.
- Maslow, A.H. (1954). *Motivation and personality*. New York, NY: Harper & Row.
- Middleton, L. (1999). *Disabled children: Challenging social exclusion*. Oxford: Malden, MA: Blackwell Science.
- Montgomery, S. & Kazin, A. (n.d). *Providing inclusive recreation opportunities: The Cincinnati model*. National Center on Accessibility. Online: <http://www.naonlin.org/ncpad/inclusion.shtml>
- Moon, M. S., Hart, D., Komissar, C., Friedlander, R., Stierer, C.L., & Johnson Brown, P. (1994). The community leisure facilitator. In M.S. Moon (Ed.). *Making school and community recreation fun for everyone* (00. 17-32). Baltimore: Brookes Publishing Co.
- Odom, S. L., & Diamond, K. E. (1998). Inclusion of young children with special needs in early childhood education: The research base. *Early Childhood Research Quarterly*, 13(1), 3-25.
- Roberts, R. (2005). Boundaries need not apply. *Parks and Recreation*, 40(8), 49-52.
- Rubenstein, J. (1984). Friendship development in normal children: A commentary. In T.Field, J. Roopnairine, & M. Segal (Eds.), *Friendships in normal and handicapped children* (pp.125-135). Norwood, NJ: Ablex.
- Rubin, K. H., & Rose-Krasnor, L. (1995). Interpersonal problem-solving. In V. Van Hasselt & M. Hersen (Eds.), *Handbook of social development*, (pp. 284-324). New York, NY: Plenum.

- Russell, R. V. (2002). *Pastimes: The context of contemporary leisure*. (2nd ed.). Champaign, IL: Sagamore Publishing.
- Salend, S.J. (2000). Strategies and resources to evaluate the impact of inclusion programs on students. *Intervention*, 35, 264-270. Retrieved on April 4, 2006, from [http://www.powerof2org](http://www.powerof2.org) . .
- Schleien, S.J. (1988). *Community recreation and persons with disabilities: Strategies for integration*. Baltimore, MD: Paul H. Brooks Publishing Co.
- Schleien, S.J., Ray, M.T., & Green, F.P. (1997). *Community recreation and people with disabilities: Strategies for inclusion*. (2nd ed.). Baltimore, MD: Paul H. Brooks Publishing Co.
- Schneider, B. H., & Bryne, B. M. (1985). Children's social skills training: A meta-analysis. In B. Schneider, K. H. Rubin, & J. Ledingham (Eds.), *Children's peer relations: Issues in assessment and intervention* (pp.3-22). New York, NY: Springer-Verlag.
- Scholl K.G., Dieser, R.B., & Davison, A. (2005). Together We Play: An ecological approach to inclusive recreation. *Therapeutic Recreation Journal*, 39(4), 299-311.
- Sherrill, C. (2004). Adapted physical activity, recreation, and sport. social interaction skills. In J.O. Greene, & B.R. Burleson (Eds.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.
- Siperstein, G. N., Parker, R. C., Bardon, J. N., & Widaman, K. F. (2007). A national study of youth attitudes towards the inclusion of students with intellectual disabilities. *Exceptional Children*, 73(4), 435-455.
- Slinger D., Sherrill, C., & C.M. Jankowski. (2000). Children's attitudes toward peers with severe disabilities: *Revising contact theory*. *Adapted Physical Activity Quarterly*, 17(4), 176-196.
- Strully, J.L. & Strully, C. (1991). A journey toward inclusiveness. *Children Today*, 20 (2), 2-4.
- Together We Play: Obtaining together we play services for families*. (n.d.). [Brochure]. Waterloo, IA: Family YMCA of Black Hawk County.
- U.S. Census Bureau (2002). *Disability status*. Retrieved on December 13, 2004 from <http://www.census.gov/hhes/www/disability.html>.

U.S. Office of Special Education Programs. (2003). *Number of children ages 6-21 served in different educational environments under IDEA, by disability, during the 2000-2001 school year: Part B (Table AB2)*. Retrieved June 12, 2007, from <http://www.ed.gov/about/offices/list/osers/osep/research.html>.

Wolfensberger, W. (1972). *Principle of normalization in human services*. Downsview, Ontario: National Institute on Mental Retardation.

APPENDIX A

ANALYSIS OF SOCIAL INTERACTION

OBSERVATION TOOLS

APPENDIX B

ANALYSIS OF SOCIAL INTERACTION DEFINITIONS

OBSERVATIONAL TOOLS

Analysis of Social Interaction Definitions

INTERACTION MEASURES

STRUCTURE

- I Initiation: Any verbal or active nonverbal behavior that engages or attempts to engage another person.
- A Acknowledgement: Any verbal or nonverbal behavior that appears to be in response to an initiation. This can include: (a) gazing at the initiator, (b) nodding (yes/no) in response to an initiation, (c) carrying out a direction that has been given, (d) physically or verbally resisting the initiation, (e) significantly changing expression or intentional eye contact, and (f) responding to physical assistance.
- I & A Reciprocal interaction: Communicative exchanges in which there is both an initiation and an acknowledgement.

FUNCTION (initiations only)

- G Greeting: acknowledging another person.
- I Information: communication regarding upcoming event, comment, request.
- A Access to others: introduction to another person.
- M Material aid: physical assistance, assistance.
- E Emotional support: comforting a person.
- C Companionship: interacting – shared activity.
- P Protest: to indicate a desire to avoid an undesired stimulus or to escape an ongoing stimulus.
- O Student observing activity/On-task

QUALITY (reciprocal interactions only)

- Pos Positive: One or both partners in the reciprocal exchange demonstrate positive affective (i.e., verbal praise, or compliments, sharing or helping, smiling to indicate pleasure, physical or verbal humor, and/or physical or verbal affection).
- Neut Neutral: The reciprocal exchange is made with neither positive nor negative affect (e.g., conversation, discussion, answering teacher's questions).
- Neg Negative: One or both partners in the reciprocal exchange demonstrate negative affective (e.g., anger, irritation, indignation, discourteousness, and/or exasperation).

WHO (identity of partner)

- L Leisure companion
- R Recreation leader/instructor/coach
- A Other adult
- S Student without disabilities
- Sd Student with disabilities

ENGAGEMENT MEASURES

- Act Active engagement: Student is **actively engaged by himself or herself** or within a small or large group activity. Student is participating through verbal/alternative communication or physical movement.
- Pass Passive engagement: Student is passively engaged by himself or herself in a small or large group activity. Student is participating by attending and waiting for his or her turn, giving direct eye contact, passively listening, and/or attending and waiting for his or her turn, giving direct eye contact, passively listening, and/or attending to the teacher or group members
- NE Not engaged: Student is not actively or passively engaged in activity. Student is either not attending to ongoing activity, not being attended to by staff or students, or not assigned to a task or given materials.
- SA Student alone: Student is physically alone (e.g., on playground) or working by themselves or with an instructional assistant on an activity unrelated to the activity of other students in the area.
- SG Student with other students: Student is engaged in an activity with at least one other student.

APPENDIX C

STRUCTURED FIELD NOTES

OBSERVATIONAL TOOLS

Structured Field Notes

Multi-case Analysis of Social Interactions

Focus: _____ Activity: _____ Weather: _____

Observer: _____ Setting: _____ Date/Time: _____

- 1) How long do these interactions last?

- 2) What is the nature of these interactions (e.g., spontaneous, assistive, reciprocal, instructional, disciplinary, attention-seeking, playful)?

- 3) Who is initiating and terminating the interactions?

- 4) How many students w/out disabilities are interacting with their peers with disabilities?

- 5) What events, activities, individuals, objects, and other stimuli seem to limit interactions?

- 6) What roles, if any, do race, gender, and socioeconomic factors play in the interactions?

- 7) Do the students with and w/out disabilities possess the requisite skills to interact with their peers?

- 8) What are the outcomes of these interactions?

APPENDIX D

DAILY INTERACTION

ASSESSMENT TOOL

