Spring 2018

Parent and Child Perspectives: Applying MOHO to Assess Inclusion Outcomes in Unified Sports

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Parent and Child Perspectives: Applying MOHO to Assess Inclusion Outcomes in Unified Sports®

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Abstract

For all children, being a participant in a recreational sports program is important for the well-being and quality of life. Children with disabilities may not always have the same opportunities to engage in sports programs. Unified Sports®, a branch of Special Olympics®, is an inclusive team sports program that aims to break down stereotypes about children with disabilities; however, it lacks documented outcomes. Previous research failed to explore outcomes of co-curricular inclusion programs from the perspectives of the two main stakeholders: children with disabilities and their parents. These perspectives are key to analyzing success of current inclusion programs and developing future ones. This study explored perspectives and experiences regarding outcomes of Unified Sports®. The specific aim was to answer the research question: “What are the perspectives of children with disabilities and their parents on inclusion in Unified Sports®?” In order to answer this question, selected participants from a convenience sample completed online surveys. Participants included two athletes with disabilities and three parents. The surveys had seven questions about their feelings and experiences with the Unified Sports® Program. Study results demonstrated that Unified Sports® may help children with disabilities build relationships, grow personally, and integrate into positive environments. Creating more recreation-based inclusion sports opportunities for children with disabilities is encouraged. Additional research is needed.
**Literature Review**

**Introduction**

Children with disabilities are often excluded from sports programs. Having the opportunity to be involved in sports is important for children of all abilities. Sports have many benefits as they can help children grow physically, mentally, and emotionally. While there are some programs designed to include children with disabilities, they tend to be seclusionary, meaning children with disabilities are separated from typically developing children. Special Olympics® is an example of one of these seclusionary programs. One program that takes an inclusionary approach is Unified Sports®. This program partners children with disabilities with typically developing peers to compete together. Research suggests that inclusionary sports, such as Unified Sports®, have a positive impact. However, much of the current research focuses on the perspectives of children without disabilities, educators, and coaches. The research largely neglects the viewpoints of the children with disabilities and their parents. The few studies that do seek these perspectives fail to explore the child and parent perspective on program outcomes. Rather, they focus on the factors that either facilitate or hinder inclusion in recreation. In order to fully understand the impact of inclusionary sports, the perspectives of these two vital stakeholders must be considered - specifically regarding program outcomes for the child and his or her family.

**Inclusion**

Inclusion is often researched and has various definitions, each of which highlights the key components that compose inclusion. It is also arguable that inclusion is a crucial area for research, so it is useful to demonstrate the importance of inclusion as evidenced by outcomes documented in the current literature. Overall, feeling included has been shown to be important
for all individuals regardless of whether they have a disability or not. However, individuals with disabilities have less access to inclusionary programs. The development of future programs will require an understanding of the factors that influence the availability and success of inclusion. These influencing factors will be explored following a discussion of what constitutes inclusion and why it matters.

**Defining Inclusion.** The main purpose of this research is to study the inclusion of children with disabilities in sports with children without disabilities. Therefore, it is important to have an understanding of what inclusion involves. There are many different definitions of inclusion. However, there seem to be two key concepts in the definitions of inclusion. The first concept is that inclusion is a subjective experience, meaning it is unique to the individual. Spencer-Cavaliere and Watkinson support this concept in a study that explores how the thoughts, feelings, and experiences of children with disabilities are central to the understanding of inclusion. Specifically, the study emphasizes that a key component to inclusion is seeing each participant as an individual (Spencer-Cavaliere, & Watkinson, 2010, p. 276). The second key concept to inclusion is placing value on diversity (Rogers, 1993 P.4; Nixon II, 2007, p. 419). In inclusive sports, there are a wide range of talent and abilities including students who have physical disabilities and mental disabilities. Many participating students have no disability. To successfully include people with disabilities, sports must be organized with an understanding of the many differences of people with disabilities and their different capacities to compete in sports of different kinds and level (Nixon II, 2007, P.418). Not only do these differences have to be recognized, but they must also be valued. At the minimum, people with disabilities should be able to participate in activities with people without disabilities without fear of stigma or plagued with derogatory stereotypes. This means that an inclusive team needs to have an environment
that empowers, supports, accepts, and respects all participants - placing value on diversity (Nixon II, 2007, P.419)

**Benefits of Inclusion.** Inclusion is important for various reasons. First of all, inclusion can have a significant impact on social environments, even leading to social cohesion and community development (Kelly, 2011, p. 131). Davis, Rocco-Dillon, Grenier, Martinez, and Aenchbacker found that both an improved social climate of the school and community and positive changes in the learning environment result when students engage in sport-related activities together to promote skill development and tactical knowledge (2012, p.41). A positive atmosphere at school leads to a better experience for all students and staff. A study by Briere and Siegle Titled “The Effects of the Unified Sports® Basketball Program on Students’ Self-Concepts: Four Students’ Experiences” follows the perspective of four Unified Sports® participants. One participant, Sally shared that “after the program had concluded she felt that she belonged more and felt less like a misfit” (2008, p.8). Another student, Aaron, stated that he felt “his high school was not the most welcoming environment at first, but during the Unified Sports® program, he said he actually looked forward to coming to school (Briere and Siegle, 2008, p. 8-9). The more opportunities the two populations have to interact with one another in the same environment, the more positive changes there will be to their self-concepts (Briere and Siegle, 2008, p.3). In addition, inclusion can lead to positive social interactions between adult coaches and children with disabilities. It provides opportunity for the children to request assistance in their social environment through touch, body language, facial expressions, and verbalization (Fennick & Royle, 2003, p. 24). The positive impact that inclusion has on social environments was also evidenced in a researcher’s personal experience volunteering to coach a community soccer team for children with disabilities. The children expressed excitement
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throughout the season. They were happy to have other children their age to play the game with them and provide a more “normal” experience. Assistants and coaches gave help as needed but were mainly there for support, which reinforces the idea that inclusionary programs provide children with disabilities the opportunity to request for assistance as needed in their social environments. Children were also afforded the opportunity to learn how to work as part of a team to make sure everyone's needs were being met. The children both with and without disabilities were able to gain a better understanding of how to interact with one another and have fun together.

Creating opportunities for children with disabilities can help reduce social isolation, as well (López, Moreno-Rodríguez, Alcover, Garrote, & Sánchez, 2017, p. 169). In addition to those with physical disabilities, children with mental disabilities also face challenges related to community involvement and fitness. For example, most children with Autism Spectrum Disorder (ASD) are at risk for social exclusion or poor inclusion as a result of their behavior, mainly playing with others. Sports can be used as an effective tool to promote psychomotor and social skills that improve play performance in these children, thereby leading to improved relationships with peers (Lopez et al., 2017, p.167). Social relationships are a priority of children with disabilities and contribute significantly to their quality of life, and hence inclusion is especially important because of its role in improving potential for these relationships (Young, Rice, Dixon-Woods, Colver, & Parkinson, 2007, p. 660).

In fact, beyond social relationships, participation in recreation itself is a main factor in contributing to quality of life in children with disabilities (Young et al., 2007, p. 660). However, children with disabilities do encounter barriers to participating in their preferred recreational activities - mostly the poor attitudes and behaviors in their social environment. In addition, they
are often hesitant to engage in certain activities because they feel they could not perform well enough (Young et al., 2007, p. 664). Inclusion facilitates access to otherwise unaffordable leisure provision or provides sporting activities for those likely to be excluded from mainstream services (Kelly, 2011, p. 131). Hence, successful inclusion is important because it plays a role in allowing children with disabilities to engage in recreation, an important component in their quality of life (Young et al., 2007, p. 664). By being able to engage in this important occupation, in addition to the vital occupation of social participation that accompanies it, children progress toward having better occupational balance in their lives.

As both social relationships formed from inclusion and recreation itself are factors in determining quality of life, it is evident that participation in an inclusive sport can improve multiple aspects of an individual’s life (Young et al., 2007, p. 660). Inclusionary programs also result in improvement in child performances and children’s enjoyment in the activities (Fennick & Royle, 2003, p. 24). In addition, sports-based social inclusion has been found to provide a “pathway to work,” encouraging those with disabilities to join the workforce or engage in education or training (Kelly, 2011, p. 131). Finally, sports-based inclusion also “gives voice,” providing opportunity for the active participation of young people through consulting with others (Kelly, 2011, p. 131).

Beyond these benefits of inclusion in recreation, there are even physical benefits for the children involved. Special Olympics Unified soccer, an example of inclusion in recreation, has been shown to be successful in increasing fitness and soccer skill performance of youth with intellectual disabilities and those without intellectual disabilities (Baran et al., 2013, p. 695). These specific findings demonstrate the utility of the Unified Sports program for youth both with and without disabilities (Baran et al., 2013, p. 708).
Overall, research suggests that establishing options for children and youth with developmental disabilities to participate in integrated community recreation is worthwhile (Fennick and Royle, 2003, p. 26). While different programs achieve varying degrees of success, their impact on decreasing exclusion is inevitable (Kelly, 2011, p. 126). In the future, an important step will be having the education community, recreation community, and families come together to move inclusion beyond the schools and into the community (Fennick and Royle, 2003, p. 26).

**Factors Impacting Inclusion.** Many factors play into our everyday actions and choices. The people we surround ourselves with, our own thoughts and feelings, and the environment itself impacts us. Inclusion is influenced by all these factors, as well. Feelings of inclusion and exclusion are experiences almost everyone has at some point in their lifetime. For example, in middle school trying to find a group to sit with in the cafeteria can be a challenge. Some social groups are inviting and friendly, while others are exclusive in who they allow to sit with them. The social stigma surrounding disability, the way it has affected the individual mentally and physically, and the environment itself can all influence feelings of inclusion. These factors and others that impact inclusion must be explored to understand the success of inclusionary programs.

There have been several studies examining the various aspects that influence inclusion (Fennick and Royle, 2003; Grandisson, Tetreault, and Freeman, 2012; Hiu-Lun Tsai and Fung, 2009; Magalhães, Cardoso, and Missiuna, 2011; McConkey, Dowling, Hassan, & Menke, 2013; Nixon II, 2007; Spencer- Cavaliere and Watkinson, 2010; Young, Rice, Dixon-Woods, Colver, and Parkinson, 2007). One study, which highlights the perspective of children with disability, suggests that peers are the greatest influence on how children with disabilities feel they fit in
Applying MOHO to Assess Inclusion Outcomes in Unified Sports® (Spencer-Cavaliere and Watkinson, 2010, p.289). The unaccepting attitudes and behaviors of peers, parents, and instructors lead to discrimination of children with disabilities and serve as barriers to participation in preferred recreational activities (Young et al., 2007 p. 664; Hui-Lun Tsai and Fung, 2009, p. 156). Similarly, the community’s general lack of understanding and knowledge about people with intellectual disability is another factor identified as influencing inclusion in sports and recreation (Hui-Lun Tsai and Fung, 2009, p. 156). Additional factors that affect integration in sports have been identified from the perspective of adolescents with disability, their parents, and rehabilitation staff persons; these include both environmental and personal factors (Grandisson et al., 2012, p. 217).

In the environment, sociocultural factors that impact inclusion beyond attitudes are characteristics of the group of athletes, coaches’ knowledge about intellectual disability, and presence of an athletic model in the family or parent factors (Grandisson et al., 2012, pp. 223-224; Hui-Lun Tsai and Fung, 2009, p. 158). Specifically, a couple of parent factors that can motivate a atmosphere for integration in sports are: parents’ sense of entitlement and awareness of civil rights, fear of harassment, and sport values (Hui-Lun Tsai and Fung, 2009, p. 158). In addition, appropriate accommodations in the social environment - whether from a coach or peer - determine success level in inclusionary programs. The reality in the United States is that if sports organizations and associations are to comply with the law and be fair to people with disabilities, they usually will have to build adaptations and accommodations into their sports (Nixon II, 2007, P.43). Some children with disabilities can participate in activities if general accommodations are implemented, and others with more intensive need require one-on-one assistance for safety or for very individualized accommodations (Fennick & Royle, 2003, p. 21). Nixon II notes that when athletes require adaptations or accommodations, sports officials often reject athletes with
disabilities. They may make claims that adaptations or accommodations will be expensive or impractical, much as employers have done in resisting hiring of people with disabilities” (Nixon II, 2007, p.430). Sports organizers and administrators must be flexible, adaptable, and open to change, and they must understand how to match the abilities, interests, and motivation of athletes with disabilities with the structural parameters of their sport (Nixon II, 2007, P. 431).

Political economic factors in the environment that were found to impact inclusion were availability of practical support, characteristics of the sport, information available about integrated athletic activities, procedure in place for integration in sports, scientific knowledge about integration in sports, cost of the activity, and availability of transformation (Grandisson et al., 2012, pp. 224-225; Hui-Lun Tsai and Fung, 2009, p. 158). Finally, the physical aspect of the environment that is most influential is the availability of adapted equipment secondary to lacking financial resources (Grandisson et al., 2012, p. 225). In addition to these environmental factors, a few personal factors impact integration in sports: child capabilities (behavioral, motor, social, and communication), independence level and previous experience, and interest in sports (Grandisson et al., 2012, p. 226; Hiu-Lun Tsai and Fung, 2009, p. 158). Related to child capabilities, for example, a systematic review shows that two of the most frequently cited difficulties with activity and participation for children with developmental coordination disorder are difficulties playing ball games and participating in organized sports. These difficulties could be significant barriers to participating in inclusive recreation (Magalhães, Cardoso, and Missiuna, 2011, p. 1309).

While many of the identified factors serve as barriers to inclusion, there have been processes identified that enhance social inclusion (McConkey et al., year, p. 925). In the context of Youth Unified Sports®, personal development of children with and without disabilities,
inclusive and equal relationships, positive perceptions of the children with disabilities, and the formation of alliances all promoted social inclusion (McConkey et al., p. 927). These factors identified within a Unified Sports® program even suggested that the program provides a vehicle for promoting social inclusion of people with intellectual disability (McConkey et al., p. 923). Another factor found to contribute to successful inclusion is positive inclusion attitudes and abilities of staff such as coaches or instructors. Likewise, well developed social skills of individuals with disability can lead to successful inclusion (Hui-Lun Tsai and Fung, 2009, p. 151). These factors impacting inclusion suggest a need to equip individuals with and without disabilities, as well as program providers, with knowledge, attitudes, and skills for inclusion (Hui-Lun Tsai and Fung, 2009, p. 167).

Over the past several decades, laws have been enforced to promote fair treatment of individuals with disabilities. These laws serve as facilitators for inclusionary practices. In 1990, the American with Disabilities Act (ADA) became federal law (Pedretti, 2012, 383). It aims to protect those with disabilities from discrimination (Pedretti, 2012, 383). The act has proven effective in many areas. Foley, Lieberman, and Kim note “physical education classes are becoming more inclusive, as a result of the “least restrictive environment” rule, mandated by federal law.” (2007, p. 34). Another law that has made a strong impact for those with disabilities is the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004. This act requires each state to ensure that public agencies provide extracurricular services and activities to afford children with disabilities an equal opportunity for participation (Galanter, 2015). Section 300.107 of IDEIA goes on to say that those services and activities include athletics and transportation. (Galanter, 2015). This law has helped expand opportunities for children with disabilities in their schools, the Unified Sports® Program serves as an example.
In summary, inclusion is subjective and experienced by individuals differently. It is also essential that diversity is valued in inclusive settings. Understanding that everyone in the group has their own set of strengths and weaknesses will lead to feelings of acceptance. Inclusion is important for all individuals as it promotes social cohesion and community development, reduces social isolation, gives individuals voice, has physical benefits, and provides an overall positive impact on quality of life. When aiming to facilitate successful inclusion, there are many factors that will inevitably have an influence on the success of inclusion: peers, sociocultural factors, political economic factors, attitudes, and laws.

Child Perspective

While there is not a lot of literature exploring the perspectives of children with disabilities on inclusive sports, it is a crucial area to study in order to make inclusive practices successful. Unified Sports®, which is the focus of the current study, is a program aimed at inclusion of individuals with disabilities. Hence, they are the main stakeholders whose input should be sought out and considered. Most of these children have never had the opportunity to engage in a team sport with typically developing children. They may have never played sports or may have experience with disabilities sports such as Special Olympics®. As mentioned previously, inclusion is understood as a subjective experience, so understanding the perspectives of the child who is to be included is the first step in studying inclusion (Spencer-Cavaliere and Watkinson, 2010, p.275). However, investigating inclusion in sports and recreation is a relatively new phenomenon, so recommendations for including children with disabilities in physical education, team sports, and other structured activity settings are largely based on a body of research that doesn’t represent the voices of children with disabilities (Spencer-Cavaliere and Watkinson, 2010, p.278).
Several studies have aimed to gain a better understanding of the perspectives of children with disabilities (Briere and Siegle, 2008; Grandisson et al., 2012; Spencer-Cavaliere and Watkinson, 2010). In Spencer-Cavaliere and Watkinson’s study titled “Inclusion from the Perspectives of Children with Disabilities”, three themes emerged that proved particularly important to the children with disabilities: gaining entry into play (meaning being invited to play), feeling like a legitimate participant, and having friends (Spencer-Cavaliere and Watkinson, 2010, p. 282-285). These themes demonstrate the importance of the social aspect of recreation. Similarly, social benefits are highlighted in another study that documents adolescents’ perceptions. Through sport participation, adolescents with disability feel that they develop self-esteem, experience increased social inclusion, and gain an opportunity to have fun (Grandisson et al., 2012, p. 222). Likewise, in Briere and Siegle’s 2008 study “The Effects of the Unified Sports® Basketball Program on Special Education Students’ Self-Concepts: Four Students’ Experiences”, four students were interviewed and revealed what was most valuable to them about their Unified Sports® team. The first student interviewed, Sandy, shared that socialization appeared to be the most appealing aspect of the program for her. Her friendships and peer relationships had improved from the start to finish of the program. When asked if she felt more popular now, Sandy simply said “Yes, with everybody.” (Briere and Siegle, 2008, p. 6). Another student, Sally, “formed an especially close bond with Heather, a partner in the program (non-special education student), who helped Sally maneuver around the court” (Briere and Siegle, year, p.8). When asked about if she thinks the program should be continued, Sally stated “it helps build up kids’ egos and self-confidence” (Briere and Siegle, 2008, p.8). These quotes from both Sandy and Sally emphasize that having the opportunity to bond with other students, both with
and without disabilities, is meaningful to them. They also feel they have benefitted from the program in areas such as physical self-concept and self-confidence (Briere and Siegle, 2008).

Briere and Siegle’s study demonstrated perceived benefits beyond the social factors, as well. One of the students previously mentioned, Sandy, also shared that she felt stronger and faster. Her physical self-concept appeared to have improved the most as a result of her involvement in the Unified Sports program” (Briere and Siegle, 2008, p.6). Likewise, adolescents have identified health improvement and development of motor and cognitive abilities through participation in sports (Grandisson et al., 2012, p. 222). The children’s perceived improvement in strength, speed, motor abilities, and health are further supported by an objective study mentioned previously. It showed that a Special Olympics Unified soccer program, an example of integrated sports, does indeed improve fitness and soccer skill performance of youth participants with and without disabilities (Baran et al., 2013, p. 708).

These studies help provide an understanding of what individuals with disabilities are looking for in an inclusive program. From socialization opportunities to building physical skills, those with disabilities want many of the same things that those without disabilities are able to experience through sports. Through inclusive sports programs, they have found many of those desires. However, little research has been performed on this population which is why it demands further research to better understand the children’s perspective on inclusionary sports programs since they are key stakeholders.

**Parent Perspective**

Parents of athletes with disabilities are also key stakeholders regarding the promotion and development of inclusion. However, like children with disabilities, their perspective is greatly underrepresented in current research. Parents often want what is best for their children and have
valuable input on how to create an environment that will help their child feel included.

Fortunately, current research has explored the barriers and facilitators from parent’s perspectives. Parents also hear and know a vast amount about their children’s feelings and experiences, which means they may have valuable insight into the outcomes of inclusion for their children. However, there is very minimal research in the current literature that demonstrate inclusion outcomes from the perspective of parents. Barriers and facilitators that have been identified will be reviewed, followed by a brief discussion on the minimal findings related to outcomes of inclusion.

**Barriers and Facilitators.** Parents of children with disabilities may be most comfortable with sports that are structured to be unthreatening and over which they have some control. Hence, factors in inclusive recreation programs that allow for more parent input and control may serve as facilitators to inclusion (Nixon II, 2007, P.423). One study indirectly identified the barriers that are most prominent in the view of parents of children with disabilities (Carter, Swedeen, Walter, Cooney, & Moss, 2010). During parent-led community conversation events intended to promote inclusion, parent tended to choose topics of conversations related to the following four themes: lack of inclusive opportunities, need for local education, awareness, and strategies to promote inclusion, need for supports in existing opportunities to make them more inclusive, and the need for new inclusive opportunities (Carter et al., 2010, p. 15). Parent leaders expanded on these barriers to successful inclusion in recreation. Many gave examples of how their children were not included in existing school or community activities (Carter et al., 2010, p. 15). Others explained that they notice individuals that want to include children with disabilities, but “just don’t know what to do” and need practical strategies to use (Carter et al., 2010, p. 16). One parent expressed that even though there were many activities that were “inclusive” of her
daughter, if she didn’t send a support person along with her, she “couldn’t just drop her off there” (Carter et al., 2010, p. 16). Beyond identifying these barriers addressed through parent-led conversations, this particular study suggests that community conversations led by parents are a unique and valuable way through which parents can lead change efforts within their community. Through these conversations, valuable input can be gleaned from parents and the wider community to come up with innovative solutions to barriers of integrated sports (Carter et al., 2010, p. 21).

Without solutions to the current barriers, access to even the existing inclusive recreational opportunities may be difficult. One study examined the experiences of parents of persons with intellectual disabilities as they sought inclusive sport participation for their children (Hui-Lun Tsai and Fung, 2009, p. 151). Of 46 parents who sought community sport and recreation programs for their children, only three experienced success in integrated their children into these programs (Hui-Lun Tsai and Fung, 2009, p. 156). The three parents who had success also had to be very persistent and determined (Hui-Lun Tsai and Fung, 2009, p. 161). The other parents gave up mainly because of rejection from program staff and other participants, but also because of their own lack of sense of entitlement, low sports values, and lack of participation information. These are only a few of the many barriers to inclusion in recreation that need addressed (Hui-Lun Tsai and Fung, 2009, p. 151).

**Outcomes of Inclusion.** For parents, the outcomes of inclusion in recreation may include feelings of pride in their children and improvement in the parent-child relationship (Grandisson et al., 2010, pp. 222-223). One study showed that once children have gained entry into inclusive recreational opportunities in which they receive individualized accommodations, they provide positive feedback when inquired about the program. However, the study provides no further
detail (Fennick and Royle, p. 24). Another study looked at the outcomes from a Unified Sports® program from multiple perspectives, one being family/parents (McConkey, Dowling, Hassan, and Menke, 2013, p. 923, 925). While many of the perspectives were combined in the results section of the study to show outcomes of the sports program, a few parent comments showed their thoughts on the outcomes of the Unified Sports program. A theme a few parents identified was the broadening of opportunities in the community. Their involvement in activities took them out of special facilities and into typical meeting places in their communities and beyond (McConkey, Dowling, Hassan, and Menke, 2013, p. 928).

The current literature covering the perspective of parents is scarce, especially regarding the outcomes of inclusion for their children. The lack of research in this area demonstrates the importance of seeking out parents’ input as to how inclusion can impact their child. This information could serve to confirm or deny the effectiveness of certain inclusion programs and promote the development of those programs with positive outcomes. Research does show that parents express concerns regarding the difficulty finding a program as well as the program being the right fit and having the necessary supports to see their child succeed. The parents who did have the opportunity to watch their child succeed in an inclusive program expressed a sense of pride for their child. They also felt that they saw their child benefit off the playing field due to their involvement in the program. Hence, the limited research that is available on current programs does support further research to help promote more inclusion programs.

**Model of Human Occupation**

Occupational therapists often work with individuals with both physical and mental disabilities. The field strives to help these individuals reach their full potential despite their disability. Occupational therapists help individuals participate in the activities that are
meaningful to them, such as sports, and to integrate into their environments to the greatest extent possible. Therefore, applying an occupational therapy lens can be useful in understanding inclusionary programs.

Much of the research available is from the education perspective (Davis et al., 2012; Fliess, Chachan & Van den Auweele, year; Galanter, 2015; Hutzler et al., 2002; Lopez et al., 2017; Place and Hodge, 2001). However, the topic of inclusion in sports is important from a community perspective, as well. It is also relevant to the field of occupational therapy. Occupational therapy values the use of therapeutic reasoning, which is “how therapists use theory to understand a client and develop, implement, and monitor a plan of therapy with a client” (Kielhofner, 2008, p. 143). One particular model that is based in theory, the Model of Human Occupation (MOHO), fits well with many of themes of inclusion found in the literature. However, none of the literature reviewed applied MOHO in an effort to successfully frame inclusion. The current study aims to apply the concepts of MOHO to inclusion, specifically inclusion from the perspectives of both the children with disabilities and their parents.

A more detailed explanation of MOHO will clarify its applicability and usefulness for our particular study. The model consists of four basic concepts: person factors, doing of occupation, environment, and outcomes. The current study applies each of these concepts to the participant responses. Specifically, the person refers to the athletes and parents, the occupation is bocce ball, and the environment is the high school in which they attend. The outcomes of the interaction between these components are sought out. Figure 1 further demonstrates the interconnectedness of these concepts. It also provides descriptions within each concept. For example, the person has three internal subsystems: volition, habituation, and performance capacity.
Kielhofner defined both function and disability in his model. Under MOHO, function means the individual has good occupational adaptation and strong occupational engagement. Disability is viewed as poor occupational adaptation and having a lack of occupational engagement. Occupational adaptation is a concept of MOHO that describes one’s ability to construct a positive identity and achieve occupational competence over time in the context of one’s environment. Occupational engagement is what the individual does, thinks, and feels. This is fitting to our study as the athletes on our team are viewed as “disabled”. However, if the athletes demonstrate strong occupational adaptation and occupational engagement in the Unified Sports® environment, then this program maximizes their functioning.

In addition, MOHO uses a client centered approach. Each client is viewed as a unique individual. The individual’s unique characteristics are considered when determining goals and strategies for that person. This relates to this area of research because inclusion is understood as a subjective experience, so understanding the perspectives of the child who is to be included is critical (Spencer-Cavaliere and Watkinson, 2010, p.275). Hence, the multiple unique
perspectives of the children are important to determining the successfulness of inclusive programs. Each person’s unique characteristics and perspectives help build an overall feeling about the program’s impact on the individuals involved. In a sense, developing these programs should be “client-centered” by focusing on the perspectives and needs of the children with disabilities. In fact, the current literature emphasizes that a key component to inclusion is seeing each participant as an individual just as being client-centered focuses on the uniqueness of each person (Spencer-Cavaliere and Watkinson, 2010, p. 276).

The central mechanism of change in MOHO is also especially relevant to this research: occupational engagement. Occupational engagement was briefly defined earlier as what the client does, thinks, and feels. The current project is designed to increase understanding the thoughts and feelings of the athletes and parents in the Unified Sports® program as the main purpose of inclusive programs is to provide an environment that creates positive feelings and thoughts for these populations. Specifically, the aim is to gain insight into the participant’s values, interests, roles, habits, and performance in relation to the inclusive environment, all of which are important concepts in MOHO.

Another key concept in MOHO is volition. Volition is one’s motivation for occupation. This research may provide insight into what motivates the athletes and parents to be involved in Unified Sports® and how the program motivates them outside of practice. Personal causation is one’s sense of competence and effectiveness and is an important aspect of MOHO. The research may also help discover how Unified Sports® affects the athlete’s sense of personal causation. Unified Sports® is designed to help students with disabilities feel a part of their community while engaging in an occupation they enjoy and also gaining confidence and life skills. This statement really clarifies the connection between the current research on Unified Sports® and
MOHO, which looks at the individual, their occupation, the environment, and outcomes (Kielhofner, 2008).

Clearly, there are many applicable connections between MOHO and assessing inclusion. MOHO could have been a useful model in applying to previous studies discussed regarding inclusion in recreation. In any study on inclusion, the application of an occupational therapy lens such as MOHO helps to understand how inclusionary practices can impact an individual. It takes into consideration not just the volition, habituation, and performance skills of the person themself but also the sport and the environment. These are all important factors in understanding what helps build an atmosphere of inclusion, which can then lead to outcomes in occupational performance. Improved occupational performance is an outcome that indicates there is more success in engaging in meaningful occupations, such as recreation or social interaction in these inclusive programs.

By applying MOHO to Unified Sports® outcomes identified in the current study, researchers may be able to gain a better understanding of occupational performance based on the outcomes identified by the children with disabilities and their parents. The changes in the person identified through child and parent perspectives will then translate into occupational identity, occupational competence, and occupational adaptation. Depending on the impact of outcomes on these three constructs, occupational performance may be facilitated or hindered. Ultimately, that change in occupational performance will be resultant of the Unified Sports® program.

Gaps in the Current Literature

While there is plentiful research available regarding disability sports and inclusion in educational settings, there is a lack of research on extra-curricular and recreational inclusionary programs. In addition, the perspectives of athletes with disabilities and their parents has not
received much attention. Gaining insight into these perspectives will further understanding of what it takes to increase feelings of inclusion for individuals with disabilities.

**Lack of information from the Children’s Perspectives.** As research was conducted on this topic, little information regarding the perspective of the children with disabilities was found. Several articles confirm this lack of information. Blinde and McCallister (1998), as well as Goodwin and Watkinson (2000) share that viewpoint that there has been little attention to the experiences of children with disabilities participating in inclusive physical activity in research. Several other studies address this same concern of limited information being reported regarding the included children’s own perceptions (Blinde & McCallister, 1998; Goodwin & Watkinson, 2000; Hutzler et al. 2002; Place & Hodge, 2001). These statements emphasize there is a gap in the current research regarding the perspective of the child with a disability. As a result of this gap, the current study includes the perspectives of children with disability in our research. This perspective is crucial to understanding inclusive sports as the purpose to initiating these teams is to create an environment and activities that are specifically aimed towards the inclusion of this population. With inclusion being a subjective experience, the perspectives of those to be includes is vital to making successful programs (Spencer-Cavaliere and Watkinson, 2010, p. 276).

**Lack of information from the Parent’s Perspectives.** While there are some studies seeking the perspectives of children with disabilities’ parents on inclusion in recreation, few of these focus on their perspectives of the program outcomes. Rather, they focus on the factors that either facilitate or hinder inclusion in recreation. Hence, our study will focus on the perspective of parents specifically about the results and outcomes of a Unified Sports® Program, rather than what facilitated or impeded their child’s ability to participate in the inclusive program.
It is important to understand the parent perspective of whether the program is beneficial once the initial barriers to inclusion have been overcome. Parents often see the “big picture,” including child outcomes, family outcomes, impact on the community, and more. Their direct involvement in their child’s lives gives them unique perspective on the impact of inclusionary programs. In addition, parents are frequently advocates for their children. Hence, they will likely serve as advocates for inclusion if they perceive positive outcomes. To continue improving inclusionary programs and build advocacy for them, parent perspectives on program outcomes first have to be explored.

**Areas of Focus in Current Research.** Within the topic of inclusion, there are many common areas of focus in the literature. Nixon II states: “Scholars have given much (warranted) attention to issues of opportunity, integration, and justice concerning females and racial and ethnic minorities, but relatively little attention to these issues concerning people with disabilities” (Nixon II, 2007, P.417). While these areas of inclusion are important and deserve attention, inclusion of individuals with disabilities is an area that is growing and also deserves some spotlight. As research regarding inclusion of those with disabilities was uncovered, a decent amount of research regarding the perspectives of non-disabled students was found (Tindall, 2012; Townsend & Hassall, 2007), inclusion in the PE setting (Blind & McCallister, 1998; Davis et al., 2012; Goodwin & Watkinson, 2000; and Place & Hodge, 2001), and inclusion from the education standpoint (Davis et al., 2012; Fliess, Chachan & Van den Auweele, year; Galanter, 2015; Hutzler et al., 2002; Lopez et al, 2017; Place and Hodge, 2001). The research in these areas are important and have made an impact on the field. However, there are other areas of inclusionary practices for those with disabilities that have received little attention. As Briere and Siegle state, “While mainstreaming has successfully brought increased numbers of special
Applying MOHO to Assess Inclusion Outcomes in Unified Sports®

education students into the regular education classroom, very little emphasis has been placed on mainstreaming these students into extracurricular settings. (2008, P.3). Educational inclusion is a very important area, however, extracurricular involvement is also important to an individual’s physical and emotional well-being. Therefore, it is important that inclusion in the extracurricular setting is thoroughly researched. Briere and Siegle also share that while inclusion in sports has been studied in the physical education setting, there has not been much research regarding sports outside of the school gym: “This small body of research, however, has tended to focus on physical education (PE) settings and not explored other physical activity contexts where children with disabilities are also located” (e.g., recess, community sport, free play) (2008, P.276). It is important to expand research to other contexts as physical education is not the only place where children with disabilities should be included. They deserve equal opportunities outside of the school setting.

The current research helps provide a better understanding of inclusionary practices for individuals with disabilities. However, there are important gaps to fill that have been neglected in previous research. Parent and child perspectives have not been sought out regarding inclusion outcomes for their children. In addition, the focus of inclusion has consistently been within the education setting. The current study aims to fill these gaps by answering the research question, which will be proposed after a brief description of the recreational inclusion program used in this study, Unified Sports®.

**Unified Sports® Program**

Inclusionary sports programs are not commonly available. Few programs exist and they do not all have a wide footprint yet. When trying to understand the impact of inclusion on children with disabilities, it is important to select a current program that is well developed and
Applying MOHO to Assess Inclusion Outcomes in Unified Sports®

may provide an accurate representation of inclusion outcomes. Through a well-developed program, it can be seen how athletes with disabilities and their parents perceive the concept of inclusionary sports. Unified Sports® is a program that has received attention since its creation as it is successful and is making an impact globally.

Unified Sports® is a specific program that serves as an example of inclusion in recreation and has been found to be a useful vehicle for promoting the social inclusion of children with intellectual disabilities (McConkey, Dowling, Hassan, & Menke, 2013, p. 923). Unified Sports® is a program developed by the Special Olympics, which has both experience and knowledge in sport development and provision for people with intellectual disability. Hence, this program can play an important role in the growth of inclusive sports (Hui-Lun Tsai and Fung, year, p. 167).

Unified Sports® was created by Special Olympics in response to the Inclusion Movement (Briere and Siegle, 2008, p.3) It was created with the intent to “improve each participant’s physical, social, and global self-concepts (Briere and Siegle, 2008, p. 3).

A few studies in the current literature mentioned previously have focused in on Unified Sport®s programs. For example, Baran et al. documented the physical benefits experienced by the children (both with and without disabilities) involved in a Unified Sports® soccer program (2013, p. 695). Another study examined the factors that promoted social inclusion in the context of youth Unified Sports® (McConkey et al., p. 925). Beyond the physical benefits and promoting factors, yet another study shows the attitudes of children without disabilities toward possible inclusion in Unified Sports® with students who have an intellectual disability (Townsend & Hassall, 2007, p. 265). Only one study reviewed looked at the perspective of Unified Sports® participants with disabilities. Four students were interviewed and revealed what was most valuable to them about their inclusion in the Unified Sports® program. Because only
one study was found to look at the perspectives of children with disabilities on Unified Sports®, our study aims to build on Briere and Seigel’s study by further examining the children’s perspectives. In regard specifically to Unified Sports® programs, there is no information on parent perspectives on inclusion. Hence, our study will begin to lay the groundwork for understanding Unified Sports® programs from the parent perspective, with a particular focus on their perspective of outcomes because this is also a gap in the current literature on inclusion discussed previously.

Additionally, the current study looks at Unified Sports® in the school setting. In Townsend and Hassall’s article “Mainstream Students’ Attitudes to Possible Inclusion in Unified Sports® with Students who have an Intellectual Disability” they highlight the role schools can play in the Inclusion Movement. They state: “Although such teams may be initiated from any community group, schools are uniquely placed to act as change agents if they have already accepted the principles of normalization and inclusion, and organized sport is an existing part of school life” (Townsend and Hassall, 2007, p. 265). Schools are designed to be a place of learning and growth. After school sport programs are intended not only to allow students the opportunities to advance their physical abilities but also allow them the opportunity grow socially, emotionally, and mentally. By utilizing the school setting, people learn inclusion at a younger age and are more likely to be accepting of those with disabilities which as found in Townsend and Hassall’s 2007 study.

Unified Sports® is a well-developed inclusionary program. As the program was built off of Special Olympics®, it has been created on a strong understanding of sport development for individuals with disabilities. While research exists on the program and shows positive outcomes, it is lacking studies from the perspectives of individuals with disabilities as well as their parents.
As a result, this study investigates the feelings of these two key stakeholders to further evaluate the success of the program.

**Summary of Current Literature and Research Question**

The current literature highlights the many benefits of inclusionary practices for children with disabilities. These include improving physical skills, increasing social, opportunities, and building self-esteem. The literature also notes how there are barriers that can prevent individuals with disabilities from feeling included in sports such as a shortage of opportunities, social stigma, political and economic factors, and an overall lack of supports. These studies help provide a better understanding of inclusionary sports programs and what contributes to their level of success. However, the literature fails to explore the perspectives of the children with disabilities and their parents. It also focuses on inclusion in an educational setting rather than in a recreational setting. By looking into these perspectives more deeply, researchers may gain a better understanding of whether a certain program provides positive outcomes from the perspectives of the two most important stakeholders. As discussed, MOHO is an ideal framework to apply to the current study to provide an occupational therapy perspective. An occupational therapy lens may be helpful in understanding the impact of inclusion on the individual and also how the physical, social, and temporal environment influences the person’s occupational performance.

Following review of the literature, the current study aimed to address the gaps found in the literature by conducting a pilot study on the perspectives of children with disabilities and their parents regarding inclusion outcomes of one specific program - a Unified Sports® bocce team program. It is important to research the perspectives of children with disabilities as they are the population that such inclusive programs are primarily designed for. As discussed above,
parents play a crucial role in their child’s life and often have insight to provide about how their child has been impacted by inclusive sports programs. As a result, the study was designed to address the research question, “What are the perspectives of children with disabilities and their parents on inclusion in Unified Sports®?”

**Methods**

**Description of aims**

The aim of this study was to understand the perspectives of adolescent athletes with disabilities and their parents regarding outcomes of inclusion in the Special Olympics® inclusionary sports program called Unified Sports®. These perspectives were sought to give them voice as vital stakeholders in assessing outcomes of inclusionary programs which contribute to overall feelings of inclusion in the individuals with disabilities. The secondary aim was to understand participant responses from an occupational therapy perspective. The Model of Human Occupation (MOHO) was applied to organize the outcomes of the program contributing to feelings of inclusion and understand the impact of inclusion on the occupational performance of the athletes with disabilities.

Overall, the study aimed to gain an understanding of Unified Sports® outcomes from the two key perspectives and how outcomes contribute to overall feelings of inclusion and impact the individuals’ occupational performance. The perspectives of athletes with disabilities and their parents have not received much attention in the current literature. However, they are crucial to making these programs a success. By giving voice to these stakeholders in understanding what factors encourage feelings of inclusion, more programs can be created to benefit athletes with disabilities and their families. Ultimately, positive results of the program would suggest Unified
Applying MOHO to Assess Inclusion Outcomes in Unified Sports® as a potential model for further development of successful inclusive sports programs for children with disabilities.

**Sampling Procedures**

This study used convenience sampling. One of the researchers had experience volunteering with Special Olympics® at a large suburban high school in Pennsylvania. Through this connection, the Unified Sports® Bocce team at this high school was contacted. The researchers visited the high school to inform athletes and their parents about the study. The coach of the Unified Sports® Bocce team recommended athletes with disabilities and their parents who they thought would be good participants to take part in the study. A good participant was any athlete or parent who was able to communicate and understood that it was voluntary to participate.

**Inclusion/Exclusion Criteria.** Athletes eligible to participate in the study were: (1) current members of the Unified Sports® Bocce team, (2) diagnosed with a physical or mental disability, and (3) were between ages fourteen and twenty one. Parents were eligible to participate in the study if they had a child currently participating in the Unified Sports® Bocce team.

**Data Collection**

Semi-structured SurveyMonkey® interviews were sent to participants through email. There was one survey for athletes with disabilities and a separate survey for their parents. Both surveys consisted of seven questions. The first five questions were multiple choice and utilized a likert scale (strongly disagree, disagree, somewhat agree, agree, or strongly agree). These questions can be seen in Table 1 and Table 2. Following the multiple choice questions, there
were two open ended prompts for the parents: (1) How do you feel your child has benefited from joining the Unified Sports team? and (2) Describe the impact of this program on your child and your family. Likewise, the athlete survey had two open ended prompts following the multiple choice questions: (1) What is your favorite part of being on the Unified Sports team? and (2) Why did you want to join the team? All participants were provided a description of the study as well as consent forms prior to taking the survey. Member checking was performed to ensure that results and interpretation of the results were accurate to the participant’s feelings towards the program.

**Data Analysis**

Data was recorded through the SurveyMonkey® website. Respondents were given de-identifying codes (ex. R1, R2, etc.) to maintain confidentiality, and then the data was transcribed onto a secure word document. Charts were created to organize multiple choice responses, and open-ended responses were simply transferred over with the de-identifying codes. Preliminary analysis was performed and themes were coded using the procedures described in *Analyzing Qualitative Data* by Graham Gibbs (Gibbs, 2007). The researchers looked for commonalities among participant responses regarding outcomes of the Unified Sports® program, ensuring that every response was represented after coding. This led to the emergence of three “themes” which thoroughly described participant responses. Framework analysis was used to apply MOHO, developed by Gary Kielhofner, to the themes. MOHO was chosen for this study to help provide an understanding of inclusionary practices from an occupational therapy lens as much of the previous research on inclusion was from the viewpoint of educators. MOHO is a fitting model for this study because it provides an integrative yet broad view of human occupation that includes many concepts potentially related to inclusion.
Statement on informed consent and ethical review

The Elizabethtown College Institutional Review Board approved this research prior to implementation. Informed consent was obtained from the high school asking permission to engage with athletes and parents prior to meeting. Participants were provided with appropriate informed consent agreements. Participation was voluntary and could be withdrawn at any point.

Results

Participants

There were five participants (n=5): two athletes and three parents. The athletes were eighteen and nineteen-year-old males diagnosed with a mental or physical disability. All three parent participants were female.

Data

The following tables represent the participant responses to the multiple choice survey questions. The questions used a Likert Scale, which provided participants with the following options to select from: strongly disagree, disagree, somewhat agree, agree, or strongly agree.
<table>
<thead>
<tr>
<th>Question</th>
<th>R1</th>
<th>R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being on the Unified Sports team makes school more fun.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I have made good friends with other students on the team.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I feel supported by my teammates and coaches.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I feel that I am an important member of my school.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I enjoy being partnered with another student at Unified Sports.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Table 1: Athlete Survey Responses
After performing the preliminary analysis, three major themes emerged. These themes are centered on feelings of inclusion that occurred as a result of being a participant in the Unified Sports® program at their high school. Framework analysis was completed to relate these themes to MOHO concepts and understand how feelings of inclusion impact overall occupational

<table>
<thead>
<tr>
<th>Question</th>
<th>R4</th>
<th>R5</th>
<th>R6</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel my child is gaining confidence due to involvement in the Unified Sports Program.</td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I feel the Unified Sports coaches and staff are supportive.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I feel my child enjoys school more since joining Unified Sports.</td>
<td>Agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I feel the Unified Sports program has an overall positive impact on my child.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I feel my child enjoys their partnership with their teammate at Unified Sports.</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Table 2: Parent Survey Responses
performance. Figure 1 provides a useful visual to reference when understanding MOHO concepts and their integration with the study’s themes.

**Personal Growth.** The first theme that emerged was personal growth. Athletes and parents indicated that the athletes were growing as individuals through participation in the Unified Sports® program. The program helps the athletes build their self-esteem, increase independence, practice leadership skills, form friendships, and become more physically active. Self-esteem was related to increased social support and feeling valued as described by the athletes. They all indicated that they felt supported and more important at their school as a result of their involvement in the Unified Sports® program. These factors that lead to self-esteem simultaneously contribute to their overall personal growth as an adolescent emerging into the next phase of life. Parents all strongly agreed that the program had an overall positive impact on their children, including factors beyond self-esteem. One parent respondent shared “My son has become more independent, acquired leadership skills and developed more genuine friendships due to Unified Sports®.” This demonstrates how she sees her son experiencing personal growth not only in his independence, but also in skills related to leading and making friends. Another parent also commented that the program has allowed her son to be more physically active, which she believes is good for his overall health.

The overarching theme of personal growth fits well with two MOHO concepts: performance skills and volition. Through engagement in the Unified Sports® program, athletes have had the opportunity to build their performance skills. Playing Bocce allows them to be more physically active, promoting the development of physical performance skills. Athletes also build communication and social interaction skills through working with teammates. Problem solving and cognitive abilities are increased through participation in sports because the players need to
think strategically in order to aim to win. Problem solving and cognitive skills are also utilized when interacting with others. By increasing physical abilities, communication skills, and cognitive abilities, athletes are experiencing personal growth. A second concept from MOHO that applies to the theme of personal growth is volition. It became evident that the Unified Sports® program has helped develop athlete’s interests and values, which are included in the concept of volition. They have found a new interest in participating in the sport of bocce and connecting with others. In addition, they have found value in being a part of a team, working hard, and caring about others. For example, they cheer for each other at meets because they value their friendships with teammates. By extending their values and interests, the athletes have grown personally from their participation in the program. In addition, another piece of volition is personal causation, which is an individual’s feelings of competence and effectiveness - essentially their self-esteem. Athletes’ participation allows them an opportunity to practice skills to improve competence, and results indicated that they were growing in overall confidence, as well.

**Building Relationships.** A second theme that arose was building relationships. Responses showed that Unified Sports® participants feel they have gained quality and genuine friendships through the program. They feel supported by their friends, teammates, and coaches. In addition, they experience a sense of comradery as a result of involvement in the program. This seemed to be the most common theme among participant responses. When asked “What is your favorite part of being on the Unified Sports® team?” one athlete responded “cheering on my teammates.” This quote suggests that this athlete finds value in his relationships with his team and has a mutual sense of enthusiastic support with others on the team. Both athlete participants also strongly agreed that they “have made good friends with other students on the team.” They
also responded “strongly agree” to the question “I feel supported by my teammates and coaches.” The responses to both these questions indicate student feel Unified Sports® has helped them build relationships. Both athlete participants said they wanted to join the team to build relationships - specifically because “being on a team is awesome” and they wanted “to be with friends.” Parents also feel their child has built relationships through their experience with Unified Sports®. One parents shared:

“My son is getting together with friends outside of school (going to the movies, out to eat) more than previously. This in turn has helped him become more social and confident. I believe Unified Sports® has been a ‘game changer’ at our high school. So many good thing come from being a part of a team. Athletes learn about teamwork, friendship and selflessness. They work together towards a common goal.”

This mother’s response emphasizes how large of an impact Unified Sports® has had on her son’s social life. Another mother shared this same feeling with her response: “He feels he has friends now. I’m so thankful to those kids who take the time to be with those who need extra help and create friendships.” It was strongly emphasized throughout the study that this program has had a large impact on the athlete’s relationships and seemed to be a valued impact of the program for both the athletes with disabilities and their parents.

It was determined that the MOHO concepts most fitting for the theme of building relationships were social environment and habituation. The social environment at Unified Sports® practices was an inclusive atmosphere that encouraged friendships to form. In turn, these friendships carried over to the school and community social environments. Having the friendships helped athletes have a more positive outlook on attending school and engaging in activities in the community, such as when going out to the movies. Habituation, which includes
habits and roles, is also related to this particular theme. Athletes’ habits changed due to the friendships they built. For example, athletes were attending movies, going bowling, and spending time together outside of school and practice. For the athletes with disabilities, this is something they did not do before they made friends with peers at the Unified Sports® program. They also gained the roles of teammate and friend through this program, which are valued roles that they did not have prior to the program.

**Positive Environments.** The third theme that was evident in the participant’s responses was positive environments. The first environment which was made more positive as a result of the Unified Sports® program was the high school itself. Athletes felt more valued as individuals as a result of their participation in the program. Both athletes chose “strongly agree” when asked if they feel that they are an important member of their school. In addition, they report finding school more fun and enjoyable. Again, both athletes strongly agreed with the idea that being on the Unified Sports® team makes school more fun. All parent participants also agreed that their child enjoys school more since joining the program. Athletes feeling more valued and enjoying school more demonstrate how participation in the program carries positive feelings of inclusion from the practice environment to the school environment overall. In addition to transforming the school into a more positive environment for athletes, the Unified Sports® program’s positive outcomes have transferred into other environments in the community. When parents were asked to describe the impact the program has had on their child and the family, outside inclusion was emphasized in their responses. One parent shared that “more peers interact even outside the games.” Another parent shared a similar response stating that her son gets invited to go to the movies and out to eat with peers. Athletes with disabilities are being included not just at practice and school, but in these natural community contexts, as well. Overall, the
program is encouraging the development of positive environments for the athletes with disabilities beyond the program’s events - both during the school day and the evenings/weekends.

Two MOHO concepts are especially relevant to this theme: social environment and volition. As mentioned above, the inclusive atmosphere of Unified Sports® is facilitative of multiple positive environments for individuals with disabilities - particularly social environments. Athletes feel more positively about school and other social environments outside the program as their friendships with their teammates and resulting self-esteem have carried over into these atmospheres. Self-esteem in itself is a relevant concept for this theme, which relates specifically to the MOHO concept of volition. Personal causation one aspect of volition, which as mentioned earlier refers to feelings of competency and self-esteem is also relevant to this theme. The ability to integrate into multiple environments that are now seen as “positive” help to increase personal causation for the athletes. They feel more valued and comfortable performing within their everyday environments. In addition, athletes are building interests and learning more about their values through these positive environments created by the program outcomes. They are afforded the opportunity to engage in new activities, which helps them to further explore their interests and values.

The three main themes as related to concepts from MOHO then contribute to overall feelings of inclusion. In addition, three important concepts from MOHO feed into feelings of inclusion, including occupational competence, occupational identity, and occupational adaptation. These three MOHO concepts may influence feelings of inclusion, but the opposite may be true as well. This means that feelings of inclusion can also contribute to changes in occupational competence, identity, and adaptation. When these three forces are maximized by
increasing positive feelings of inclusion, the ultimate result is improved occupational
performance. The connection between the three main themes and the corresponding concepts
from MOHO, as well as MOHO outcomes are demonstrated in Figure 2.

**Framework Analysis: Outcomes from a MOHO Lens**

Framework analysis was utilized to apply MOHO in order to put an occupational therapy
lens on the research results regarding inclusion. MOHO revealed a reciprocal relationship
between feelings of inclusion and occupational outcomes (occupational adaptation, occupational
competence, and occupational identity). In other words, while these three concepts may
contribute to feelings of inclusion, the feelings of inclusion can also have an impact on the
occupational outcomes. Ultimately, improvements in these three areas leads to a greater sense of
occupational performance for participants. Hence, feelings of inclusion from the Unified Sports®
program, which impact occupational adaptation, competence, and identity, may indirectly
improve individuals’ occupational performance overall.

Through engagement in the Unified Sports® program, athletes have had the opportunity
to develop their occupational identity and occupational competence as well as occupational
adaptation. The program has helped the athletes establish and expand their occupational identity
through exploring their interests and values as well as experiencing personal growth. By feeling
included on their team, at school, and in community environments, they gain a better sense of
their identity in multiple contexts. This contributes to a better sense of who one is and who they
want to become. The athletes have also grown a greater sense of occupational competence
through their participation on the team. They have a better sense of self which makes them more
aware of their abilities. The athletes now know they are capable of being a bocce ball player, a
teammate, a friend, and much more. They have had the opportunity to increase their physical,
Applying MOHO to Assess Inclusion Outcomes in Unified Sports®

social, and communication skills. This has increased their competence and allows them to fulfill the roles and expectations in their lives. The athletes have the opportunity to display their established occupational identity through the Unified Sports® program and demonstrate their occupational competence. Participation in an inclusionary sport has also allowed the athletes to achieve occupational adaptation. Since they have a better concept of their own occupational identity and have increased their sense of occupational competence, the athletes have a stronger mastery over their environments and situations. Through developing occupational identity, competence, and adaptation, the athletes increased their occupational performance. The program has given them the opportunity to better their sense of self, increase skills, build relationships, and gain mastery in their context and situations. With this growth, the athletes are able to perform at a higher level than before participation in the inclusionary program.

Figure 2: Factors that Lead to Feelings of Inclusion
Discussion

The crucial perspectives of athletes with disabilities and their parents on outcomes of inclusion in recreation were sought out within the current study. Responses from these key stakeholders were coded to yield three major themes: personal growth, building relationships, and positive environments. Each theme contributed to feelings of inclusion - not only during Unified Sports® events, but also at school and in the community. The overall feelings of inclusion ultimately led to improved occupational performance.

Through this study, children with disabilities and their parents were given a voice. Prior research had neglected to express the feelings of these two key stakeholders regarding inclusionary practices. In previous studies, the perspectives of the children without disabilities was often noted rather than that of the children with disabilities because it is easier to communicate with those who do not have a disability. However, considering that inclusionary programs are designed for children with disabilities, their perspective is highly valuable. As far as perspectives beyond the children participating in the program, coaches and educators were commonly quoted in prior studies, as well. However, there was a lack of information from the perspective of parents of children with disabilities. The parents’ perspective is valuable in that many parents have valuable insight into the feelings and experiences of their children. Parents often talk with their children about their days and have a general sense of their children’s emotions from day to day. The surveys used in this study allowed for the athletes with disabilities to share their experiences in the Unified Sports® program, as well as for their parents to share their point of view on influences the program had on their children. Through these surveys, researchers were able to gain a broader understanding of outcomes of the program which contribute to further feelings of inclusion from these two perspectives.
Previous literature also tended to emphasize inclusion in an educational setting, such as in the typical classroom or gym classes. Through this study, inclusion was explored in a recreational setting. While the Unified Sports® team did take place at the high school, it was a voluntary after school team program. By encouraging inclusion in the recreational setting, individuals with disabilities have more opportunities to engage in meaningful activities with peers. This also allows peers to see that individuals with disabilities have the same interests and desires and leads to greater acceptance. The current study even demonstrated the extension of feelings of inclusion from the program into community environments. Not only were participants experiencing positive feelings of inclusion at school and during the program, but they were also attending movies and going out to dinner. These are vital examples of how the current study demonstrates a program which encourages inclusion beyond the school setting.

The results of this study back current literature stating that inclusionary programs have an overall positive impact on the well-being of individuals with disabilities. Though there is minimal research exploring outcomes, the current study does agree with the minimal findings from the previous studies on outcomes in recreation. In 2015, Unified Sports® Bocce was a part of the Special Olympics World Games®. A study by Texas Women’s University noted that athletes with disabilities were accepted through their participation in the event. A father of an athlete participating in the program shared that he saw his son gain confidence through the program (Cheng-Chen, & Davis, 2015, p.16). The program had given his son the opportunity to “be a part of the competition in a role which was new to him, while creating a sense of inclusion for others” (Cheng-Chen, & Davis, 2015, P.16). The current study demonstrated many similar outcomes regarding acceptance, confidence, and new roles. The athletes in the current study felt they were accepted and gaining friendships, as building relationship was identified as a main
theme. Within this theme, habituation was identified as an applicable concept from MOHO, as athletes were playing new roles as friends and teammates. In addition, another main theme was personal growth which consisted of improved self-confidence in the current study’s athlete participants. In the study by Cheng-Chen and Davis, the school and community saw what the athletes with disabilities are capable of due to the program. Their peers recognized the athletes with disabilities as their friends since they became teammates. Hence, the athletes, like the participants in our current study, may have felt a sense of belonging and experienced personal growth through the Unified Sports® program at their high school. Overall, both the study by Cheng-Chen and Davis as well as the current study demonstrate the positive outcomes of the Unified Sports® program.

The current study also supports previous findings from a study by Fennick and Royle, which explored community inclusion for children and youth with developmental disabilities. This study found multiple positive outcomes of community inclusion. The participating children with disabilities enjoyed the classes they attended, whether or not they were truly included. They interacted with their nondisabled peers and participated at individually appropriate levels. Fennick and Royle concluded that establishing options for children and youth with developmental disabilities to participate in community recreation is worthwhile (Fennick and Royle, 2003).

Implications

This study demonstrates the positive impact inclusionary sports can have on individuals with disabilities and their families. They experience personal growth, building relationships, and integrating into more positive environments through participation in the Unified Sports® bocce program. Study results can be used to help encourage the implementation of future inclusionary
programs for individuals with disabilities as it demonstrates the positive impact of inclusion. Few programs exist for this population, and this study serves as evidence that inclusionary programs have strong, positive outcomes for individuals with disabilities. Hence, this study can serve as a foundational evidence-base for organizations considering program development. It proves that programs are worthwhile and necessary to improve overall well-being of children with disabilities. In fact, it suggests that the Unified Sports® bocce program may be a useful model for basing the development of future programs on. Further research would be needed to explore the factors of that specific program which contribute to the positive outcomes.

In addition, the current study demonstrates that occupational performance is increased through inclusionary recreational sports programs. It gives occupational therapist practitioners an evidence-base for encouraging clients to seek out inclusionary, recreational programs. Practitioners can share that evidence shows that recreational programs may be an important way to increase physical, social, and communication skills. The skills individuals learn in inclusionary sports can carry over into other aspects of life. For example, increased social and communication skills as well as self-confidence can prove helpful in a job interview. Hence, practitioners can confidently conclude that not only does Unified Sports® provide a fun recreational outlet for their clients, but it can aid in teaching life skills, as well. Similarly, when parents of clients receiving occupational therapy express concern about their child integrating into social environments and making friends, occupational therapists can share knowledge that recreational programs may work to help their child increase confidence, build relationships, and integrate into positive social environments even outside of school.
Limitations

There are a few biases and limitations to the current study. First of all, although still providing valuable insight into vital perspectives on inclusion, the sample size was small (n=5). Secondly, sampling bias was present as both athlete participants were male. They were close in age at eighteen and nineteen years old. Additionally, all parent participants were females. It would be beneficial in future research to explore the perspective of female athletes with disabilities as well as the perspective of fathers of athletes with disabilities. Thirdly, there may have been reporting bias as parents could have influenced athlete answers if they provided assistance to their child when completing the survey. Finally, there may have been response bias if participants selected answers based on an understanding of “right” response. Further research is encouraged to include missed perspectives and reduce other biases.

Conclusion

Study results demonstrated that Unified Sports®, may help athletes with disabilities build relationships, grow personally, and integrate into positive environments. Growth in these three areas may improve the athletes’ sense of occupational identity, competence, and adaptation, which leads to increased occupational performance. Creating more recreation-based inclusion sports opportunities for children with disabilities is encouraged. Occupational therapists are encouraged to utilize these programs as a recommendation for clients seeking friendships, the ability to integrate into social environments, and growth in overall performance skills. Beyond referring clients to inclusion programs, occupational therapists may also play a role in the creation, implementation, and evaluation of the programs due to their knowledge in occupation based, client-centered models such as MOHO. As demonstrated through this study, MOHO provides a useful framework for understanding how personal and environmental factors lead to
positive occupational performance outcomes. Additional research is needed to confirm study findings, identify the factors contributing to positive outcomes in the program, and explore the applicability for occupational therapy practitioners.
References


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