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Physical Activities in the NYS/BYA Program on the Turtle Mountain Chippewa Reservation: A Resource Guide for Adaptation

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PHYSICAL ACTIVITIES IN THE NYS/BYA PROGRAM ON THE TURTLE MOUNTAIN
CHIPPEWA RESERVATION: A RESOURCE GUIDE FOR ADAPTATION

by

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Master of Occupational Therapy, University of North Dakota, 2016

Advisor: Breann Lamborn, MPA

A Scholarly Project

Submitted to the Occupational Therapy Department

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for the degree of

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Approval

This Scholarly Project Paper (or Independent Study), submitted by (your names) in partial fulfillment of the requirement for the Degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

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Signature of Faculty Advisor

December 17, 2016

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December 16, 2015

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ABSTRACT

The percentage of children with disabilities in the United States (U.S.) is increasing at an alarming rate. According to the 2000 census, 3.9% of all families reported having a child with disabilities. As of the 2010 census, there were 53.9 million school-aged children (aged 5 to 17) in the U.S with about 2.8 million (5.2%) reporting a disability. Among the American Indian population, these rates are increasing at an even higher rate. American Indians have the highest rates of disability of any group in the United States (Nichols & Keltner, 2005). According to Waldman, Perlman, and Swerdloff (2008), more than 23% of the American Indian population has one or more disabilities. Of those who have disabilities, more than 50,000 are children and 39,000 have multiple disabilities (Waldman et al., 2008).

The National Youth Sports Program/Belcourt Youth Activities Program (NYSP/BYAP) is offered to children ages 7-17 at the Turtle Mountain Band of Chippewa Indians Reservation for 4 weeks in the summer to educate children on health and wellness topics, as well as career opportunities (Martin, 2015). The physical activities that the children participate in are volleyball, basketball, floor hockey, track and field, strength and conditioning, yoga, weightlifting, kickball, softball/moshball, flag football, and swimming (Martin, 2015). Currently, the physical activities are not adapted for children with physical disabilities to be able to fully participate in them. Therefore the purpose of this scholarly project is to adapt several of the physical activities currently offered by the NYSP/BYAP in order for children with disabilities on

the Turtle Mountain Band of Chippewa Indians Reservation be able to participate in these tasks with other children of their age. This will be achieved by adapting several of the physical activities currently offered by the NYSP/BYAP.

An extensive literature review and communication with the program director of the NYSP/BYAP led to the creation of a manual for the program direction and staff to utilize. The manual begins with a description of the need to make these adaptations, the importance of inclusion for children with disabilities, and specific considerations for disabilities and adaptation. Next, a list of the adapted tasks include, step-by step directions/suggestions on how to modify yoga, strength and conditioning, weightlifting, volleyball, and swimming. Pictures are also provided with each of the tasks. Lastly, resources are included at the end of the product to educate staff about what assistance is available for children with disabilities, helpful organizations and websites on education about adapted sports, where to find adaptive equipment, and where to seek out financial assistance for purchasing adaptive equipment.

The primary goal of this product is to ensure that all children will participate in the adapted tasks in the NYSP/BYAP to improve health and wellness among this population. The manual will be given to Dr. Shane Martin, CSCS, to be distributed to the staff. Dr. Martin would then decide whether or not to implement the adaptations. Occupational therapy students will be able to provide assistance in carrying out these tasks for this program and make additional suggestions for adaptations to the tasks. This scholarly project may also lead to the development of an emerging fieldwork site with the NYSP/BYAP.

CHAPTER I

INTRODUCTION

American Indians have the highest rates of disability of any group in the United States (Nichols & Keltner, 2005). More than 23% of the American Indian population has one or more disabilities. Of those who have disabilities, more than 50,000 are children and 39,000 have multiple disabilities (Waldman et al., 2008). In the American Indian culture, limitations in cognitive functioning are often disregarded due to not being able to physically see these deficits (Personal Communication, Dr. Lavonne Fox, 9/29/2015). Currently, children with disabilities on the Turtle Mountain Band of Chippewa Indians Reservation cannot fully participate in the tasks of the National Youth Sports Program/Belcourt Youth Activities Program. Therefore, this scholarly project will focus on meeting the needs of children with physical disabilities. The staff/volunteers of the NYSP/BYAP will need to be able to see the need for adaptation and then follow through with the recommendations proposed by this product for inclusion of all children in this setting to occur. In the future, it is hoped for level one fieldwork students to be able to provide assistance in carrying out these tasks for this program and make additional suggestions for adaptations to the tasks. This scholarly project may also lead to the development of an emerging fieldwork site with the NYSP/BYAP.

Product

A manual has been created to be given to the program director and staff of the NYAP/BYSP. It begins with a description of the need to make these adaptations, the importance

of inclusion for children with disabilities, and specific considerations about easy environmental changes to facilitate participation. Next, a list of the adapted tasks is included with step-by step directions/suggestions on how to modify yoga, strength and conditioning, weightlifting, volleyball, and swimming. Pictures demonstrating the modified techniques are also provided with each of the tasks. Lastly, resources are included at the end of the product to educate staff about what assistance is available for children with disabilities, helpful organizations and websites on education about adapted sports, where to find adaptive equipment, and where to seek out financial assistance for purchasing adaptive equipment.

Factors Influencing Application

There are several factors that will influence the application of this manual. One of these factors is the openness of the staff to make the proposed adaptations, and their limited knowledge and experience with working with children with disabilities. Also, the number of children with disabilities who choose to participate in the program will influence the willingness of staff to make the changes because if there are only a few children then they would be less likely to consistently make the adaptations. Lastly, the budget will impact application because if there is not enough money to purchase the equipment and supplies being recommended then the adaptations will not be able to be implemented.

Occupation Based Model

The Ecology of Human Performance (EHP) was utilized as the basis of this scholarly project. EHP emphasizes the environment, which shapes both the person and tasks that the person engages in (Turpin & Iwana, 2011). Turpin and Iwana (2011) also stated the environment impacts task selection and performance. In this scholarly project, the cultural environment impacts the tasks because the children are participating in these tasks on the reservation and

through their cultural lens. Interventions included in this model are establish/restore, alter, adapt, prevent, and create (Turpin & Iwana, 2011). In this scholarly project, the tasks will be adapted and created to make them accessible to all children, help the children establish skills, and prevent health conditions.

Key Terms

American Indian: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment. This term was chosen for this scholarly project because it is what the Federal government uses in the 2010 census. The researchers acknowledge that not all tribe members identify themselves as Native American, however, the majority of members do.

Tasks: a a person engages in; used interchangeably with “activity”

Disability: Defined by the Americans with Disabilities Act (ADA) as, "a physical or mental impairment that substantially limits one or more of the major life activities of such individuals, a record of such an impairment, or being regarded as having such an impairment" (United States Department of Justice, 2009, para. 2).

Review of Chapters

The following chapters included within this scholarly project will address these terms and concepts in more detail. Chapter II will present the findings of an extensive review of literature. These finding support the need for adapted activities for the National Youth Sports Program/Belcourt Youth Activities Program (NYSP/BYAP). It also provides substantial research addressing the benefits and barriers to participation in physical activities as well as the cultural

perceptions of disability in the American Indian population. Chapter III provides a description of the process that lead to the development of the scholarly product and the methodology implemented when creating the manual. Chapter IV presents the description and overview of the final product, which consists of a description of the need to make adaptations in this context, the importance of inclusion for children with disabilities, and specific considerations for adaptation for this population. Next, a list of the adapted tasks will be included with step-by step directions/suggestions and visual examples of how to modify yoga, strength and conditioning, weightlifting, volleyball, and swimming. Lastly, resources will be included at the end of the product to educate staff about what assistance is available for children with disabilities and their families, helpful organizations and websites for athletic activities for those with disabilities, and where to find adaptive equipment. Chapter V will provide will provide an overall summary and purpose of the project, limitations that will influence the application of the product, and lastly recommendations for the future of the NYSP/BYAP. The appendix includes the emails granting permission to use images from various websites. Finally, a reference page will provide a list of all the references utilized throughout this entire project.

CHAPTER II

LITERATURE REVIEW

The National Youth Sports Program/Belcourt Youth Activities Program

The Belcourt - Turtle Mountain Community College is one of many colleges and universities nationwide that implemented the National Youth Sports Program; this specific program is called the Belcourt Youth Activities Program. The National Youth Sports Program/Belcourt Youth Activities Program (NYSP/BYAP) is a four-week summer education prevention program offered to youth ages 7-17 for the past 10 years at the Turtle Mountain Chippewa Reservation (Martin, 2015). The program focuses on nutrition education, physical fitness, suicide prevention, tobacco prevention, drug and alcohol prevention, and career outlook and opportunity (Martin, 2015). The program runs Monday through Friday, 9 a.m. to 2 p.m. throughout the month of June (Martin, 2015). According to Martin (2015), roughly 200 children from around the Turtle Mountain community participate in the program every summer. Each day youth participate in two hours of physical activity, one hour of culture and one hour of either career outlook and opportunity or health education classes (Martin, 2015). One hour is reserved for lunch while the other four hours are segmented into two hours of physical activity and two hours of classroom type instruction with a focus on health and preventative education (Martin, 2015). The NYSP/BYAP also contains a day called "Mother Earth" day to work with the United States Department of Agriculture and National Resources Conservation Service (USDA/NRCS) program, and "Track and Field" day where they spend the entire day having a track meet with lots of fun games that promote activity (Martin, 2015). Martin (2015) states the objectives of the

NYSP/BYAP program are to provide a systematic process that provides quality health education to the youth during a four-week period and address the youth's health and well being through physical activities, which increase stamina to sustain interactions with people and objects, in the environment.

History of the National Youth Sports Program (NYSP)

In 1969, an idea to create a program for children from low-income households was set in motion by the Federal Government and the United States Office of Economic Opportunity (OEO) (Brown-Bray & Thiebe, 2006). The Federal Government and United States OEO wanted there to be an educational opportunity on college and university campuses through programs in nutrition, sports, drug education, and academia (Brown-Bray & Thiebe, 2006). According to Brown-Bray and Thiebe (2006), the Government would provide the funding necessary for the program, while the National Collegiate Athletic Association (NCAA) would provide the facilities, training, and personnel. Brown-Bray and Thiebe (2006) stated the objectives of this program are the following:

- To provide expanded opportunity during the summer for the youth of the community to participate in competitive sports and benefit from sports skills instruction.
- To help young people learn good health habits and become better citizens through utilization of the personnel and facilities of higher education.
- To enable the institutions and their personnel to participate more fully in community life and the solution of community problems.
- To provide a combination of employment and on-the-job training in sports administration and instruction.

- To serve the most needful metropolitan centers of the United States and extend such service to any other community in which the need exists. (para. 4)

Sports training and competition, one meal a day, and educational components are provided through the NYSP (Brown-Bray & Thiebe, 2006). Originally the program wanted to involve 50-100 colleges and universities in 30 different metropolitan areas of the country during the summer, hosting at least 200 youth with 80% of the youth from poverty areas (Brown-Bray & Thiebe, 2006). Brown-Bray and Thiebe (2006) stated that the OEO assumed responsibility of the program in 1975 and knew that the NCAA was the only organization able to implement the program on a national scale. The NCAA then became the main sponsor of the program and distributed the grant to the schools that chose to run the programs at their facilities (Brown-Bray & Thiebe, 2006). “Family Day” was put into effect to improve community promotion, educate the families, and promote effective communication between the participants and their families (Brown-Bray & Thiebe, 2006). According to Brown-Bray and Thiebe (2006), congress stopped providing federal funding after the summer of 2005, and at the time 202 colleges and universities were providing about 73,000 children services nationwide. Local funding has become a necessity especially since the NYSP Revitalization Act of 2010 (H.R. 4480), which was supposed to restore the federal funding, was not passed (Library of Congress, 2010). Several colleges and universities have stopped offering the program due to costs and the decreasing amount of participants (Brown-Bray & Thiebe, 2006).

Problem Statement

The NYSP/BYAP activities (tasks) that the children participate in are volleyball, basketball, floor hockey, track and field, strength and conditioning, yoga, weightlifting, kickball, softball/moshball, flag football, and swimming (Martin, 2015). Children with disabilities are not

able to fully participate in these tasks currently, due to the tasks not being adapted to meet the needs of all children. In the American Indian culture, limitations in cognitive functioning are often disregarded due to not being able to physically see these deficits; which is why this scholarly project will focus on meeting the needs of children with physical disabilities (Personal Communication, Dr. Lavonne Fox, 9/29/2015). The staff/volunteers will be able to see the need for adaptation and then follow through with recommendations.

Youth and Disabilities

The percentage of children with disabilities in the United States (U.S.) is increasing at an alarming rate. According to the 2000 census, 3.9% of all families reported having a child with disabilities. As of the 2010 census, there were 53.9 million school-aged children (aged 5 to 17) in the U.S with about 2.8 million (5.2%) reporting to have a disability. It is unclear why this number is increasing at such a substantial rate; however, it is clear that these children do not have sufficient access to the programs they need to promote health and wellness into adulthood. Lastly, there is a lack of research on interventions aimed at improving health and fitness among youth with disabilities (Rimmer & Rowland, 2008).

Definition

Disability, defined by the Americans with Disabilities Act (ADA), "is a physical or mental impairment that substantially limits one or more of the major life activities of such individuals, a record of such an impairment, or being regarded as having such an impairment" (United States Department of Justice, 2009, para. 2).

Inactivity

Youth with disabilities had a 4.5-times higher rate of physical inactivity compared to nondisabled youth (Rimmer and Rowland, 2008). This high rate of inactivity is concerning

because negative health behaviors at a young age often carries on into adulthood (Rimmer & Rowland, 2008). Higher levels of inactivity during childhood result in increased chances of developing secondary health conditions such as reduced cardiovascular fitness, obesity, diabetes, osteoporosis, impaired circulation, and other adverse health conditions (Murphy, Carbone, & Council on Children with Disabilities, 2008; Rimmer & Rowland, 2008). In addition, the psychosocial implications of inactivity include decreased self-esteem, decreased social acceptance, and ultimately, greater dependence on others for daily living (Murphy et al., 2008).

Benefits

Participation in sports and physical activity promotes physical health as well as emotional, and social well being for both children with and without disabilities (Murphy et al., 2008). Increased engagement in physical activity and improved fitness levels has the potential to reduce the incidence of chronic diseases in adulthood such as type 2 diabetes and heart disease, as well as secondary conditions such as obesity, weakness, fatigue, mobility, and social isolation (Rimmer & Rowland, 2008). Also, a child's strength has been shown to increase after participating in physical activity (Jaarsma, Dijkstra, Blecourt, Geertzen, & Dekker, 2014). These benefits decrease the need for personal assistance in performing activities of daily living (ADL) and instrumental activities of daily living (IADL) (Rimmer & Rowland, 2008). Psychological and social benefits can also be achieved through participation in physical activity (Crawford et al., 2015). These benefits may include the formation of friendships, expressing creativity, developing a self-identity, fostering meaning and purpose in life, peer acceptance, and increased self-esteem, perceived physical competence, life satisfaction, family support, social adjustment, and community involvement (Murphy et al., 2008). Children and adolescents with cerebral palsy and myelomeningocele reported an increased competence, self-concept, self-perceived physical

appearance, and global self-worth when participating in organized sports (Sahlin & Lexell, 2015). Also, those who have a spinal cord injury displayed increased life satisfaction, extraversion, community integration, and employment, as well as decreased levels of depression and anxiety when participating in organized sports (Sahlin & Lexell, 2015).

Social participation. One of the benefits a person gains through participating in physical activity is social participation. Community-based activity programs foster opportunities for socialization with peers leading to the development of friendships. (Wiat, Darrah, Kelly & Legg, 2015). Due to limited opportunities to develop friendships in other settings, socialization in these programs is a priority for children with intellectual disabilities (Wiat et al., 2015). Parents of children with more severe disabilities stated that inclusion was important especially since as their children got older, segregation from children without disabilities increased (Wiat et al., 2015). Being accepted by their peers is important to children with disabilities; they achieve this through feeling like they belong when invited to play, feeling like a legitimate participant by having an important role, and making friends by participating and being included (Spencer-Cavaliere & Watkinson, 2010).

Barriers

Although children with disabilities benefit from physical activity in a variety of ways, many barriers exist limiting their ability to participate in these tasks. These barriers include the environment, professionals, personal factors, and parents.

Environment. Youth with disabilities have substantially less access to sports and recreational activities and are not offered the same opportunities compared to youth without disabilities (Rimmer & Rowland, 2008). Environmental barriers are the main cause of this

discrepancy among this group of people due to the substantial impact they have on a child's ability to participate in physical activity. Environment barriers exist causing access to programs to be challenging, such as transportation, expense, equipment, and the social environment. Finding transportation can be difficult for some who live in rural areas due to the lack of available services (Bloemen et al., 2014; Rimmer & Rowland, 2008; Jaarsma et al., 2014). Also these services may be expensive limiting a family's ability to send the child to these beneficial programs (Bloemen et al., 2014). The programs themselves may be costly and require a monetary commitment, which many families may not be able to afford (Bloemen et al., 2014). Other barriers exist if the tasks are not adapted and are lacking adaptive equipment to make the activity accessible to a child with disabilities (Bloemen et al., 2014; Rimmer & Rowland, 2008). For those with more severe physical disabilities, a lack of assistive devices, such as pool lifts, impedes ones ability to perform lifts, transfers, and personal cares (Wuart et al., 2015). The social environment is one last barrier that impacts participation in physical activities. Other children may not accept a child with disabilities and bully them by excluding them from activities (Bloemen et al., 2014; Jaarsma et al., 2014). Also, children may not be accepted by other parents and their teachers due to their misconceptions, unfriendly attitudes, and stigma related to disability (Bloemen et al., 2014). It is unclear to many about the opportunities available for children with disabilities (Jaarsma et al., 2014).

Professionals. Another common barrier includes the lack of trained staff and or knowledgeable volunteers to facilitate the participation of a child with disabilities during the activity (Bloeman et al., 2014). Often times, staff does not have adequate knowledge on how to adapt tasks to meet the needs of all children, with or without disability (Rimmer & Rowland, 2008). The American Indian culture does not focus on disability, which makes them less likely to

seek out information or make accommodations for children with disabilities (Nichols & Kelter, 2005). Therefore, the staff is not educated on the needs of the children. A lack of interest of the administration to make the necessary changes to address the needs also limits the availability of accessible and beneficial programs for children with disabilities (Rimmer & Rowland, 2008). Knowledge of disability and diversity is also evidenced to be lacking among physical activity program staff (Wiart et al., 2015).

Personal factors. Children, regardless of their culture, have internal factors that are barriers to participating in physical activity. The level of fitness impacts their ability to fully participate due to fatigue, lack of energy and endurance, limited motor skills, and high oxygen cost for physical activity (Bloemen et al., 2014; Jaarsma et al., 2014). Motivation plays a key role, as well, because a child will not attempt to participate if he/she has poor motivation due to preferring sedentary behavior or not having an interest in the activity (Bloemen et al., 2014). Another barrier stated by Bloemen et al. (2014) is when the child does not accept their disability because they do not want to be different from their peers; this impacts the child's willingness to receive help. They may resist asking for the necessary help due to these and may feel like an outsider or ashamed (Bloemen et al., 2014). After a long school day, children may be too fatigued to participate in sports (Jaarsma et al., 2014). Youth with disabilities may also avoid more physically demanding tasks that require higher energy expenditure (i.e. soccer, basketball) due to a lack of confidence in their abilities (Rimmer & Rowland, 2008). A child may be self-conscious or embarrassed because they may not know how to use the equipment or even know how to do the activity (Bloemen et al., 2014).

Parents. Parents with disabilities often want to protect their child from failure or rejection. They want to protect their child from participating in competitive activities because it

may result in failure, injury, or verbal abuse by other children (Rimmer & Rowland, 2008). This mindset can be a barrier for children with disabilities because it limits a child's engagement in activities with other children. Other children's parents also impact parents' perception due to their stigma and awareness of disabilities. These parents want their child to exceed in sports and see children with disabilities as getting the way of this, therefore discouraging parents of children with disabilities to enroll their children in the same programs. This high level of competition and emphasis on winning are substantial attitudinal barriers that make it less desirable for coaches, parents, and youth to involve children with disabilities into community and recreation programs (Rimmer & Rowland, 2008). Parents retain many responsibilities when their child participates in physical activities. They are relied on for transportation, which takes added time out of their day (Bloeman et al., 2014). Parents may not accept their child's disability and therefore are not supportive; on the other side, parents fear their child not being accepted (Bloemen et al., 2014).

Reservation Context Barriers

The American Indian (AI) culture context contains several barriers to physical activity programs. First, it is difficult to find information on available programs and services for children with disabilities (Wiart et al., 2015). Safety is a concern for many of the American Indian families. Parents believe that staying inside is safest therefore children are not encouraged to get the necessary amount of physical activity (Waldman et al., 2008). Another safety concern is the inadequate infrastructure on most reservations (Waldman et al., 2008). Aging and outdated facilities are a safety concern because the facilities are lacking the resources to make the necessary adaptations to ensure safety and accessibility for children with disabilities (Waldman et al., 2008). As well as having safe facilities, reservations have a hard time recruiting and retaining culturally competent staff due to the location and funding available (Waldman, et al.,

2008). Staff needs to be educated and aware of the perception that this culture has towards disability. Understanding this perception is important in order to respect the American Indian culture. The staff will then be able to provide services that are in line with their cultural norms.

American Indian Population with Disabilities

After an extensive review of literature, it was concluded that a lack of research exists related to American Indians with disabilities. American Indians have the highest rates of disability of any group in the US (Nichols & Keltner, 2005). According to Waldman, Perlman, and Swerdloff (2008), more than 23% of the American Indian population has one or more disabilities. Of those who have disabilities, more than 50,000 are children and 39,000 have multiple disabilities (Waldman et al., 2008). The most frequently occurring health care needs of the American Indian population includes spinal cord injuries, diabetes complications, blindness, mobility impairments, traumatic brain injury, fetal alcohol syndrome, intellectual disabilities, speech impairments, learning disorders, and serious emotional disturbance (Joe, 1997; Walden, Perlman & Kucine, 2006; Weaver, 2015). American Indians are reported to experience the onset of these health disparities earlier in life than other populations (Faircloth, 2006).

Perception of Disabilities

The American Indians culture views disability much differently than the western culture and even among the American Indian populations the view of disability differs. The mainstream culture in the United States values independence, which influences perspectives of disability in this population (Weaver, 2015). The western society also views disability as something to overcome (Weaver, 2015). There is significant diversity among the more than five hundred American Indian tribes/nations within the United States in regards to language, culture, and social structures (Weaver, 2015). Although there are differences among tribes, common beliefs,

values, and experiences shape perceptions of disabilities and individuals with disabilities (Weaver, 2015). Most American Indian languages do not have a specific term for "disability" nor do they have derogatory slang words referring to people with disabilities (Nichols & Keltner, 2005). Due to a lack of terminology, families may be reluctant to label their child as having disabilities, hindering the family from seeking out services in a timely manner (Nichols & Keltner, 2005). This perception influences how the person with disabilities is treated. Persons with a disability are cared for like others in the community that may be considered to be in a vulnerable population (Kelsey, 2013). Little attention is placed on an individual's disability, therefore they are viewed from a neutral perception and the disability does not define who they are (Weaver, 2015). These individuals are seen as being accepted into the society rather than being excluded or sent away from society (Kelsey, 2013).

Connection to others and interdependence are important values of the American Indian culture; these values influence the views of those in the community that are ill, approaching death, or have a disability (Kelsey, 2013). The American Indian perception of being healthy includes being committed to a path of beauty, harmony, balance, gratitude, respect, and generosity (Waldman et al., 2009). A healthy person is also someone who has a sense of purpose and follows the guidance of the Great Spirit (Waldman et al., 2009). American Indian communities place much emphasis on the concepts of harmony and balance as vital components of wellness (Weaver, 2015). Due to this belief, the American Indian culture views disability to be a disharmony of spirit, and that mental retardation may be from a taboo violated by a key family member prior to the child's birth (Joe, 1997). This means that the disability is outside of the individual's control (Joe, 1997). Many use tribal heal ceremonies to understand why the disability occurred and whether it has natural or supernatural causes (Joe, 1997).

In order to best help American Indian children, one must understand the extent of acculturation. Many American Indians live in a bicultural world (traditional and modern world), which means their values, beliefs, and ideas are being constantly shaped by these two worlds (Joe, 1997). In past history, it was rare to see a child with due to the high infant mortality rate (Joe, 1997). Advances in modern technology have decreased this, meaning children with disabilities are living longer therefore an increased amount of children with disabilities are in need of services (Joe, 1997). The American Indian culture influences the decisions made by each family with a child who has disabilities (Nichols & Kelter, 2005).

Turtle Mountain Reservation Services

In the Turtle Mountain Reservation, there is a lack of services available for children with disabilities. The services that are available include the Turtle Mountain Tribal Health Education, Indian Health Services (IHS), Bureau of Indian Affairs (BIA), and special education. The Turtle Mountain Tribal Health Education's mission is the following (Turtle Mountain Band of Chippewa Indians, 2012):

Provide assistance to American Indian/Alaska Natives in the Determination and improvement of their health status incorporation cultural beliefs, practices and traditions. The program is committed to working in partnership with individuals, groups and communities in the provision of Health Services. Health Education is the prevention arm of the Indian Health Service. The program emphasizes education, wellness, and prevention to obtain optimal health for American Indians/Alaska Natives. (para. 1)

The BIA and IHS have to convince Congress of the need for funding for children with disabilities, but the money received ends up going to personal salary for schools, hospitals, and other support services (Joe, 1997). Programs have come and gone over the years, and the few resources and programs that are available depend on individuals who submit grant proposals (Joe, 1997). Rural American Indian healthcare is focused on acute care with a few programs for mental health and diabetes (Joe, 1997). Also, in most instances, disabilities are not being recognized; due to this lack of documentation on the prevalence of disabilities, funding for programs and services becomes difficult to receive (Joe, 1997). Many children are in special education, but there is not enough space for all of the children that are in need of it (Joe, 1997).

Previously Adapted Tasks

The Special Olympics and Paralympic organizations are well-researched, effective, and successful programs. The adapted tasks used in these programs will give useful information to assist in adapting the tasks of the NYSP/BYAP.

Special Olympics

Special Olympics is a well-researched and supported sports program for youth and adults with disabilities. The Special Olympics (2015) mission is the following:

To provide year-round sports training and athletic competition in a variety of Olympic-type sports for children and adults with intellectual disabilities, giving them continuing opportunities to develop physical fitness, demonstrate courage, experience joy and participate in a sharing of gifts, skills and friendship with their families, other Special Olympics athletes and the community. (para. 1)

It is the largest recreation program for children with intellectual disabilities with approximately 4.4 million athletes in 170 countries (Crawford et al., 2015). A study by Crawford et al., (2015) indicated that there is an association between participation in Special Olympics and increased quality of life, reduced stress, higher self-esteem, and positive psychosocial outcomes. Although there are significant known benefits to participating in Special Olympics, the program has been criticized for encouraging segregation from mainstream sports (McConkey, Dowling, Hassan, & Menke, 2013). The Special Olympics Unified Sports program was created to attempt to eliminate the segregation of persons with disability and those without (McConkey et al., 2008).

Special Olympics Unified Sports. Programs specific to children with disabilities are valuable, but participating in activities with other children in the community reduces societal barriers (Murphy et al., 2008). The program created by the Special Olympics organization, Special Olympics Unified Sports (2015), is the following:

Dedicated to promoting social inclusion through shared sports training and competition experiences, Unified Sports joins people with and without intellectual disabilities on the same team. It was inspired by a simple principle: training together and playing together is a quick path to friendship and understanding. (para. 2)

In this program, teams are created by combining people of similar age and ability in order for practice to be fun, challenging, and exciting (McConkey et al., 2013). The program encourages participants to develop sporting skills while socializing with peers in the community, throughout this process it is hoped that these preconceptions and false ideas are eliminated (McConkey et al., 2013). The Unified Sports (UNS) program facilitates social inclusion, bonding, and loyalty among athletes. This 'bonding' creates alliances, which leads to increased self-esteem, social

skills, and awareness of personal talents for athletes with Intellectual disabilities (McConkey et al., 2013). The UNS program is also beneficial at reducing problem behaviors of children with intellectual disabilities and cause children without disabilities to improve their perception of and attitude towards children with intellectual disabilities (Ozer et al., 2012). In conclusion, the UNS is a valuable and rewarding program for all youth with and without intellectual disabilities.

Paralympic Sports

Competitive sporting events for persons with disabilities have gained rapid popularity since past decades. The Paralympic games have become the pinnacle of sporting events for showcasing the abilities of people with disabilities (Blauwet & Willick, 2012). The first Paralympic event was held in 2008 and was hosted in Beijing, China. 3951 participants from 148 countries competed in the 2008 Beijing Paralympic games (Blauwet & Willick, 2012). The mission of the Paralympic movement is to promote function, independence, and self-autonomy for individuals with disabilities (Blauwet & Willick, 2012). It uses the power of sports to promote disability rights, environmental accessibility, social integration, health, and wellness (Blauwet & Willick, 2012).

Introduction to Physical Activities in the NYS/BYA Program on the Turtle Mountain

Chippewa Reservation: A Resource Guide to Adaptation

Purpose/rationale

The purpose of this scholarly project is to adapt several of the physical activities currently offered by the NYSP/BYAP in order for children with disabilities on the Turtle Mountain Chippewa Reservation be able to participate in these tasks with other children of their age.

Organization of the Manual

This manual will educate staff on the need for adaptations to occur and give step-by-step instructions on how to adapt the specific tasks of volleyball, strength and conditioning, yoga, weightlifting, and swimming to meet the needs of all children regardless of disability. A list of resources will also be included.

Use and Target Audience

This product targets the children in the NYSP/BYAP at the Turtle Mountain Chippewa Reservation. The adapted tasks will be implemented during the NYSP/BYAP. In the future, it is hoped for level one fieldwork students to be able to provide assistance in carrying out these tasks for this program and make additional suggestions for adaptations to the tasks. This scholarly project may also lead to the development of an emerging fieldwork site with the NYSP/BYAP.

Model

The Ecology of Human Performance (EHP) was utilized as the basis of this scholarly project. EHP emphasizes the environment, which shapes both the person and tasks that the person engages in (Turpin & Iwana, 2011). Turpin and Iwana (2011) also stated the environment impacts task selection and performance. Interventions included in this model are establish/restore, alter, adapt, prevent, and create (Turpin & Iwana, 2011). In this scholarly project, the tasks will be adapted to make them accessible to all children, to help establish skills, and prevent health conditions. Therefore, EHP is a good fit for this scholarly project.

OT Role

Occupational therapists are well prepared to analyze the tasks and the person, looking at the cognitive, physical, and psychosocial aspects. The occupational therapist will then be able to adapt the tasks or create new ones in order to facilitate successful participation. The

NYSP/BYAP tasks are not currently adapted for children with disabilities; therefore occupational therapists are needed to assess current tasks and an individual's abilities to determine how the tasks need to be adapted to make the tasks accessible to all children.

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CHAPTER III

METHODOLOGY

The product designed for this project will consist of a manual to educate staff on the need for adaptations for specific activities. Step-by-step instructions will be provided on how to adapt the specific tasks of yoga, strength and conditioning, weightlifting, volleyball, and swimming in order for all children, regardless of ability, to have the opportunity to participate in these activities. Resources will be included at the end of the product to educate staff about what assistance is available, helpful organizations and websites, and where to find adaptive equipment.

Dr. Lavonne Fox proposed the idea for this product after an interest in the American Indian population was discovered. Dr. Shane Martin expressed to Dr. Lavonne Fox a need for the activities of the Nation Youth Sports Program/Belcourt Youth Activities Program to be adapted for children with disabilities. The literature supported the necessity of physical activity programs for children with disabilities due to the many benefits that result from participation. Also, past research related to the American Indian culture indicated that this population has the most significant need for these programs. Culture plays an important role, which is why it was taken into account when adapting the tasks for this product. Inclusion specifically was touched on. Also, generally, this population does not have the resources needed to provide the necessary services for children with disabilities, which is why a list of resources are included at the end of the product. Therefore advocating for the implementation of adapted activities will provide a

gateway for further programming for those who have disabilities, whether they are children or adults.

An extensive review of literature was completed using the PubMed and CINAHL databases. Research was also gathered from the Internet sources of the Special Olympics, Unified Sports, and Paralympic Sports and was utilized as a guide to assist with developing this product. After completing the literature review, the specific tasks to be adapted were chosen based on communication with Dr. Shane Martin and the amount of research that exists on how to adapt these specific tasks. With these adaptations made to these tasks, it would promote successful participation. Personal communication with Professor Carrlson assisted in clarifying the role of OT and giving specific environmental considerations, and adaptation ideas. Also, permission was sought for the use of the images contained in the manual. Lastly, the resources were compiled from various websites that would be of benefit to the staff for making these adaptations.

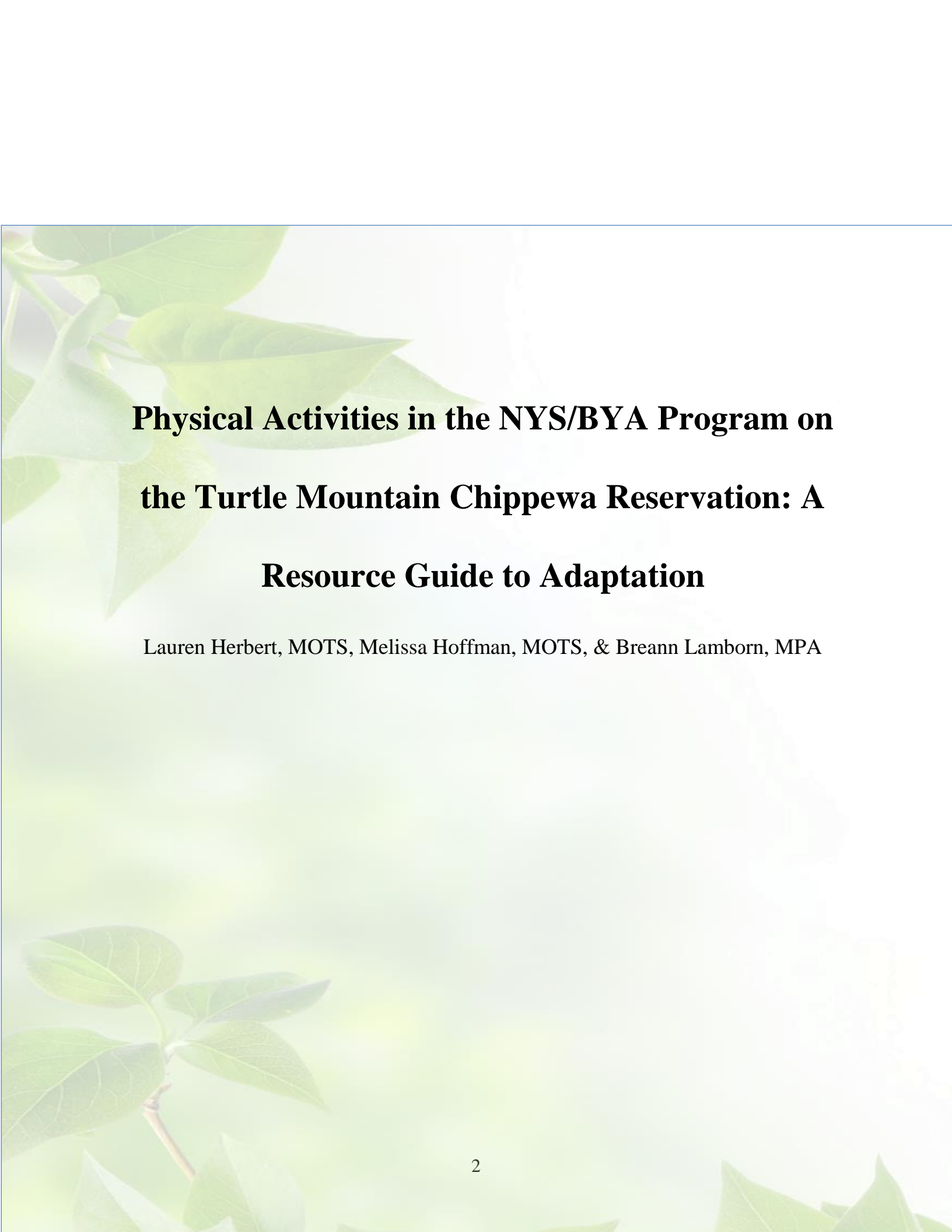
CHAPTER IV

PRODUCT

The purpose of this product is to adapt several of the physical activities currently offered by the NTSP/BYAP in order for children with physical disabilities on the Turtle Mountain Chippewa Reservation to be able to participate in these tasks with other children of their age. This product will be presented in a manual format with sections for each of the tasks adapted and a resources section for staff to use.

The product will begin with a description of the need to make these adaptations, the importance of inclusion, and specific considerations. Next, a list of the adapted tasks will be included with step-by step directions/suggestions on how to modify yoga, strength and conditioning, weightlifting, volleyball, and swimming. Pictures will also be provided with each of the tasks. Lastly, resources will be included at the end of the product to educate staff about what assistance is available, helpful organizations and websites, and where to find adaptive equipment.

EHP was utilized as the basis of this manual. EHP emphasizes the environment, which shapes both the person and tasks that the person engages in (Turpin & Iwana, 2011). Turpin and Iwana (2011) also stated the environment impacts task selection and performance. Interventions included in this model are establish/restore, alter, adapt, prevent, and create (Turpin & Iwana, 2011). In this scholarly project, the activities (tasks) will be adapted to make them accessible to all children, to help establish skills, and prevent health conditions.



**Physical Activities in the NYS/BYA Program on
the Turtle Mountain Chippewa Reservation: A
Resource Guide to Adaptation**

Lauren Herbert, MOTS, Melissa Hoffman, MOTS, & Breann Lamborn, MPA

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Need for Adaptations

American Indians have the highest rates of disability of any group in the United States (Nichols & Keltner, 2005). According to Waldman, Perlman, and Swerdloff (2008), more than 23% of the American Indian population has one or more disabilities. Of those that have disabilities, more than 50,000 are children and 39,000 have multiple disabilities (Waldman et al., 2008). American Indians are reported to experience the onset of these health problems earlier in life than other populations (Faircloth, 2006). Programs such as the National Youth Sports Program/ Belcourt Youth Activities Program (NYSP/BYAP) aim to prevent these health problems by engaging the children in physical activity and healthy lifestyle programs. However, children with disabilities are not currently able to fully participate in the physical activities offered through the NYSP/BYAP, because the activities are not being adapted to meet the needs of all children. If the tasks are adapted to meet the needs of all children, several benefits will arise.

Participation in sports and physical activity promotes physical health as well as emotional, and social well-being for both children with and without disabilities (Murphy, Carbone, & the Council on Children with Disabilities, 2008). Increased engagement in physical activity and improved fitness levels has the potential to reduce the incidence of chronic diseases in adulthood (Rimmer & Rowland, 2008). Also, a child's strength has been shown to increase after participating in physical activity (Jaarsma, Dijkstra, Blecourt, Geertzen, & Dekker, 2014). Psychological and social benefits can also be achieved through participation in physical activity (Crawford, Burns, & Fernie, 2015). These benefits may include the formation of friendships, expressing creativity, developing a self-identity, fostering meaning and purpose in life, peer acceptance, increased self-esteem, perceived physical competence, life satisfaction, family

support, social adjustment, and community involvement (Murphy et al., 2008). The activities included in the product are designed to facilitate inclusion and socialization by allowing the children to participate in these tasks with other children. These benefits support the need to make adaptations to the activities to allow for children with disabilities to participate in the program.

Considerations for Implementation

In order to make this program as successful as possible, several aspects need to be considered when implementing these adaptations. It is highly recommended that before starting every task, rules and regulations be established and discussed with the children using “Do” instead of “Do not” statements. This will help the children know what is expected of them in order to be safe and have fun. Also, there are various environmental considerations that need to be addressed to ensure successful participation in the tasks. For example, if the setting in which the task is being performed is too loud the child may have difficulty following directions or concentrating on the task. In this situation, the child may wear earplugs, wear a sports band, or a curtain can be drawn to minimize noise distractions. Lastly, each child is unique in his/her own way with different physical, psychosocial, and cognitive abilities. All of these factors need to be considered when adapting the specific tasks in order to address all aspects of the child.



Yoga

Yoga is beneficial for both physical and mental well-being. It can increase flexibility, strength, balance, circulation, mobility, endurance, and bone and muscle health (Myers, 2015). Also, practicing yoga can reduce stress and anxiety (Myers, 2015). The concepts of Yoga can be utilized during any of the activities of this program to help a child relax when feeling stressed/anxious/overwhelmed. Yoga can also be used as a holistic approach to address both the mind and the body of children with and without disabilities (Galantino, Galbavy, Quinn, 2008). There are a few risks of engaging in Yoga: those who have a herniated disk or osteoporosis should avoid deep forward bends (Pappas, 2013). Also, people practicing yoga should not push themselves too hard because this could lead to injury (Pappa, 2013). Each pose can be modified and adapted to meet the needs of each individual. One core element is spirituality which focus on harmony and balance in one's life (Saraswati, 2007). The American Indian culture incorporates these elements into daily life to maintain a healthy, harmonious, and balanced life.

For some people, participating in yoga is challenging due to physical limitations and conditions. Chair Yoga is an effective alternative for persons with physical disabilities who want to experience the benefits that yoga offers. Chair Yoga is fitting for people of all ages, fitness levels, and physical conditions (Living Yoga Center, 2015). Chair Yoga offers the same benefits to the body and mind, as does the standard practice of yoga (Living Yoga Center, 2015). Chair Yoga adapts yoga positions and poses through the use of a chair. The chair replaces the yoga mat and becomes an extension of the body; this allows the individual to perform yoga poses with more support and stability (Living Yoga Center, 2015). Yoga can also be performed with a partner to incorporate partnership, social engagement, and collaboration.

This is a video that demonstrates a 20-minute chair yoga session. This is a perfect video for people of all ages, levels, and experience with yoga.

<http://www.chopra.com/ccl/video/chair-yoga-flow-for-all-levels>

This is a video that demonstrates children's adaptive yoga from the National Center on Health, Physical Activity and Disabilities (NCHPAD). This video can be used as a guide for implementing an adapted yoga class.

<https://www.youtube.com/watch?v=Dq1XBAkIZEM>

The following Chair Yoga poses are done seated in a chair and can be performed by children or adults with and without disabilities.



Fig. 1: Seated Yoga-Mountain Pose

Sit on edge of chair with feet flat on the floor

Press your hands downward into the seat while lifting the crown of the head upward

Tuck the chin and look straight ahead

Inhale-feel your spine lengthen and crown lift

Exhale-press your hands down into the seat

Repeat for 10 slow breaths

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**Fig. 2 & 3: Seated Yoga-
Left/Right Arm Lift**

Inhale and raise left hand upward. Lengthen up through the fingertips.

Exhale and press opposite hand into seat.

Repeat 5 breath cycles

Repeat these same steps with the right arm

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http://www.hep2go.com/exercise_editor.php?exId=8768&userRef=0

http://www.hep2go.com/exercise_editor.php?exId=8769&userRef=0



Fig. 4: Seated Yoga-Double Arm Lift

Inhale-Lift both arms upward, reaching through fingertips
Lengthen the spine

Exhale-Feel your sit bones press down into the seat

Hold 5 breath cycles

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Fig. 5 & 6: Seated Yoga-Left/Right Knee Lift

Inhale-Lift leg knee up and pull toward you with the right hand
Feel the crown of the head lift and the spine lengthen

Exhale-Press the opposite hand downward into the seat

Hold for 5 breath cycles

Repeat knee lift on the right side

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http://www.hep2go.com/exercise_editor.php?exId=8772&userRef=0

Fig. 7 & 8: Seated Yoga-Left/Right Knee Extension

Inhale-Straighten out the left knee and flex the foot
Lift through the crown of head and lengthen the spine

Exhale-Press opposite hand into the seat

Repeat 5 breath cycles
Repeat with right leg

Repeat with right leg

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http://www.hep2go.com/exercise_editor.php?exId=8774&userRef=0
http://www.hep2go.com/exercise_editor.php?exId=8773&userRef=0





Fig. 9: Seated Yoga-Spinal extension

Inhale-place hands behind you on the seat and lift the breastbone, arching the spine

Exhale-Press hands downward into the seat

Repeat for 5 breath cycles

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http://www.hep2go.com/exercise_editor.php?exId=8775&userRef=0



Strength and Conditioning

Strength training promotes the following benefits (Alexander, 2003):

- Improve motor function such as walking, using a wheelchair, and transferring to various surfaces
- Increase range of motion
- Maintaining heart function,
- Preventing muscle atrophy
- Promoting bone strength
- Helping control or lose weight
- Reducing stress
- Promoting social interaction,
- Enhancing general feelings of well-being
- Improve endurance

With these benefits, there are also risks that should be considered prior to participation to support safety (Alexander, 2003):

- Children should be provided enough water so dehydration does not occur and so muscle breakdown does not occur for children with muscular dystrophy or myositis.
- Children with spinal cord injuries at or above the T-6 level may experience autonomic dysreflexia, which is a sudden and dangerous rise in blood pressure. If this occurs, have the child sit down and take deep breaths.
- Children with a spinal cord injury, spina bifida, muscular dystrophy, and other conditions may have low blood pressure or dizziness; if this happens, have the child sit down or lie down and take deep breathes.
- High body temperature is a risk for children with a spinal cord injury or spina bifida.

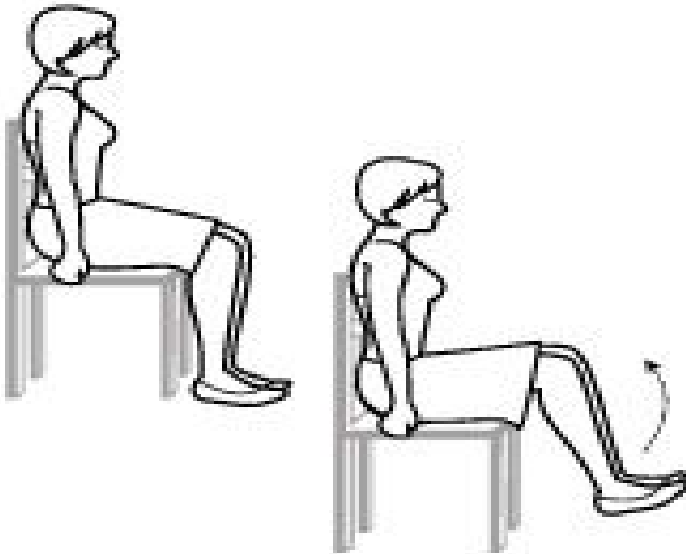
- Fractures may take place if bones are too weak.

Strength training can be completed standing, lying down, or sitting. Other ideas can include arm and leg movement to music or ball games using light or weighted balls. A partner may need to be present to assist based on an individual's level of disability. Having a partner will also present opportunities for social participation and teamwork.

Exercises included are as follows (Nichols, 2012):

- Seating chair knee lifts
- Seated leg extension and pump
- Back extension
- Seated side bend with towel
- Isometric bicep hold with towel
- Low mount seated rows
- Standing adduction with resistance band
- Push-ups

Fig. 10: Seated Chair Knee Lifts (abs)



Used with permission. Available at <http://www.divine.ca/en/exercise-finder/leg-lift/>

Fig. 11: Seated Leg Extension & Pump with Band (quadriceps)



Used with permission. Available at <http://www.sheknows.com/health-and-wellness/articles/1031387/leg-exercises-you-can-do-from-your-office-chair>

Fig. 12: Back Extension (Lower back): Sit in chair to perform upper body movement



Used with permission. Available at <http://www.bestperformancesystems.com/2014/09/sitting-standing-how-to-eliminate-back-leg-foot-pain/>

Fig. 13: Standing Side Bend with Towel: Stand or sit and perform with or without towel



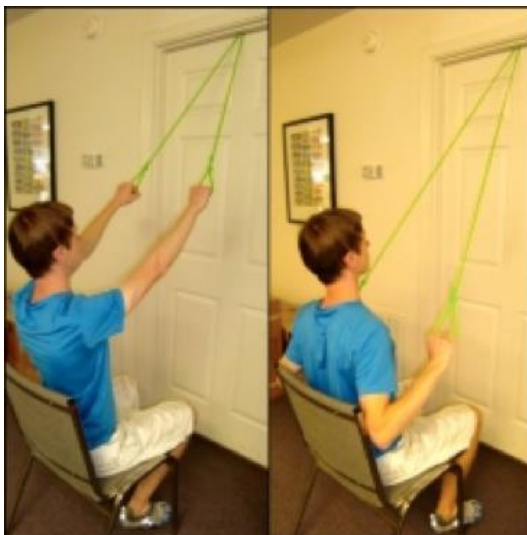
Used with permission. Available at <http://www.apmhealth.com/education/healthy-living/stretching---strengthening-tips/cubicle-workout>

Fig. 14: Isometric Bicep Hold with Towel (Biceps): Sit in chair to perform movement



Used with permission. Available at http://homegym-exercises.com/biceps_curl_towel_seated.html

Fig. 15: Low Mount Seated Rows (Upper back): Perform in a chair. If you cannot use your feet to hold the band, connect it to a stable furniture leg, door knob, etc.



Used with permission. Available at http://www.hep2go.com/exercise_editor.php?exId=8808&userRef=0

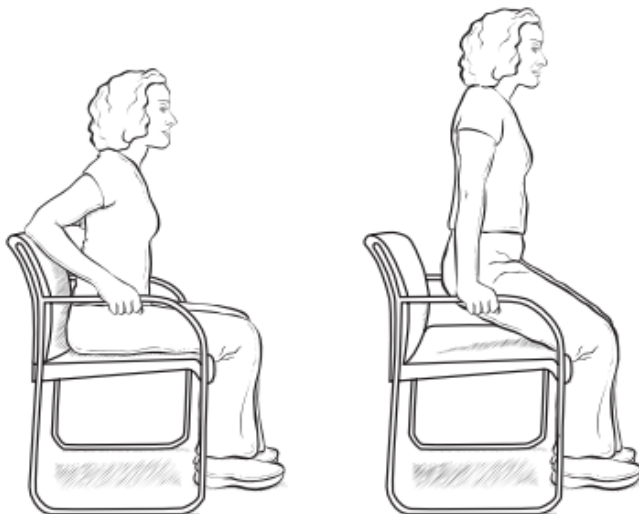
Fig. 16: Standing Adduction with Resistance Band (Inner thigh): Perform while seated by elevating leg off the floor in front of you.



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=8095&userRef=134728

Fig. 17: Push Ups: Perform while seated or using one or two hands



Used with permission. Available at <https://www.mskcc.org/cancer-care/patient-education/general-exercise-level-2>



Weightlifting

Weightlifting is one aspect of strength and conditioning that builds muscle tone and increases strength (Barfield, Cobler, Pratt, & Malone, 2013). This increase in muscle tone and strength will assist the child in increasing his/her independence in daily tasks. The recommended number of repetitions for children with disabilities is 8 to 12 with 2 to 4 sets and a rest period of 2 to 3 minutes between each set (Barfield et. al., 2013). The weight can be increased or decreased depending on the abilities of the child. When bench pressing, leg/bench straps may be used for extra support (International Paralympic Committee, 2014). Built up handles and/or wrist/ankle weights can be used if a child has difficulty grasping a hand weight. Also, if the weights are causing pain, gloves can be worn to alleviate the discomfort. Children with or without disabilities can participate in the following exercises that can be completed standing, lying down, and sitting. It is recommended that each person have someone spotting him or her to ensure safety and to incorporate social inclusion/participation.

Weightlifting exercises included are as follows (Nichols, 2012):

- Concentration curls
- Dumbbell shoulder press
- Seated dumbbell triceps extension
- Wrist curls
- Dumbbell lateral raises
- Dumbbell shrugs
- Chest flys
- Alternating bicep curls
- Dumbbell side bends
- Benching

Fig. 18: Concentration Curls (biceps)



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=12400&userRef=134728

Fig. 19: Dumbbell Shoulder Press (shoulders)



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=12401&userRef=134728

Fig. 20: Seated Dumbbell Triceps Extension (triceps)



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=8078&userRef=0

Fig. 21: Wrist Curls (forearms)



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=38&userRef=134728

Fig. 22: Dumbbell Lateral Raises (Shoulders): Sit in chair to perform movement



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=12398&userRef=134728

Fig. 23: Dumbbell Shrugs (Upper back): Sit in chair and perform with your arms hanging at your sides. Hand weights may be added to increase resistance.



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=461&userRef=134728

Fig. 24: Chest Flys: Sit in chair and can use hand weights.



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=17468&userRef=0

Fig. 25: Alternating Bicep Curls (Biceps): Sit in chair to perform movement. Lift one side while bending at the elbow. Perform on one side and then alternate to the other side.



Used with permission. Available at

http://www.hep2go.com/exercise_editor.php?exId=22416&userRef=0

Fig. 26: Dumbbell Side Bends (Obliques): Stand or sit to perform with or without weights.



Used with permission. Available at <https://www.jefit.com/exercises/993/dumbbell-seated-side-bend>

Fig. 27: Benching (chest, shoulders, and biceps): Lie down on bench and use leg/bench straps for extra support



Used with permission. Available at <http://britishweightlifting.org/event/manchester-parapowerlifting-summer-open/>

The background features a soft-focus image of green leaves on the left and bottom edges. A white, torn-paper-style outline of a geographical region, possibly a country or continent, is visible on the right side of the page. The overall color palette is light green and white.

Volleyball

This is a team sport that can be played in multiple ways. Sitting volleyball and chair volleyball are two adaptations to this sport to make it inclusive. There are several benefits to playing volleyball (Chair Volleyball Advisory Board, 2013):

- Improves cardiovascular fitness
- Increases joint flexibility
- Enhances/maintains muscle tone and endurance
- Promotes self-esteem
- Reduces stress
- Builds confidence
- Promotes social interaction

Risks in participating in this task include (Stop Sports Injuries, 2015):

- Injuries of the shoulder and fingers due to repetitive overhead motions, such as spiking and blocking.
- Court burns, blisters, bruises, concussions, and broken bones may occur.

Sitting volleyball and chair volleyball can be played by people with and without a disability, of all ages and genders in any combination. Sitting volleyball can be played while players are seated on the floor cross-legged (World ParaVolley, 2015). Chair volleyball is played while players are sitting in a chair, which can be a wheelchair or standard chair (Chair Volleyball Advisory Board, 2013).

Recommended adaptations include (Chair Volleyball Advisory Board, 2013; World ParaVolley, 2015):

- Decrease court size
- Lower the net

- Use a lighter weight or smaller volleyball, for example a beach ball or balloon
- Use brightly colored volleyball for children with visual impairments.

Games can be played prior to playing actual volleyball to introduce the child to the concepts related to playing the game. One is practicing the skills (passing and setting) with a partner. Another is using a balloon and trying to keep it in the air, no net would be required. Environmental considerations are important in this task due to the gym setting. It can be loud and overwhelming to some children. These children can wear earplugs or a sports band. However, these adaptations may not work for all children because every child has unique preferences. Another option is reducing noise distractions by drawing a curtain.

Psychosocial aspects to be considered include competition and self-regulation. Competition can lead to additional stress and anxiety if a child is focused on being better than another student or is focused on winning. A child may not be able to self-regulate his/her emotions when a mistake is made or if the team loses. Having strategies in place for when this occurs is vital to ensure that the child can successfully engage in the tasks. Examples include removing self from the situation and deep breathing. To prevent this from happening, score could not be kept and emphasis that they are playing for fun.



Fig. 28: Sitting volleyball. Used with permission. Available at www.nchpad.org



Swimming

Water is a great activity for those with disabilities because of the health benefits it offers. These benefits are as follows (Fragala-Pinkham, Dumas, Barlow, & Pasternak, 2009).

- Facilitates muscle relaxation,
- Increases joint range of motion (ROM)
- Improves muscle strength and endurance
- Equalizing effects of water reduce the force of gravity on the body
- The buoyancy of the water supports the body and strengthens muscles

Equipment for pool entry and exit should be non-slip and in safe working condition. Staff trained to assist in emergencies should be present at all times. Rescue equipment and first aid supplies need to be checked on a frequent basis to ensure location, proper functioning, and adequate supplies.

For some children, swimming can be a frightening activity if it is unfamiliar to them. This additional stress may lead to anxiety. For children who have difficulty regulating their emotions, it is important to gradually introduce them to the water to help them feel safe in the water. Also, it is key for the child to have specific ways to calm him/herself when he/she is feeling overwhelmed. To gradually introduce a child to the water, start by having the child sit at the edge of the pool and then slowly progress to getting into the pool at a pace that is comfortable to the child. A child may require assistance getting into and out of the pool, as well as once in the pool, depending on their level of ability. Explaining rules and safety concerns is recommended prior to entering the pool. This includes going over expectations, and giving examples of what to do in unsafe situations through use of pictures, words, and/or demonstrations.

The following activities will facilitate children with disabilities to engage in water games with other children. Games are a way to keep children interested in swimming and assist in forming friendships. A few suggested games are given below from Gomes, French, Goode, Silliman-French, and Waugh (n.d.):

Activity: Crocodile Race

Objectives: To use a noodle to push a crocodile across the pool into the other team's goal

Task: Two teams evenly divided are organized at the same side of the pool. Each crocodile tube will be placed in front of the teams. When the instructor says "GO" the students will push using any form of mobility to the crocodile placed in front of each team and try to push the crocodile to the other side of the pool using only the pushing stick. Each student will have their own noodle or "pushing stick".

Activity: Crocodile Hunter

Objectives: To work collaboratively as a team and work on independent moving.

Task: Two teams starting at two opposite corners of the pool. The teams will swim diagonally across the pool to the opposite corner. Students will work together as a team to move the crocodile from one end of the pool to the other without the crocodile escaping. Students will swim or kick while holding on to the crocodile. The teams will "tie" the croc up to a hoop at the opposite side of the pool.

Variation: Students with vision impairment can receive verbal cues. Each student could have their own crocodile. Students with orthopedic impairments may need physical assistance from the instructor.

Activity: Pass the Hoop

Objectives: To work cooperatively to pass a hoop from student to student while holding hands

Task: Students are to stand in a circle formation holding hands in water shallow enough water to be able to stand independently. Between two of the students place a hoop around his/her wrist.

The students will have to pass the hoop to the person next to them by passing the hoop around their body. The hoop must make its way all the way around the circle passing the hoop through each student holding hands.

Variation: Students are to try to manipulate hoop with as little assistance as possible. Students may use hands if necessary to pass the hoop around their body. For students with orthopedic impairments, place between two stronger students, and a floatation device may be needed.

Activity: Three Children in a Boat

Objectives: Cooperative Activity

Task: Students are in a scattered formation in water shallow enough to stand independently.

Have the students begin free swimming. Start the music. When you stop the music each student has to find a float and hang on. No more than 3 students per float. When you see there is a correct number of students on each floats then begin the music again. They will begin free swimming again.

Variation: Change up the number of students per float. Have them use different swim strokes.

Have student swim with a partner.

Activity: Across the Ocean

Objectives: Work cooperatively to move mat across water, and move back either independently or with assistance.

Task: Students will be divided into two groups and placed holding a mat at each end of the pool. Students will work together holding the mat to move to the other end of the pool. Once there, they grab either a noodle or kick board and make their way back to the other end of the pool kicking independently or with assistance if necessary.

Variation: Reinforce that students are to kick and work together to move the mat, and use as little assistance as possible when they are swimming back on their kick boards and noodles. For some students with orthopedic impairments should be paired with stronger swimmers in their group. If assistance is needed when coming back, they should be given swim vests, or larger floatation devices. Verbal prompting or sound devices needed to guide students with a visual impairment. Brightly colored objects may also be used.

Activity: Inner-Tube Volley Beach Ball

Objectives: To foster more independent movement of the students in the pool.

Task: Students are divided into two teams on one half of the pool. The students, while floating in their inner-tubes, will try to keep the beach ball in the air by hitting it towards other students.

Variation: Use different size beach balls. Eliminate the air element of the game and try to facilitate movement of the ball by throwing other balls at it.

Adaptive Swimming Devices

Adaptive floatation devices are a good option for individuals with low strength, and endurance (Infinitec, 2015). A floatation device provides safety and assurance for individuals learning new exercises or swim strokes. There are many types of adaptive floatation devices such as swim rings, Styrofoam kickboards, waist belts, head rings, inflatable collars, and life vests (Infinitec, 2015). An amputee swimmer may use special swim fins instead of his/her normal prosthesis (Infinitec, 2015). Typically, a regular prosthesis feels heavier and clumsier in water. Swimmers who are blind or visually impaired may use a beeping device, which helps the swimmer locate the edge of the pool while swimming (Infinitec, 2015).

Swim Rings are multi-purpose float swimming aids. Sets of the rings may be snapped together for neck, chest, or torso support (AbleData, 2015). Individual rings can be removed to reduce the amount of flotation. Danmar Products, Inc. makes this product for approximately \$100 (AbleData, 2015).



Fig. 29: Swim rings. Used with permission. Available at <http://www.abledata.com/product/8724-swim-rings>

The Child's Konfidence Jacket is a float swimming aid designed for use by children with physical or cognitive disabilities in aquatic therapy or while learning to swim (AbleData, 2015). This neoprene buoyancy vest features eight removable floats (AbleData, 2015). This jacket promotes correct swimming position and helps children achieve a face forward position (AbleData, 2015). Konfidence USA sells this product for \$39 (AbleData, 2015).



Fig. 30: Child's Konfidence Jacket. Used with permission. Available at <http://www.abledata.com/product/childs-konfidence-jacket>

The Aqua Sprinter Flotation Belt is a float swimming aid designed for use by individuals with physical or neurological disabilities (AbleData, 2015). This device is worn around the waist and can suspend an individual in a position that enables the spine to be suspended neutrally (AbleData, 2015). The belt is designed to hold the swimmer at the waist in an upright position to prevent the child from tipping forward (AbleData, 2015). Sprint Aquatics/Rothhammer International sells this product for \$29.50 (AbleData, 2015).



Fig. 31: Aqua Sprinter Flotation Belt. Used with permission. Available at <http://www.abledata.com/product/aqua-sprinter-flotation-belt-model-700>

The Child Head Float is a float swimming aid designed for use by children with upper extremity, neurological, or physical disabilities (AbleData, 2015). This device is useful for a swimmer with under-developed reflexes and minimal head and limb control (AbleData, 2015). The float rests on the child's shoulders and wraps around the neck, holding the head above water (AbleData, 2015). Flaghouse, Inc. and Especial Needs, Llc sells this product for approximately \$120 (AbleData, 2015).



Fig. 32: The Child Head Float. Used with permission. Available at <http://www.abledata.com/product/child-head-float>

A chair lift will assist a person in a wheelchair be able to get in and out of the pool. If a limited budget is a concern, an alternative option to purchasing a pool lift is manually assisting the child into and out of the pool. Also, grants could potentially fund purchasing a chair. The approximate price of this type of chair is \$3,550.00 and this is one location it can be purchased at: <http://www.spinlife.com/Aqua-Creek-Ranger-Pool-Lift-with-Anchor-Power-Pool-Lifts/spec.cfm?productID=90238>



Fig. 33: Chair lift. Used with permission. Available at <http://www.spinlife.com/Aqua-Creek-Ranger-Pool-Lift-with-Anchor-Power-Pool-Lifts/spec.cfm?productID=90238>

Resources

http://www.sparkpeople.com/resource/fitness_articles.asp?id=626&page=2

Strength and conditioning exercise ideas for people with or without disabilities.

<http://www.nchpad.org/>

National Center on Physical Activity (www.nchpad.org), lists various types of accessible sports and recreational programs in the US for youth and adults by state, city and zip code.

<http://www.specialolympics.org/sports.aspx>

Special Olympics site that includes specifics on their adapted sports that people with disabilities participate in.

<http://www.specialolympics.org/unified-sports.aspx>

Special Olympics Unified Sports program site that includes specific information on the various sports both people with and without children with disabilities participate in together.

<http://www.paralympic.org/sports>

Paralympic site that includes information on the sports people with physical disabilities participate in, such as how they adapted each event.

<https://www.care.com/a/10-helpful-special-needs-organizations-1210250634>

This website contains resources of national organizations serving children who require assistance for medical, mental or psychological disabilities, with things such as education, advocacy, advice, and support. These groups give help so that they can flourish and become happy, healthy members of society.

<http://www.disabilityresources.org/NORTH-DAKOTA.html>

Guides a person to different websites to find information in these major areas: general, advocacy and legal rights, aging, Alzheimer's disease, arts, assistive technology, autism, blindness and visual impairments, children, deaf-blindness, deafness and hearing impairments, developmental disabilities, education, employment, financial assistance, health, heart disorders, learning disabilities, mental illness, mental retardation, multiservice agencies, multiple sclerosis, respite services, sports and recreation, transportation, and vocational rehabilitation.

<http://www.challengedathletes.org>

This website offers grants to individuals in need of financial support to purchase sports equipment. The grant application and terms for eligibility are included on the site.

<http://www.disabledsportsusa.org/resources/adaptive-sports-equipment/>

The purpose of the Equipment Resources page is to help athletes identify adaptive sports equipment. This website links a person to the resources he/she needs to find proper adaptive equipment for many types of sports to make them accessible regardless of a disability.

<http://www.indianaffairs.gov/index.htm>

This government organization provides services to federally recognized tribes. There are resources on this website that can be utilized.

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Permissions

Re: picture usage from apmhealth.com

Herbert, Lauren

Thu 10/29/2015 2:05 PM

To: Jonathan Gelfman <jonathan.gelfman@apmhealth.com>;

Jonathan,

Thank you for your permission. It is very much appreciated.

Lauren Herbert, MOTS

From: Jonathan Gelfman <jonathan.gelfman@apmhealth.com>

Sent: Thursday, October 29, 2015 2:03 PM

To: Herbert, Lauren

Subject: RE: picture usage from apmhealth.com

Lauren,

You have my permission. I'm not sure if I have the hi-res version... so hopefully the web file will be ok for you.

Jonathan Gelfman

Marketing Manager

414-325-3792 (o)

414-526-1263 (c)

jonathan.gelfman@apmhealth.com

.....
Advanced Pain Management

4131 W. Loomis Rd., #300

Greenfield, WI 53221

www.apmhealth.com

From: Herbert, Lauren [<mailto:lauren.herbert@my.und.edu>]

Sent: Thursday, October 29, 2015 1:40 PM

To: Jonathan Gelfman

Subject: Re: picture usage from apmhealth.com

Good afternoon,

This is the link to the article with the picture: <http://www.apmhealth.com/education/healthy->

[living/stretching---strengthening-tips/cubicle-workout](#)

At the Office: Cubicle Workout | Advanced Pain Management

Learn exercise and stretches to do at the office. ... Seated Turn. Start this exercise in a seated position with your chest lifted and your back straight.

[Read more...](#)

I am referring to number 6, the seated side bend picture.

Thank you,
Lauren Herbert, MOTS

From: Jonathan Gelfman <jonathan.gelfman@apmhealth.com>

Sent: Thursday, October 29, 2015 1:34 PM

To: Herbert, Lauren

Subject: picture usage from apmhealth.com

Lauren,

I am responding to the request for use of a picture from our website. Feel free to give me a ring when you're available so we can see which pic you're wanting to use.

Jonathan Gelfman

Marketing Manager

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414-526-1263 (c)

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.....
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www.apmhealth.com

Fwd: Hep2go.com New Comment
TJs Schwabenbauer <mistertj3@msn.com>

Thu 10/29/2015 2:24 PM

To: Herbert, Lauren <lauren.herbert@my.und.edu>;
Lauren,

Please place "permission from HEP2go.com for use of this photo" in the caption of each photo and I will permit the use as you described.

(Please note that permission to use our photos is required in each and every new every project.)

Thanks,

TJ
HEP2go Team

Begin forwarded message:

From: Hep2go <admin-s@hep2go.com>
Date: October 29, 2015 at 11:09:42 AM MST
To: support-s@hep2go.com
Subject: HEP2go.com New Comment
Reply-To: Hep2go <admin-s@hep2go.com>

Lauren Herbert, MOTS has sent following comment:

I am seeking permission to use several pictures for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration.

Visitor Name: Lauren Herbert, MOTS
Email: lauren.herbert@my.und.edu

Re: other
contact@homegym-exercises.com
Fri 10/30/2015 2:20 AM
To:Herbert, Lauren <lauren.herbert@my.und.edu>;

Hello Lauren,

yes you can use the pictures of the bicep curl with towel if you use a reference link to the page where you have taken them from.

Greetings,

Sebastian

Lauren Herbert, MOTS schrieb am 29.10.2015 19:29:

I am seeking permission to use the picture of the bicep curl with towel for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities. Thank you for your consideration.

Re: Website picture permission
divine.ca admin <admin@divine.ca>

Wed 11/11/2015 2:57 PM

To: Herbert, Lauren <lauren.herbert@my.und.edu>;
Good afternoon,

We are very sorry for the delay.

You can surely use the image, but just make sure to add our credit.

Thanks

On Thu, Oct 29, 2015 at 2:34 PM, Herbert, Lauren <lauren.herbert@my.und.edu> wrote:

Good afternoon,

This is the link: <http://www.divine.ca/en/exercise-finder/leg-lift/>

Thank you.

From: [divine.ca](mailto:admin@divine.ca) admin <admin@divine.ca>

Sent: Thursday, October 29, 2015 1:26 PM

To: Herbert, Lauren

Subject: Re: Website picture permission

Good afternoon,

Which picture are you talking about? If possible to send us the link of the article.

Thanks

On Thu, Oct 29, 2015 at 2:13 PM, [divine.ca](mailto:admin@divine.ca) <admin@divine.ca> wrote:

From: Lauren Herbert, MOTS <lauren.herbert@my.und.edu>

Subject: Website picture permission

Message Body:

I am seeking permission to use the picture of a person completing a seated leg lift for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration.

--

This e-mail was sent from a contact form on [divine.ca](http://www.divine.ca) (<http://www.divine.ca>)

Re: Website picture permission

weils@MSKCC.ORG

Thu 11/5/2015 2:09 PM

To: Herbert, Lauren <lauren.herbert@my.und.edu>;

3 attachments (661 KB)

Lauren Herbert_Manual.doc; seatpushup.pdf; mg_info.txt;

Hi Lauren,

Attached is our copyright agreement and a pdf of the figures. Please let me know if you prefer a different file format. Best of luck in your graduate school endeavors!

Sue

Susan Weil-Kazzaz, CMI

Manager, Media Services

Medical Graphics & Photography

Department of Communications

Memorial Sloan Kettering Cancer Center

1275 York Avenue, Box 54, New York, NY 10065

T 646.888.1440 F 646.888.1433 C 646.591.8616

weils@mskcc.org

www.mskcc.org

On Nov 5, 2015, at 2:52 PM, Herbert, Lauren <lauren.herbert@my.und.edu> wrote:

Sue,

I am currently a graduate student attending the University of North Dakota in Grand Forks, ND and working towards receiving my Master's of Occupational Therapy degree. A scholarly project is required to receive it, which is why I am seeking permission to use your picture within the manual I am creating. The picture will be used in a manual that will be shared with the staff at the Turtle Mountain Chippewa Reservation to be utilized for use during the National Youth Sports Program/Belcourt Youth Activities Program that runs every June on the reservation. I am adapting several of the activities in order for them to be accessible for youth with disabilities. The name of the manual is "The National Youth Sports Program/Belcourt Youth Activities Program (NYSP/BYAP) Adapted Activities for Children with Disabilities Manual" and the picture will be under the Strength and Conditioning section.

Thank you,

Lauren Herbert, MOTS

From: weils@MSKCC.ORG <weils@MSKCC.ORG>

Sent: Tuesday, November 3, 2015 2:56 PM

To: Herbert, Lauren

Subject: Re: Website picture permission

Thanks, Lauren.

I'll need to put a copyright agreement together for you. Can you please let me know all the contact information and any specifics about how these images will be used? What is the name of your instructional manual? Does this go under a specific chapter in your manual- and if so, what's the name of that chapter? Finally, what file type would you prefer that the images be sent as?

Thanks,
Sue

Susan Weil-Kazzaz, CMI

Manager, Media Services
Medical Graphics & Photography
Department of Communications

Memorial Sloan Kettering Cancer Center

[1275 York Avenue, Box 54, New York, NY 10065](https://www.mskcc.org)
T 646.888.1440 F 646.888.1433 C 646.591.8616
weils@mskcc.org

www.mskcc.org

On Nov 3, 2015, at 3:33 PM, Herbert, Lauren <lauren.herbert@my.und.edu> wrote:

Ms. Weil-Kazzaz,

I am referring to figure 21 and 22 on the following webpage.

<https://www.mskcc.org/cancer-care/patient-education/general-exercise-level-2>

General Exercise Program: Level 2 | Memorial Sloan ...

This information describes Level 2 of a general exercise program that will help you with your physical recovery. This exercise targets major muscle groups ...

[Read more...](#)

Thank you,
Lauren Herbert, MOTS

From: weils@MSKCC.ORG <weils@MSKCC.ORG>

Sent: Friday, October 30, 2015 11:28 AM

To: Herbert, Lauren

Subject: Re: Website picture permission

Dear Ms. Herbert,

I'm happy to help you in using one of our illustrations for your project. Can you please verify which figure you're interested in using? Please let me know the URL and the figure number, and I'll put together the artwork.

Information you should know: we allow one time use in print or digital output. Any subsequent use would require another permission request. Please send me a sample of the finished product that contains our artwork. Usually, we charge a fee for using our artwork, but as you're using it for your educational pursuits, I can waive the charge. However, you cannot use this in any way for which you might derive a profit. When I send the artwork, I'll include our copyright agreement.

I look forward to hearing back from you—

Sue

Susan Weil-Kazzaz, CMI

Manager, Media Services
Medical Graphics & Photography
Department of Communications

Memorial Sloan Kettering Cancer Center

1275 York Avenue, Box 54, New York, NY 10065

T 646.888.1440 F 646.888.1433 C 646.591.8616

weils@mskcc.org

www.mskcc.org

From: Herbert, Lauren [<mailto:lauren.herbert@my.und.edu>]
Sent: Thursday, October 29, 2015 2:33 PM
To: PublicAffairs_MSKCC/Public Affairs
Subject: Website picture permission

To whom this may concern,

I am seeking permission to use the seated push up picture for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration,
Lauren Herbert, MOTS

Re: Website picture permission

Herbert, Lauren

Thu 11/5/2015 1:56 PM

To: Tiffany Hagler-Geard <Tiffany.Hagler-Geard@sheknows.com>;

Tiffany,

Thank you very much! This will not be an online project.

Lauren Herbert, MOTS

From: Tiffany Hagler-Geard <Tiffany.Hagler-Geard@sheknows.com>

Sent: Tuesday, November 3, 2015 3:36 PM

To: Herbert, Lauren

Subject: Re: Website picture permission

Dear Lauren,

I am the Photo editor over at Sheknows.com

We would be happy to give you permission to use these images in your project.

Will this be an online project ?

If so, could you link back to the article source when crediting the images that would be most appreciated.

Please send us the link so we can pass around to our editors to share!

Please let me know if you have any questions.

Thanks so much and good luck with your project!

Best,

Tiffany

TIFFANYHAGLER-GEARD

PHOTO EDITOR/PHOTOGRAPHER

Glamping expert, photo nerd and official cat whisperer

[sheknows media](#)

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Are YOU an Expert Among Us? [Share your skills with 75+ million women every month.](#)

From: Herbert, Lauren <lauren.herbert@my.und.edu>

Sent: Tuesday, November 3, 2015 1:42 PM

To: Catherine Conelly

Subject: Website picture permission

Ms. Conelly,

Laura Williams gave me your contact information, as she stated that you have the rights to the picture I am seeking permission to use for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities. The picture I am referring to is the leg extension picture from the following article:

<http://www.sheknows.com/health-and-wellness/articles/1031387/leg-exercises-you-can-do-from-your-office-chair>

Leg exercises you can do from your office chair - SheKnows

Just because you sit all day doesn't mean you can't get fit! Check out these five leg exercises you can do from your chair.

[Read more...](#)

Thank you for your consideration,

Lauren Herbert, MOTS

Re: Website picture permission

Herbert, Lauren

Thu 11/5/2015 1:56 PM

To: Barry Carlin <barry@bestperformancesystems.com>;

Dr. Barry Carlin,

Thank you very much.

Lauren Herbert, MOTS

From: Barry Carlin <barry@bestperformancesystems.com>

Sent: Tuesday, November 3, 2015 3:52 PM

To: Herbert, Lauren

Subject: RE: Website picture permission

Greetings Lauren,

You have my permission to use the illustration , but I would like to see a draft of how you are using my stuff before it is finalized/

I am all for your endeavor

Thank you

Sincerely,

Dr. Barry Carlin

CEO

Keeping People Healthy & Performing Their Best

11301 Olympic Blvd. Suite 669

Los Angeles, CA 90064

Tel: 310-478-1234

Cell: 310-980-0502

barry@bestperformancesystems.com

www.bestperformancesystems.com

Subscribe to the [BPS BLOG](#)

From: Herbert, Lauren [mailto:lauren.herbert@my.und.edu]

Sent: Tuesday, November 3, 2015 12:51 PM

To: Barry Carlin

Subject: Re: Website picture permission

Dr. Carlin,

I am currently a graduate student attending the University of North Dakota in Grand Forks, ND and working towards receiving my Master's of Occupational Therapy degree. A scholarly project is required to receive it, which is why I am seeking permission to use your picture within the manual I am creating. The picture will be used in a manual that will be shared with the staff at the Turtle Mountain Chippewa Reservation to be utilized for use during the National Youth

Sports Program/Belcourt Youth Activities Program that runs every June on the reservation. I am adapting several of the activities in order for them to be accessible for youth with disabilities.

Thank you,
Lauren Herbert, MOTS

From: Barry Carlin <barry@bestperformancesystems.com>
Sent: Friday, October 30, 2015 1:50 AM
To: Herbert, Lauren
Subject: RE: Website picture permission

Hello Lauren,
Could you please give me a bit more information.
What country and school?
How will you use the illustration?
Would you like any additional input from a practitioner?

Sincerely,

Dr. Barry Carlin

CEO
Keeping People Healthy & Performing Their Best
11301 Olympic Blvd. Suite 669
Los Angeles, CA 90064
Tel: 310-478-1234
Cell: 310-980-0502
barry@bestperformancesystems.com
www.bestperformancesystems.com

-
[Subscribe to the BPS BLOG](#)

-
From: Herbert, Lauren [<mailto:lauren.herbert@my.und.edu>]
Sent: Thursday, October 29, 2015 11:23 AM
To: info@bestperformancesystems.com
Subject: Website picture permission

-
[To whom this may concern,](#)

[I am seeking permission to use the back extension picture for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.](#)

-
[Thank you for your consideration,](#)
[Lauren Herbert, MOTS](#)

To whom this may concern,

I am seeking permission to use two pictures from this website for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission these pictures will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration,

Melissa Hoffman

Ying Lin (Jefit)

Nov 16, 10:36

Hi Melissa,

Due to the potential liability issue, we don't advise you to use our images for physical therapy purpose. You may want to do your own research about whether or not is safe for patients to do such activities. We are ok with using our pictures in your project as long as you agree not to hold us accountable for any consequence of using our exercise images. Our pictures are for reference only.

Thanks

Ying

From: Hoffman, Melissa [mailto:melissa.hoffman.1@my.und.edu]
Sent: 29 October 2015 18:29
To: BWLA Enquiries <enquiries@britishweightlifting.org>
Subject: website pictures

To whom this may concern,

I am seeking permission to use a picture from your website for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration,
Melissa Hoffman, MOTS

From: BWLA Enquiries <enquiries@britishweightlifting.org>
Sent: Monday, November 2, 2015 8:34 AM
To: Hoffman, Melissa
Subject: RE: website pictures

Hi Melissa,

Yes but please could you give a little more information as to which Photo's you want to use?

Kind Regards

Sue

Sue Ward

Office Manager

T: 0113 2249402

M.07834 520747

W: www.britishweightlifting.org

British Weightlifting - Great Britain's National Governing ...

British Weight Lifting (BWL) is the National Governing Body for Olympic Weight Lifting and Paralympic Powerlifting in Great Britain

[Read more...](#)

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager and delete it from your system.

Good morning,

Here is the link to the picture I am seeking permission to use.

<http://britishweightlifting.org/event/manchester-para-powerlifting-summer-open/>

Thank you for your permission,

Melissa Hoffman, MOTS

To whom this may concern,

I am seeking permission to use a picture from your website of a pool lift for my scholarly project to receive my Master's in occupational therapy. With your permission this picture will be used in a manual to educate people about the purpose of adaptive devices for children with disabilities.

Thank you for your consideration

Melissa Hoffman, MOTS

Here is the link to the picture I would like to use

<http://www.spinlife.com/Aqua-Creek-Ranger-Pool-Lift-with-Anchor-Power-Pool-Lifts/spec.cfm?productID=90238>

Hi Melissa,

Thank you for making contact with us regarding the use of our photo. We would be happy to let you use the photo for your project. I do have a few pictures with children in our lifts. Would one of those suite you better? If not feel free to use the photo you picked out. You can also check out our website for other photo's you might like to use.

<http://aquacreekproducts.com/category/products/pool-spa-access/>

Is this for a paper you are writing? We would love to see the finished product.

Michelle Bissonnette

Marketing Coordinator

Aqua Creek Products

9889 Garry More Lane

Missoula, MT 59808

888-687-3552

406-549-0769

Hoffman, Melissa

Michelle Bissonnette <michelleb@aquacreek.com>;

To help protect your privacy, some content in this message has been blocked. To re-enable the blocked features, click here.

To always show content from this sender, click here.

Flag for follow up. Start by Tuesday, November 17, 2015. Due by Tuesday, November 17, 2015.

Good afternoon,

Thank you for allowing me to use this picture!

I will check out the website for additional pictures.

Thanks again!

Melissa Hoffman, MOTS

From: Hoffman, Melissa [mailto:melissa.hoffman.1@my.und.edu]
Sent: Thursday, October 29, 2015 1:41 PM
To: AbleData
Subject: Website Pictures

To whom this may concern,

I am seeking permission to use multiple pictures from this website for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission these pictures will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration,

Melissa Hoffman, MOTS

Inbox

Flag for follow up. Start by Monday, November 02, 2015. Due by Monday, November 02, 2015.

Thank you for contacting AbleData. We are a public site, therefore, our images are open to the public. Please just be sure to reference us.

Also, please take a few minutes to let us know how we're doing by [taking our customer satisfaction survey](#).

Marleen

www.abledata.com

103 W. Broad Street, Suite 400

Falls Church, VA 22046

Phone: 800-227-0216

Email: abledata@neweditions.net

To whom this may concern,

I am seeking permission to use a picture from your website of seated volleyball for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration,
Melissa Hoffman

Flag for follow up. Start by Monday, November 02, 2015. Due by Monday, November 02, 2015.
You replied on 11/12/2015 11:24 AM.

I am currently out of the office with limited access to email until Thursday, November 5th. I will respond to your e-mail upon my return. If you need immediate assistance in my absence, please call the Center's main line at 800-900-8086.

Best regards,
Allison Hoit Tubbs
Project Coordinator
National Center on Health, Physical Activity & Disability

Allison Hoit <allisonh@lakeshore.org>;

To whom this may concern,

I am seeking permission to use a picture from your website of seated volleyball for my scholarly project to receive my Master's degree in Occupational Therapy. I am adapting physical activities to make them accessible for youth with disabilities. With your permission this picture will be used in an educational manual to provide assistance to others on how to adapt various activities.

Thank you for your consideration,
Melissa Hoffman, MOTS

Hi Melissa,

Can you please send me the link on our website to the image you are requesting use of?

Thanks,
Allison

Allison Hoit Tubbs, MS, ACSM EP-C

Project Coordinator

National Center on Health, Physical Activity & Disability

E: allisonh@lakeshore.org | P: 205.313.7447

nchpad.org | [@NCHPAD](https://www.facebook.com/NCHPAD) | [/NCHPAD](https://www.youtube.com/channel/UCvZ8qZ8qZ8qZ8qZ8qZ8qZ8q) | [@Allison_NCHPAD](https://www.instagram.com/allison_nchpad)

Hello Allison,

Here is the picture and link.



<http://www.nchpad.org/contentimages/283.jpg.pagespeed.ce.Boo6O6Dj5v.jpg>

Thank you,
Melissa Hoffman, MOTS

Thanks,
Allison

Allison Hoit Tubbs, MS, ACSM EP-C

Project Coordinator

National Center on Health, Physical Activity & Disability

E: allisonh@lakeshore.org | P: 205.313.7447

nchpad.org | [@NCHPAD](#) | [/NCHPAD](#) | [@Allison_NCHPAD](#)

CHAPTER V

SUMMARY

The purpose of this scholarly project is to adapt specifically identified physical activities currently offered by the NYSP/BYAP in order for children with disabilities on the Turtle Mountain Band of Chippewa Indians Reservation be able to participate in these tasks with other children of their age.

Several limitations arose when completing the literature review, such as a lack of research available on American Indians with disabilities. Also, it was difficult to generalize findings to specific reservations and tribes because the extent of acculturation differs in every American Indian family. Almost every family views disability from different perspectives depending on their personal viewpoints, experiences, and the degree to which they hold traditional or Western cultural beliefs and values. The researchers also had limited knowledge about the American Indian culture and beliefs, which impacted their ability to thoroughly incorporate cultural aspects into the product and adapted activities. The researchers did not visit the reservation where the program takes place every summer. Also, the researchers were unable to maintain consistent communication with the program director in order to obtain specific information about the program after initial contact and activity identification. This limited knowledge of where activities were performed, what equipment was already available, what specific disabilities were most prevalent, limitations with current activities, etc.

Our manual will be given to Dr. Shane Martin, CSCS, to be distributed to the staff at the NYSP/BYAP. Dr. Shane Martin would then decide whether or not to implement the adaptations depending on the available budget and resources. Occupational therapy students will be able to provide assistance in carrying out these tasks for this program and make additional suggestions for adaptations to the tasks. This scholarly project may also lead to the development of an emerging fieldwork site with the NYSP/BYAP.

Roadblocks that could potentially be encountered include: cost of equipment, openness and knowledge of staff, number children with disabilities who want to participate, and the budget. Staff needs to be open to making the proposed changes and have knowledge of disabilities, as well as knowledge of the American Indian culture. This can be addressed through staff training prior to the program about the culture, about the disabilities that they may encounter, and how to assist the children with disabilities. The number of children with disabilities who choose to participate in the program will influence the willingness of staff to make the changes because if there are only a few children then they would be less likely to make the adaptations consistently. Marketing can be used to increase awareness that all children can fully participate in their program. Lastly, the budget will impact application because if there is not be enough money to purchase the equipment and supplies being recommended then the adaptations will not be able to be implemented. This road block can be addressed by applying for grants to receive funds to purchase the adaptive equipment.

The researchers recommend further research be completed, follow through on the adaptations, and for the staff to have an understanding of the American Indian culture. First, it is recommended that the program director and staff implement all of the adapted tasks to promote the greatest level of participation possible. It is recommended that the staff and occupational

therapists continue to adapt the tasks in order to meet the changing needs of the children participating in the program. To ensure cultural competency, it is recommended that the staff understand the American Indian cultural views of disability in order to be effective in making the adaptations in a positive way that coincides with the culture of the Turtle Mountain Chippewa Reservation. More research on the population of American Indians with disabilities is recommended. Lastly, it is recommended that data collection be completed on the implementation and outcome of the adaptations.