



# EFFECT OF SPORTS PARTICIPATION ON SOCIAL DEVELOPMENT IN CHILDREN AGES 6-14

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## ABSTRACT

Sports have been proven to help promote physical health and prevent rising conditions such as obesity in children. However, not much is known about the social development that is associated with exposure to sports from an early age. Understanding the relationship between sports and social health can help determine measures to promote prosocial behaviour. The databases that were used in this review include Web of Science, OVID Medline(R), and Pubmed. After the inclusion and exclusion process, we were left with 24 studies to review. The results indicate that children that engage in sports are more likely to be confident and demonstrate higher degrees of assertiveness. Furthermore, studies show that children engaging in both team and individual sports show higher degrees of academic and social competence. Children that engage in sports from an early age tend to show more respect towards authority. According to the social learning theory, through imitation, children can learn social norms such as fair play, healthy competition, and the values of collaboration. Children not engaging in sports are more likely to display depressive symptoms that may inhibit them from engaging socially with their environment. Moreover, social anxiety is more common in those that do not participate in sports since exercise is a known anxiolytic due to its properties of releasing endorphins and reducing the body's stress hormones. The results suggest that more opportunities should be made for children to engage in sports, not only for physical development, but also for social development.

## BACKGROUND

A dilemma that parents typically face early in the parenthood process is deciding how the child will consistently and adequately meet their physical activity requirements (1). Many factors that can pertain to this

include lack of access to sports, financial insecurity, or debilitating conditions that prevent child engagement. Approximately 51% of children in Canada aged 6-14 participate in individual and team-based sports more than two times a week (2). Although participation in sports can occur earlier, it typically starts from the age of six because studies show that children under the age of six do not have the physical, psychological, and cognitive development to participate actively in organized sport (3). Children have the opportunity to engage in a wide variety of sports including activities where they engage with others on a team and individual sports, which have been shown to have different benefits including improving communicative abilities, physical health, and building a healthy sense of competition (4). In this review, we define "sports" as an activity engaging in physical exertion, which requires physical skill in a setting that is competitive in nature. We defined "sports participation" as someone that engages in sports at least two times a week consistently. Finally, "social health" is defined by how one's well-being influences their interaction with others and their environment. By understanding the effects of team and individual sports on the social development of children, we can learn how sports can help children promote prosocial behaviours.

## METHODS

The process started with doing a comprehensive search of studies relating to sports participation and its effect on social behaviours in children. Three different databases were used in order to gather the sources used in this review. The three that were utilized include OVID Medline, Web of Science, and PubMed. Mesh words were used to enhance the specificity and the amount of studies found from the comprehensive search. All of the studies were limited to a date before 1995 to ensure that the information provided is up to date. Furthermore, both primary studies and reviews were utilized when compiling the research for this review. After compiling the data, all of the duplicates were removed between the databases and the remaining titles and abstracts were

screened for relevance and credibility. After compiling a list of studies and evaluating them, a solid foundational understanding of the topic was built. The inclusion criteria for studies pertaining to articles that addressed relationships between social behaviours and sports participation in children.

In terms of exclusion criteria, we decided to exclude any study that primarily focuses on physical activity rather than a variable that is defined as sports because we are reviewing through a social lens rather than through physical development. Furthermore, we have excluded any study that does not pertain to our specified age range of 6-14 years old. We also excluded studies that focused on children with known disorders or conditions that inhibit typical development because it would add many confounding variables. In the future, it could be beneficial to specify the level at which the sports are being played.

## RESULTS

### 1. Interpersonal Relationships

Studies have indicated that children exposed to sports have been shown to have decreased levels of shyness from ages 6-14 (5). 355 elementary school students with a mean age of 10.1 were asked to complete a self-report assessment of their shyness and aggression, sports participation, and psychosocial adjustment. This was also paired alongside a parent questionnaire to assess the child's social skills. The results indicate a positive association between sports and self-esteem, particularly indicating that shyness was less common. Throughout the entirety of the study, "shyness" was defined as a lack of social interaction to the point where it negatively impacts the life of the child (5). Shyness is associated with social skill deficiencies because they have been shown to be more likely to internalize personal problems, which was similar across many studies (5,6).

Children in the shy group who engage in sports tend to demonstrate a decrease in anxiety over time (5). This correlation is even stronger with team sports as it has been shown to have a protective role in terms of improving peer-to-peer relationships in children (7).

Children engaging in sports from a young age not only learned how to socialize with their peers to a higher degree, but also developed more of a respect for authority (8, 9). Children engaging in sports have more engagement with authority figures through coaches, teachers, and referees (8). A study done on the relationship between teachers and students (exposed group engaged in extra-curricular sports and unexposed group who do not play sports in school) indicated that the children who play sports are able to develop more trust with their instructors. This overlaps with principles of morality and Kohlberg's theory of development since children develop the ability to understand social cues and abide by laws and authority in their sport (10). Authority figures such as referees and coaches play a pedagogical role through being a key role model in a

sports environment. Young children often imitate the behaviours of these key figures, so referees and coaches can adapt to consciously and deliberately behaving in a manner that encourages prosocial behaviours, while taking action to prevent negative behaviors

(8). The concept of imitating behaviours is supported by the social learning theory, which suggests that we acquire new behaviours by observing and imitating others (11).

### 2. Social Functioning

Contextual theories of developmental psychology have been applied to experiences in children to develop the theory of positive youth development (12). This theory suggests that greater engagement of a child towards their ecology tends to evoke more development in a time of great neuroplasticity in order to improve the likelihood of healthy environmental outcomes (12). To prove this theory through the lens of sports, researchers assessed the ability of a child to demonstrate competence in an academic, social, and vocational setting in over 1700 fifth grade students (13). After that, they measured the confidence of children engaged in sport-related activities vs alternative leisurely activities to determine whether sports create a positive self-identity. Relationships with family, integrity towards moral values, and levels of compassion were also determined through surveys given to both the child and the parents. The results demonstrated that children engaged in sports had higher overall ratings in confidence, relationship with family, academic competence, social competence, relationship with family, integrity, and compassion (13). Although the study was done through subjective survey measures, the large, diverse sample group and the significant difference are worth considering when examining the value of sports. Although playing sports showed to be beneficial, the group that excelled the most in all categories was the group that played a sport alongside doing other supplemental activities (13, 14). This result is significant because it suggests that to optimize child development, caregivers should have the financial stability and time to provide for additional activities (13, 14). This implication further supports the idea to provide support systems for families of lower socioeconomic status (SES) to engage their children in enriching activities.

### 3. Social Wellbeing

Social well-being is a concept that has been shown to affect our behaviours and development. Research shows that elevated body dissatisfaction and decreased levels of social acceptance will increase the risk of depressive symptoms in boys and girls ages 6-14 (15). According to Kohlberg's theory of moral development, children in this age group participate in prosocial behaviours because they understand the concept of reciprocity when following social norms (15). Essentially, a large portion of social well-being involves building strong interpersonal relations and feeling needed by others (16). A study was done with 449 Canadian students with the purpose of searching for protective measures to prevent the risk of depressive symptoms in youth. The results

indicated that engaging in sports can mitigate the risk of depressive symptoms in youth (16). This is a cross-sectional study, so a survey was done on the children and parents to determine engagement in sports and the depressive symptoms were measured using the PHQ-9 test, which is a standard protocol for depression diagnosis in the DSM-5. 16 It is still unknown whether introducing sports to a child exhibiting depressive symptoms can lower the severity of said symptoms, so a future longitudinal study may be useful to observe changes over time.

Social anxiety is an example of another disorder that can have debilitating effects on the behaviours and development of children (17). It can be characterized as a long-term condition that results in higher degrees of stress in social settings (17). Since children are still learning social norms through exposure, social anxiety can stunt both social and cognitive development due to limited exposure (17). Studies have proven that exercise has anxiolytic properties, so it is often used to reduce anxiety and stress (18). Sports will change the body's metabolism and reduce the levels of various stress hormones such as cortisol and adrenalin (19). Furthermore, exercise from sports can also stimulate the production of natural painkillers and mood elevators in the body, which are chemicals referred to as endorphins (20). A repeated exposure cohort study was done with 208 children with two measurement periods where the children are seven and eight years old respectively (18). In the study, children were interviewed in a structured manner in order to assess for behaviours associated with anxiety by a registered psychiatrist. Parents and teachers of the students were then asked to complete a questionnaire in order to provide more supplemental understanding of day-to-day behaviours. Finally, an additional survey was given to each of the parents to indicate the level of sports participation their child engaged in. The results indicated that there is a positive correlation between engagement in sports and a decrease in social anxiety symptoms, which was shown to be more significant for children participating in team sports (18).

#### **4. Developing a Healthy Sense of Competition (Understanding Social Norms):**

While team sports focus a majority of interpersonal interactions around teamwork, individual sports promote social development through friendly competition (21). Playing on a team allows children to familiarize themselves with their peers and gain loyalty and communicative ability when working together (22). Studies show that children are significantly more empathetic once they are familiar with the person and their surroundings, which leads to reliability and the achievement of moral milestones (22). On the other hand, the primary form of social interaction in individual sports is with the opponent. Children are at their most competitive stage of life from 6-14 years of age, so individual competition can teach them how to handle this competitive nature in a healthy and socially-acceptable way (23).

## **CONCLUSION**

There is a clear indication that participation in both team sports and individual sports demonstrate various social and psychological benefits in children ages 6-14. Both team sports and individual sports provide children with the opportunity to engage with many positive role models like the referees, coaches, and their peers to demonstrate social learning theory. Imitating concepts such as fair play and teamwork can extend into developing a more solid understanding of social cues in everyday life. Studies have shown that participation in sports improves the confidence of children, which makes them more assertive and less shy later in life. The lack of exposure to socialization can often manifest into symptoms of social anxiety, which is shown to be most prevalent in children that did not engage in sports and least prevalent in children participating in team sports. The lack of sports participation can potentially cause children to internalize more of their problems and could be linked to the increased rates of depression symptoms. Incorporating sports participation into the lives of children can help reduce the rates of childhood depression and suicide rates. It is important to consider some ways in which we can make sports more accessible for children of diverse backgrounds since their inability to engage in physical activity will result in health inequalities. An important lens to review will be to take socioeconomic status into consideration when developing new ways for children to engage in sports. Lower socioeconomic status is linked to hindered social development in children, so a lack of access to physical activity will exacerbate the pre-existing disparities. 24 Since the majority of studies that were utilized in this review are cross-sectional, many of the confounding variables are still affecting the result, so the causal pathway cannot be guaranteed with certainty. In the future, community and school-based sports participation should be recorded with more consistency and accuracy. Not only will this data help with reducing the increasing rate of childhood obesity in North America, but it will also help with the promotion of prosocial behaviours in youth.

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