The specific importance of engaging children and adolescents in sports in the modern information society

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[1]Ochilov Jonibek Abdukhamid ugli

[1]Samarkand agro-innovations and research institute, Samarkand, Uzbekistan

Abstract

In the context of the modern information society, the health and comprehensive development of children and adolescents have become one of the most pressing social priorities. The rapid growth of digital technologies, computer games, and sedentary lifestyles poses significant risks to the physical, psychological, and social well-being of the younger generation. This article examines the specific importance of engaging children and adolescents in sports as an effective means of counteracting these negative influences. Particular attention is given to the role of table tennis as a sport that integrates physical activity with cognitive engagement and emotional regulation. The study highlights the positive impact of sports participation on physical development, including the strengthening of the musculoskeletal, cardiovascular, and respiratory systems, as well as the prevention of metabolic disorders. Furthermore, the article discusses the contribution of sports to cognitive development, executive functions, psychological resilience, and social adaptation. It is argued that systematic and purposeful involvement in sports serves not only as a health-promoting factor but also as a preventive strategy against harmful behaviors associated with the digital environment. The paper provides theoretical reflections and practical considerations regarding the role of sports in fostering a healthy, disciplined, and socially responsible younger generation.

Keywords: .
information society; children and adolescents; sports education; table tennis; physical development; cognitive development; psychological resilience; social adaptation; healthy lifestyle; digital dependency.

Introduction

Children's sports play a major role, especially in the physical and psychological development of young children. The main benefits of sports include:

Sports help improve strength, endurance, balance, and coordination in children. Physical activity contributes to the development of children's muscles and skeletal system, as well as the effective functioning of the cardiovascular and respiratory systems. For children, regular exercise is an effective means of preventing obesity, diabetes, heart disease, and other physical illnesses. Sports activities help improve children's emotional state, increase self-awareness and self-confidence. Athletes learn to achieve success, win, and accept defeat. This, in turn, strengthens children's psychological health. Setting new goals, completing complex tasks, and putting in more effort lead to self-development and increased mental resilience in children.

Sports develop strength, endurance, speed, balance, and coordination in children. Regular training:

strengthens the musculoskeletal system,

ensures effective functioning of the cardiovascular system,

improves the function of the respiratory system.

Additionally, physical activity is an important factor in preventing obesity, type 2 diabetes, cardiovascular diseases, and other metabolic disorders. An active lifestyle formed in childhood usually persists into adulthood.

Psychological and emotional benefits

Sports have a positive effect on children's mental state. Regular exercise reduces stress, improves mood, and boosts self-confidence.

By participating in competitions, children learn:

how to properly accept victory and defeat,

the process of setting goals and achieving them,

patience and psychological resilience.

The process of performing complex tasks and expanding one's boundaries develops internal motivation and the desire for self-improvement in children.

Sports, especially team sports, strengthen social adaptation in children. They learn to communicate, collaborate, support others, and feel a sense of responsibility within the team.
This process develops:
leadership qualities,
ability to work in a team,
skills to adapt to various social situations.
Regularly playing table tennis has a complex impact on the overall physical, cognitive, and psychological development of children. Since this sport requires high coordination, quick

thinking, and emotional stability, it is of particular importance as a means of comprehensive development.

1. Impact on physical development

Table tennis improves children's overall physical condition. During training:

muscles are strengthened;
balance and coordination develop;
speed and reaction time improve;
cardiovascular system function improves.

This sport significantly develops hand-eye coordination. The small-sized ball and rapidly changing shots require precision of movement and quick control. As a result, neuromuscular connections are strengthened.

Regular practice helps prevent excess weight, activates metabolic processes, and contributes to the formation of a healthy lifestyle.

2. Cognitive (mental) development

Table tennis requires quick decision-making during gameplay. Children:

quickly analyze situations,
develop strategies,
plan shot directions in advance,
predict opponent's actions
acquire such skills.

This process stimulates brain activity, improves focus and concentration. Table tennis is considered a sport that develops executive functions in children (attention, quick thinking, self-control).

3. Psychological and emotional stability

Table tennis increases children's mental resilience. During the game, the process of frequently losing points and recovering occurs. This teaches children to:

accept defeat properly,
manage emotions,
make decisions under pressure.

A balanced acceptance of success and failure leads to the formation of a strong will and a stable character. In this respect, table tennis strengthens not only physical but also emotional health.

4. Development of social skills

Although table tennis is an individual sport, it requires active interaction between the player and the opponent. During training and competitions, children:

mutual respect,
sports ethics,
sharing experience,
healthy competition
assimilate these principles.

Competitions expand children's social connections, foster team spirit and develop sports culture.

5. Effects on aerobic and musculoskeletal systems

Table tennis is a moderate-intensity aerobic activity. It:

increases heart rate within physiological norms,
develops endurance,
improves joint mobility,
contributes to the formation of bone mineral density.

Especially during the growth period, regular physical activity is an important factor in the healthy development of the bone and muscle system.

Today, among adolescents and schoolchildren, negative phenomena such as alcohol and drug addiction, as well as dependency on the internet and computer games, are becoming pressing problems. These factors are sometimes manifested in connection with offenses, aggressive behavior, and difficulties in social adaptation.

This situation is prompting modern society to develop effective preventive measures against the negative impacts of "electronic civilization." Protecting the younger generation from harmful habits, meaningfully organizing their free time, and fostering a healthy lifestyle are among the priority tasks.

From this perspective, sports education is recognized as a crucial factor not only in physical development but also in strengthening moral and spiritual stability, tempering willpower, and fostering a healthy social environment.

It is no coincidence that politicians, scientists, educators, and parents are focusing their attention on sports. This is because sport is not merely a physical activity for young people, but also a school of discipline, responsibility, goal-setting, and developing a healthy worldview.

Therefore, one of the effective ways to protect the younger generation from modern threats is to engage them in regular and purposeful sports activities.

Conclusion

In conclusion, children's sports play a decisive role in ensuring comprehensive development during the formative years. Regular engagement in physical activity not only strengthens the musculoskeletal, cardiovascular, and respiratory systems, but also supports the prevention of obesity, metabolic disorders, and other health-related risks. An active lifestyle established in childhood often continues into adulthood, form-

ing the foundation for long-term physical well-being.

Beyond physical benefits, sports significantly contribute to psychological and emotional stability. Through training and competition, children develop self-confidence, resilience, goal-setting skills, and the ability to cope constructively with both success and failure. These experiences enhance internal motivation and foster strong character traits essential for personal growth.

In addition, sports serve as an important platform for social development. Participation in individual and team-based activities cultivates communication skills, leadership qualities, cooperation, mutual respect, and a sense of responsibility. In this regard, table tennis, as a sport requiring high coordination, concentration, and emotional control, demonstrates a particularly strong impact on children's physical, cognitive, and psychological development.

Considering the growing challenges of modern society — including sedentary lifestyles, digital dependency, and various harmful behaviors — organized sports activities represent an effective preventive and educational tool. Sports education not only strengthens physical health but also promotes moral stability, discipline, and positive social adaptation. Therefore, systematic and purposeful involvement of children in sports should be regarded as one of the most effective strategies for nurturing a healthy, resilient, and socially responsible younger generation.

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AUTHOR BIOGRAPHY:

Jonibek Abdukhamid ugli OCHILOV

Employment
Lecturer at Samarkand agro-innovations and research institute,

Degree
MD

Research interests
Children's and adolescents' sports development; theory and methodology of physical education; table tennis training methodology; cognitive and psychological aspects of sport activity;