

The Effectiveness of Sports Program Among Typical Children and Children with Disabilities

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Abstract

This research aimed to introduce the effectiveness of sports programs for both typical children and children with disabilities that has garnered significant attention in recent years, highlighting the importance of inclusive physical activities in promoting health, social skills, and overall well-being. The main aim of this research is to show the importance of sports programs in general for both typical children and children with disabilities. The research presents a set of previous recent studies and research that relied on sports programs for both typical children and children with disabilities. The research ends with a set of recommendations, including the necessity of relying on practices that have been proven scientifically and practically effective in attending to sport programs for typical children and children with disabilities.

Keywords: *Sport program, Typical Children, Children with Disabilities.*

Introduction

Experts in the field of sports not only fosters physical fitness but also enhances cognitive and emotional development across diverse populations. Research indicates that structured sports programs can lead to improved self-esteem, social interaction, and physical health outcomes in children with disabilities (Shields et al., 2007). For typical children, these programs provide opportunities for teamwork, leadership, and the development of a healthy lifestyle, which can extend into adulthood (Eime et al., 2013). Furthermore, inclusive sports programs that cater to both groups encourage empathy, reduce stigma, and promote social cohesion, making them a vital component of community health initiatives (Hutzler, 2009).

The participation in sports programs presents numerous benefits for both typical children and children with disabilities. These programs foster physical health, enhance social skills, and contribute significantly to emotional well-being. Shapiro & Malone, (2016) addressed that research indicates that sports programs tailored for children with disabilities can lead to improvements in motor skills, self-esteem, and social inclusion. Quality of life and psychological affect related to sport participation in children and youth athletes with physical disabilities: A parent and athlete perspective. Physical activity levels of students with intellectual disabilities during school and, integrating typical children and children with disabilities in sports settings promotes mutual understanding and reduces social stigma (Faison-Hodge, & Porretta, 2004).

This study explores how sports participation impacts the quality of life and psychological well-being of children and youth with physical disabilities. The research highlights that involvement in sports can lead to significant improvements in self-esteem, social skills, and overall emotional health. Parents and athletes reported positive changes in their daily lives, emphasizing the importance of inclusive sports programs (Mansoor, and Noor, 2019).

Objective of the Study

Understanding what influences of sports programs for both typical children and children with disabilities. Understanding the factors that encourage people from participation on sport program as a platform for health, social skills, and overall well-being is. Therefore, crucial. In order to aid in the development of

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more thorough sport programs other relevant settings, the major goal of this research effort is to shed light on these aspects and give helpful viewpoints.

Questions of the Study

- What are the effectiveness of sports programs for both typical children and children with disabilities?
- What recommendations and insights can be gathered to enhance the accessibility and usability of the effectiveness of sports programs for both typical children and children with disabilities.?

Significance of the Study

Results of this study provide information that leads to a better understanding of the effectiveness of sports programs for both typical children and children with disabilities. The study highlights the benefits of sport to typical children and the individuals with impairments and offers recommendations for this purpose.

Literature Review and Previous Studies

Advantages of Typical Sports Recreational Programs for Typical Students and Students with Disabilities

Fredricks and Eccles (2005) stated that the academic benefits of participation in youth sports have shown to help increase the general cognitive functioning of children, although the influence on academics is not known. There are many reported positive outcomes of participation in youth sports, such as higher tests scores and grades, more engagement and satisfaction with school, higher aspirations to attend college and higher rates of attending college, less absenteeism and lower dropout rates (Fredricks & Eccles, 2005). Youth sports help children to expand their social network and help to create interactions that are beneficial for their social growth. In addition, there is evidence that children who engage in sports maintain benefits as adult. The authors reported that children who participate in youth sports are less likely to be involved in violence as adults, more likely to be involved in civic activities as adults, and are exposed to diverse groups of children who are from different social and cultural backgrounds (Fredricks & Eccles, 2005).

There are two different ways that youth sports can provide different opportunities to children: through informal play and through organized play. Informal play is usually player-controlled and provides opportunities to help children learn to organize activities within a group, solve problems and interpersonal conflicts, and maintain cooperative relationships with peers. Organized play, however, provides the opportunity to engage in meaningful work that leads to a common goal (Fredricks, & Eccles, 2005).

Haugen, Säfvenbom, and Ommundsen (2013) conducted research in Norway with over 2,000 15- year old students. This study looked at sports participations and loneliness. The results of this study suggested that sports participation is positively related to perceived social competence and perceived social competence is negatively correlated with loneliness (Haugen et al., 2013). Howie, Lukacs, Pastor, Reuben, and Mendola, (2010), compared participation in sports outside the school to no participation in a study of 12- year old students. They found children who participated in after- school sports had lower failure rates and higher social skills than those who did not participate (Howie et al., 2010).

According to a study conducted by Light, Harvey, and Memmert (2013), decisions about sports participation choices were mostly influenced by coaches, friends, and parents. Once beginning in a sport, there are many reasons for a student to withdraw from participation. These include the student perceived that sport is not fun, the student did not have enough free play, and the student did not want to commit to the high level of involvement required at later ages for a particular sport. In other countries, such as Great Britain, Germany, and Canada, sports are seen as an important influence on attitude and on personal and

social growth because participation provides a social setting for young children (Light, Harvey, & Memmert, 2013).

The results of a study by Findlay and Coplan (2008) showed that involvement in sports was strongly identified with positive changes, such as social abilities and self-esteem. It was also reported that participation in sports provided a unique defensive tool for shy children. Shy children, who took part in games, reported a decrease in anxiety. Results were examined as to the part that social interaction during participation in sports in improved relationships of shy children (Findlay & Coplan, 2008).

According to a study conducted by Poulin and Denault (2013), having friends in activities was associated with less problem behavior and better academic functioning. Therefore, friendships with co-participants, the characteristics of these friendships, and the co-participants' adjustment skills were studied. The study examined a sample of 281 (60% girls) 8th grade students. The results showed that 70% of youths had friends who co-participated with them. It was reported that friendships made during individual sports are more academically focused, while friendships made in team sports are more supportive; students with ASD often displayed higher levels of problem behaviors in these team sports (Poulin & Denault, 2013).

Advantages of Recreational Sports and Children with Disability

A study was conducted by Seymour, Reid, and Bloom (2009) to see how inclusive physical education might help children with and without disabilities develop friendships. Children with disabilities in this study were diagnosed with hemiplegia ankle-foot orthotic, diplegia, neuromuscular disease, and quadriplegia. It was determined that physical activities and participation in sports allowed both sets of children a unique setting in which to create friendships. Though there is little research done in this area, many physical specialists use physical education classes as an opportunity to provide a positive social setting for children with disabilities to become friends with children without disabilities. These classes are used as a tool and many children's objectives for participation in these classes are to make friends, as well. Making friends also encourages children to participate in other activities (Seymour et al., 2009).

According to the study done by Wynnyk and Spencer-Caveliere (2013), children with disabilities benefit greatly from specialized sports activities. Specifically, they reported on a study of participation for children with mobility impairments in sled hockey, an adaptive sport using equipment that allows people with disabilities to play ice hockey. Results of their study showed that students felt their disability was not a primary focus; this may have been because a disability was common among several of the team members. The study showed some of the benefits of participation for children with disabilities included encouraging interactions between students without disabilities, as well as students with disabilities, providing a sense of belonging which helped make friends, and giving the students an opportunity to assert themselves. Despite these findings, there is insufficient research done on the inclusion of specialized sports and other physical activity settings (Wynnyk, & Spencer-Caveliere, 2013).

Samalot-Rivera and Porretta (2013) stated that by participating in physical education and sports, some educators assume that students improve appropriate social skills. Appropriate social behaviors develop when interventions are implemented. Many students with disabilities have emotional and behavioral disorders and do not show appropriate social behaviors (Gresham, Sugai, & Horner 2001). Samalot-Rivera and Porretta (2013) studied students with emotional and behavioral disorders and sports-related and game-related behaviors. Their results showed a positive correlation between sports and an increase in social skills and a decrease in problem behaviors.

Thus far in the literature review, the focus has been directed towards ways sports participation increases social skills in children with disabilities. However, it is also important and crucial to understand the benefits of physical activity for persons with exceptionalities, especially physical disabilities. Kleinhans (2010) reported regular participation in physical activity decreases symptoms associated with long-term health problems. Furthermore, it was stated that physical activity often leads to positive behavior, happiness, self-esteem, social outcome, and intellectuality in youth. It is especially important for people who are physically

disabled to have social gains through physical activity, which keeps them mentally fit and healthy (Kleinmans, 2010).

Sports and ASD

Keyes (2009) reported that individuals with ASD tend to show variability in their skill levels and behaviors. He also reported that the adolescent population in the United States has been determined to be overweight due to lack of physical activity, and they continue this excessive weight through their adulthood. Additionally, Keyes stated that adolescents with ASD are sedentary because of poor motor functioning and involvement in low-key activities due to high interest in video games.

Physical activity plays an important and major role in adolescence, allowing them to develop into healthy adults (CDC, 2015). Physical activity includes swimming, running, walking, and playing with friends. It is suggested by Keyes (2009) that children should engage in some physical activity for at least an hour a day. Regarding children with ASD, it was stated that they possess many stereotypical behaviors, such as repetitive vocalization, head weaving, and hand flapping. These types of behaviors make it challenging to participate in physical activity because their behaviors are deemed to be severe (Keyes, 2009). The focus of this literature review, therefore, creates a base for further research regarding and assessing stereotypical behaviors among adolescents and adults with ASD and why it is necessary for them to be engaged in physical activity. Communication for children or individuals with ASD starts with physical alertness (Srinivasan, Pescatello, & Bhat, 2014). This literature review aims to touch on the significance of the factor that physical activity has on individuals diagnosed with ASD and its relationship to social interactions.

The research conducted by Keyes (2009) presented a hypothesis which stated if the physical activity increased, there would be a reduction of the self-stimulating behaviors of repetitive vocalizing, hand flapping, rocking, pacing, and head weaving among adolescents with ASD. These behaviors were a challenge to control because they could not be modified without proper physical activity. Keyhani (2013) examined the effect of physical exercise on the development of motor skills observed in children with high functioning ASD using the Sports, Play, and Active Recreation for Kids (SPARK) motor program. SPARK is a comprehensive approach that connects physical education curriculum to health. This curriculum focuses on a moderate increase in physical activity through participation and fun, and teaches personal and social skills.

For this research study, ten children participated. The SPARK motor program improved the problematic motor skills in children with high functioning ASD (Keyhani, 2013). The Keyhani study focused on motor training that strengthened the fundamental skills that caused the motor skills to improve. It concluded that to reduce the motor weaknesses of children with ASD, motor exercises were beneficial. Some of the motor skills included moving arms and legs on the opposite sides, jumping, exercising with toes, and bending the non-supporting leg at 90 degrees (Keyhani, 2013).

In addition, the Keyhani study (2013) found improvement in running skills. Therefore, running as a sport can be used for scientific and systematic training programs. The study aimed to improve running skills in children with ASD, and their results were in line with the conclusion of previous research. The author suggested that schools should provide a special training program for children with ASD for the development of normal motor skills. Kleinmans (2010) conducted research that examined various strategies to develop a physical activity program for youth and children with ASD. His study focused on the collaborative development of special physical activity programs with children and families of children with ASD. This study used close observations made between the interactions of assistants or parents and children. Kleinmans' study results (2010) indicated development of a physical activity program for children or youth with ASD is needed to provide the appropriately implemented strategies. In his research study, Kleinmans advised that physical educators and instructors become aware of the individual needs of children or youth with ASD to assist in more complete participation of the physical activity. Researchers agree that participation in sports activities increases social skills, decreases isolation, and encourages life-long habits that will lead to a healthy lifestyle (CDC, 2015; Keyes, 2009; Kleinmans, 2010).

Another research study conducted by Sowa and Meulenbroek (2012) promoted participation in physical sports exercise for the well-being of mental and physical health, especially for people with ASD. Their meta-analysis contained 16 behavioral studies that reported on 133 children and adults with various types of syndromes, who were offered structured physical activities, either in a group or individual context. The study showed that the social and motor problems associated with ASD were reduced (Sowa & Meulenbroek, 2012).

Significant progress was reported in the group interventions in the motor and social domain. According to Sowa and Meulenbroek (2012) physical activity is valuable in contributing to the social development of the child diagnosed with ASD. Children with ASD are often confronted with many social interaction challenges because of their failure in communication skills. It is indicated that a physical or sports activity not only impacts the mental and physical health of the child, but also affects their social and personal development (Sowa & Meulenbroek, 2012). Though it has been determined that physical activity provides positive reinforcement for the participant with ASD, getting them to participate in the physical activity is one of the biggest challenges.

Motivations of Children with ASD By Sport

Lang (2010) described a methodology that is supposed to motivate the participants with ASD to be involved in physical activity. Lang intended to prove that the maladaptive behaviors commonly noticed in children, youth, and adults with ASD seemed to improve due to exercise or sports participation. Five children with ASD were encouraged to jog in the gymnasium for 20 minutes; after jogging, the self-stimulatory behaviors previously observed in the community workplace and classroom were noticeably decreased. Additionally, the work tasks were completed with increased accuracy and proficiency. Lang also reported that the physical activities reduced the stereotypical behaviors of these participants with ASD because they were getting the physical stimulation via exercise and sports. Behaviors such as arm flapping, body rocking, and spinning in circles were drastically decreased.

Kleinhans (2010) evaluated three secondary school students with ASD on two outcomes in the sports activities of snowshoeing, walking, and jogging, determining that edible reinforcers provided motivation to participate in these activities. On the other hand, Kleinhans also stated that verbal cueing was the other important part of the intervention that was used to encourage the participants to continue exercising. The participants used a self-monitoring board as a positive reinforcement technique for encouragement, getting a smiley face under their name whenever they completed the expected activity (Kleinhans, 2010).

The research reviewed so far on individuals with ASD has discussed various physical activities that can prove to be beneficial. Soccer is a physical activity that includes social interaction among the players. There is limited research on the effects of soccer with individuals among ASD; however, among the range of physical activities discussed in this paper, soccer for social interaction among the people with ASD is very effective. The research on this subject is rare and minimal; there are some personal perceptions that are offered by some of the authors who have conducted research in this area.

Bangsbo and Krstrup (2010) stated that soccer is an enjoyable team sport that can be used as treatment for long-term health problems. Their research determined that soccer provides general fitness and health benefits that are better than running. The authors believed that soccer is one of the most renowned sports, containing both the social and the positive factors that contribute to an active lifestyle (Bangsbo & Krstrup, 2010). Additionally, this research study demonstrated that soccer training for two to three hours per week benefitted the individual in the areas of metabolism, as well as cardio and muscular strength, regardless of age, gender or experience in playing soccer.

Significant effects of participation in soccer can be maintained for a longer period, even with training as little as once or twice a week. Therefore, it was stated that, recreational soccer appears to be the most efficient and effective type of training, leading to performance improvement and health benefits. Soccer training reduces cardiovascular diseases, fractures, and falls. It was also clearly stated that soccer training can surpass the results of running and can also be used to treat hypertension. Bangsbo and Krstrup (2010)

stated that soccer is also an efficient sport for women, with them noticing major differences in health and fitness if they play soccer regularly. It was also discussed that soccer prevents stress and helps in motivating the players; therefore, they appear to think and act positively.

Sidther (2013) stated that sports are great activities for children with ASD, however, it may not be an easy task for them to learn. The author stated that there are many forms of ASD and although ASD does not prohibit children from playing sports, the development of sports skills is often a random process. The benefits that come with children participating in team sports assist them in establishing routines, but also expose them to many challenging and complex situations. Sports can be comforting for the child with ASD, due to the rules and structure expected from the game (Sidther (2013)). Sports, such as soccer, also tend to increase communication skills with children with ASD and Attention Deficit with Hyperactivity Disorder (ADHD). Sidther (2013) further discussed how a coach or a parent could prepare the child for team sports, especially soccer. Most children with ASD are much better in a structured environment. In various games, children with ASD may interpret rules according to their own understanding and perspective.

Jung and Sainato, (2013) addressed that many times while playing sports, children with ASD are picked last, and that is usually a negative experience. Children with ASD tend to be sensitive, so it is important that the coach or the parent always encourages less sensitively. Most children with ASD do not have self-confidence, therefore, it is important that they still enjoy their recreational activity like soccer without getting stressed about it (Jung & Sainato, 2013).

Some positive characteristics of children with ASD that help them engage in playing soccer include flexibility, speed, strength, determination, memory, and focus. When children with ASD are engaged in a sports activity such as soccer, they can play flexibly, without any hindrance (Skogstad, 2011). They have strength and their muscle fibers are strong, therefore they do not encounter negative physical effects when playing soccer. Additionally, Skogstad (2011) reported that the speed of children with ASD was faster than typically-developing children who are physically fit, due to their heightened reflexes. Soccer is one activity that can prove to be a positive experience, strengthening their reflexes even more. The determination of children with ASD increases when participating in soccer, due to the courage soccer gives the players (Skogstad, 2011). This might also create a passion within their hearts for sports and physical training. Determination also helps them to interact with their peers. Children with ASD, with proper guidance and instruction, may be able to be trained faster than typically-developing peers, and they may also improve in areas where they are weaker and become more mobile. The other positive aspect about soccer is the enhancement of memory, because children with ASD are expected to remember the players on their team, as well as the opposing team. This may give them a chance to remember the names of all players, which is good for their memory; most children with ASD are reported to have a poor memory. The aim of playing a sport, such as soccer, would not only motivate children with ASD, but it may also help them to interact with others (Skogstad, 2011).

Conclusion

In conclusion to this study, enchanting in sports provides a multitude of benefits for both typical children and children with disabilities. For typical children, sports enhance physical health, social skills, and cognitive development, while also promoting emotional resilience. For children with disabilities, sports offer tailored opportunities that foster physical development, social inclusion, and self-esteem. Ultimately, sports serve as a powerful tool for personal growth, inclusivity, and community building, emphasizing the importance of participation for all children, regardless of their abilities. By promoting inclusive sports programs, we can create environments where every child can thrive, learn, and enjoy the numerous benefits that sports have to offer.

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