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## Analysis of the Characteristics of Children aged 10-12 Years and its Implication in the Development of Physical Activities and Sport

Yusuf Hidayat <sup>1\*</sup>, Asep Sumpena <sup>1</sup>, Burhan Hambali <sup>1</sup>

<sup>1</sup>Physical Education Health and Recreation Study Program, Universitas Pendidikan Indonesia, Indonesia

\*Correspondence: E-mail: [yusuf\\_h@upi.edu](mailto:yusuf_h@upi.edu)

| ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ARTICLE INFO                                                                                                                                                                                                                                                                                                             |
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| <p>This conceptual article describes some of the main aspects that need to be observed and considered when a physical activity and sports program will be developed and applied to children aged 10-12 years, both in the physical education setting and in sports coaching locations in schools or clubs. Sports club. The four main topics that will be described in this conceptual article are the characteristics, basis, and needs for the participation of students/athletes aged 10-12 years in sports activities, strategies for developing a conducive learning or training environment, and some practical guidelines that physical education teachers can use. or trainer to carry out the lesson or exercise.</p> <p>© 2021 Kantor Jurnal dan Publikasi UPI</p> | <p><b>Article History:</b><br/><i>Submitted/Received 07 Jan 2022</i><br/><i>First Revised 01 Feb 2022</i><br/><i>Accepted 27 Mar 2022</i><br/><i>First Available online 28 Mar 2022</i><br/><i>Publication Date 01 Apr 2022</i></p> <p><b>Keyword:</b><br/><i>Physical fitness, Physical activity, Covid, Level.</i></p> |

## 1. INTRODUCTION

As is known, each age period in the stages of individual growth and development has unique and different characteristics. Likewise, children aged 10-12 years have very other characteristics from adults about the need for physical activity, both in learning physical education and sports training. For this reason, everyone who wants to help children reach their true potential must have a deep understanding of the characteristics, basics, and needs of children related to their participation in sports activities (Hidayat, 2016; Visalim, Sofyani, Atmaja, Purwanto, 2018).

In the physical and motor aspects, children aged 10-12 years show steady growth, muscles grow fast, and need exercise, but body posture tends to be not good. Therefore bodybuilding exercises are needed (Jamalong, 2014), the ability to coordinate skills Fine motion is well developed, begins to show manipulative skills that are almost similar to those of adults, can play various sports skills such as running, swimming, rope skipping, cycling, tennis, bowling, and others (Mahardika & Heynoek, 2019). Children aged 10-12 years are in the golden age, which is the right time to lay the foundations of movement skills, the playing age for the lower class group of students (grades 1-3), and the period for developing sports skills in the group. Upper grades (grades 4-6) (Sucipto & Widiyanto, 2016) are ideal for learning/practicing movement skills such as writing, drawing, typing, and sports. In general, motor development maturity is achieved during this age period, motor development is more well-coordinated, and every movement is in harmony with the needs of their interests (Thosin Waskita et al., 2022), and the peak period of children's sports participation is reached at the age of 10. -13 years (Thosin Waskita et al., 2022)

From Piaget's cognitive development perspective, children aged 10-12 years are in the late concrete operational period and the early years of the formal operating period (Arifin, 2016). Characteristics of cognitive development in the concrete operational period include being able to classify things into parts, being able to think systematically about tangible objects, being able to find relationships between the whole and parts and between regions and territories, starting to show efforts to develop an understanding of a problem and actively trying to find solutions, and having the intellectual ability to solve simple problems and enough to be the basis for giving various skills that can improve their mindset and reasoning power (Rabindran & Madanagopal, 2020). Furthermore, children begin to think abstractly and reason more logically, entering the beginning of the formal operational period (Ahmad, Hussain, Batool, Sittar, & Malik, 2016). Moreover, when solving their problems, children have started to use hypothetical-deductive reasoning (Ahmad, Hussain, Batool, Sittar, & Malik, 2016). As for the characteristics of the socio- psychological aspect, children show an interest in being proficient in a specific physical skill and organized games, enjoy dramatic, creative, imaginative, rhythmic activities, and have an interest in achieving individual, competitive, and having idols (Harsono, 1997; Santrok, 2014). In addition, children begin to learn to control their emotions, concentrate on various learning activities such as paying attention to teacher explanations, reading books, being active in discussions, doing assignments, and being disciplined in learning (Yusuf, 2000).

From Piaget's cognitive development perspective, children aged 10-12 years are at the end of the concrete operational period and the beginning of the formal operational period (Ibda, 2015). In the concrete operational period, children begin to be able to classify objects into parts, think systematically about real objects, and find relationships between wholes and parts or between different areas. They also begin to show efforts to understand problems and actively seek solutions, and have the intellectual ability to solve simple problems that are an important foundation for the development of their thinking and reasoning skills. Below, they

begin to practice hypothetico-deductive reasoning in solving problems, indicating further progress in their thinking skills and how they view complex situations. The ability to think abstractly and logically shapes in a new way how children view and interact with the world around them, giving them better skills to handle problems and make more informed decisions.

Psychological-social children at this age are very interested in mastering certain skills from physical and organized play. They enjoy dramatic-artistic, creative-imaginative, and individual activities both in achievement and competitive with the presence of idols they idolize. (Harsono, 1997; Santrok, 2014). In addition, children begin to learn to control their emotions and concentrate on various daily activities such as listening to teacher explanations, reading, being active in discussions, completing assignments, and becoming more disciplined in their learning process (Yusuf, 2000). These skills are very important to support the holistic development and potential achievements of children.

## 2. METHODS

The method used in this article is observation. The concept of this article explains some of the main aspects that need to be observed and considered when developing and implementing physical activity and sports programs for children aged 10-12 years, both in the context of physical education and in sports training locations at school or clubs. One important method in this process is systematic observation, where observers monitor children's behavior, skills and responses during physical activity. This observation allows for assessment of the child's individual progress, difficulties and preferences, and provides insight into how the program can be adapted to meet their specific needs. By recording aspects such as levels of engagement, social interactions and technical skills, educators and coaches can identify areas for improvement and design more effective interventions to support optimal child development.

## 4. DISCUSSION

### The Basics and Needs of Children's Participation in Sports

By describing the characteristics of children aged 10-12 above, physical education teachers or trainers need to understand each of these characteristics to provide services according to their characteristic needs. Every physical education teacher or trainer should base his service program on some philosophical foundations of children's participation in sports. As a reference, of course, the following is incomplete; some of the philosophical foundations of the involvement of children in sports (Weiss (1991; Orlick & McCaffrey, 1991) are presented).

- (1) The main objective of the service program or intervention is directed at helping improve the quality of life of students or athletes, for the service program must allow each student or athlete to have more time to apply the service program into his life and to achieve his life goals.
- (2) The program developed will only be effective if the physical education teacher or trainer cares about the students or athletes. Before students or athletes care about what the physical education teacher or coach knows, they want to know that the physical education teacher or coach cares about them. Children are a unique particular community group, and adults can learn a lot from them.
- (3) The number of children who participate in sports is quite large, and unique strategies are needed to assist their personal development, both physically, socially, and psychologically;

- (4) Service implementation must apply a theory-to-practice and practice-to-theory approach,
- (5) To obtain the best understanding of the appearance and patterns of children's participation in physical activities, the implementation of service programs needs a multidisciplinary perspective.

The understanding of physical education teachers or trainers on the philosophical basics above is expected to help meet the needs of children's participation in physical activities and sports. (Soly Deo Hutagalung, 2024) formulate 3 (three) general conclusions about the reasons children participate in physical activities and sports, namely:

- (1) Based on the reasons for the need to have fun, learn new skills, do things well, make new friends and make new friends, maintain fitness, exercise, and gain experience of success.
- (2) In general, children have various reasons to participate in physical activities and sports. Likewise, his withdrawal from participation in physical activities and sports is due to plural reasons. For example, perhaps the move is less fun, too stressful, or does not like the instructor or coach.
- (3) The main reason children withdraw from physical activity, and sports is the child's need to feel worthy and competent. When children feel respected and qualified to carry out various physical activities and sports, children tend to participate, and vice versa.

### **Strategies for Developing a Learning Environment**

Understanding the main ideas about children's characteristics, philosophical foundations, and reasons for the need for children's participation in physical activities and sports, physical education teachers or trainers are required to be able to develop a conducive learning or training environment, namely a conducive learning or training environment. can meet the needs of students or child athletes. (Iswana & Siswantoyo, 2013) explain that there are 6 (six) strategies commonly used to develop a learning or training environment situation that can meet the needs of students or child athletes, namely:

- (1) Strategies to meet the needs of skills development, among others, can be done by implementing effective learning practices (e.g., presenting practical demonstrations and feedback), using a positive approach to learning that emphasizes what students or athletes are doing correctly, and knowing technical and strategic aspects of the sport.
- (2) Strategies to fulfill the need for pleasure, among others, can be done by setting realistic expectations to avoid unwanted results and avoid frustration, maintaining active time for exercise, joke and doing humor freely with students/athletes.
- (3) Strategies for meeting the needs of group recognition, among others, are carried out through activities providing time for students or athletes to make friends, scheduling social activities outside of training, providing free or relaxing time before and after exercise.
- (4) The strategy of fulfilling the need for excitement, among others, is carried out through activities that do not spend a lot of time on repetition of movements or drills but emphasize developing a variety of exercises and focusing on short and simple exercises but the target.

- (5) Strategies to meet fitness needs, among others, are carried out through teaching students or athletes how to monitor the fitness level of each student/athlete and develop an exercise plan specifically designed to improve the fitness of students or athletes
- (6) Strategies to fulfill the need to succeed, among others, are carried out through activities that provide opportunities for students or athletes to compete or compete and help students or athletes interpret victory not only when they succeed in defeating opponents but also when they achieve specific goals and standards of proficiency.

### Practical Instructions for Effective Learning Behavior

In addition to being required to have the ability to use various strategies to develop a conducive learning or training environment, a physical education teacher or trainer should be able to demonstrate effective behaviors related to the development of skills and psychological aspects of children. For example, [Weiss \(1991\)](#) suggests ten practical principles to carry out an effective learning or training process called "Mo's Ten Commandments for Maximizing Skill Development, Self-Confidence, and Fun.

- (1) Focus on teaching or training skills, among others, by maximizing the use of facilities, avoiding introducing competitive games too early, and convincing students to enjoy the variety of exercises provided.
- (2) Modifying skills and activities to provide successful experiences for students or athletes, for example, modifying venues, rules, tools, and equipment, adapting the type of activity to the student or athlete, and avoiding adapting the child to the kind of activity.
- (3) Set realistic expectations for each student or athlete based on age and ability level.
- (4) Trying to be an ideal model or demonstrator by giving many demonstrations or demonstrations from many angles.
- (5) Convince students or athletes to do the right things and provide lots of encouragement and rewards. The best way to encourage is to focus on what the student or athlete did right and not on what was wrong;
- (6) Trying to reduce students' or athletes' fears when trying new skills, then explain that mistakes are part of the learning process, try to guarantee a sense of security, and show empathy;
- (7) Provide brief and straightforward instructions, and maximize practice and playtime;
- (8) Show enthusiasm (easy to get along, always smile, maintain interaction and try to be a good listener);
- (9) Try to build character by being a good role model;
- (10) Give freedom to students to make several choices, if possible involved in the decision-making process.

In developing a physical activity and sports program for children aged 10-12 years, skill teaching should maximize existing facilities, and not introduce competitive games too quickly. In addition, what is more important is that students can be invited to enjoy the various types of training provided, so that the pleasure of the learning process can be felt ([Warner et al., 2021](#)). By using different training methods and activities, their skills can be improved without making them tired or stressed.

In addition, modification of skills and activities to provide opportunities for successful experiences for students or athletes is also very important. This can be done by modifying the

place, rules, tools, and equipment used, and adjusting the type of activity to the needs and abilities of the individual (Cronin et al., 2017; Pellett & Harrison, 1996). This approach helps ensure that the program applied not only matches the level of participants' competencies but is also supportive of success, in a way not to force the child to adapt to a specific kind of activity.

Finally, building a positive relationship with students or athletes is very important through encouragement and rewards (Corpus & Good, 2020). Simply praising what is done well is much more effective than dwelling on mistakes in increasing their motivation and self-confidence (Henderlong & Lepper, 2002). In addition, it must reduce their fear of trying new skills; explaining mistakes is a learning process, as well as empathy and ensuring a sense of safety during practice. By providing short, clear instructions, and showing enthusiasm and a willingness to listen, educators and trainers can create a supportive and enjoyable learning environment for their students.

## 5. CONCLUSION

Children in the 10-12 year age period have very different needs and characteristics from adults. Therefore, every physical education teacher or trainer must sufficiently understand all the characteristics of children aged 10-12 years, both in cognitive, affective, and psychomotor aspects. Another thing that physical education teachers or trainers need to understand is related to the philosophical foundations and needs of children's participation in physical activities and sports. Therefore, the program developed should consider several philosophical bases for children's participation in physical and sports activities, including the main objectives of the service program to help improve the quality of life of students or athletes, caring, the need for the application of unique strategies to support children's physical, social and psychological development, theoretical approaches:- to-practice and practice-to-theory and the use of a multidisciplinary perspective. In addition, it is also necessary to understand the various reasons for the need for children to participate in physical activities and sports, or vice versa for excuses for not participating in physical activities and sports. All understanding of physical education teachers or trainers on the characteristics, philosophical basis, and needs of children's participation in physical activities and sports is intended so that the service programs provided follow the characteristics and needs of children so that physical education teachers or trainers can choose and determine the principles and implementation strategies that considered the most suitable.

## 6. AUTHORS' NOTE

In this article, the author declares no potential conflicts of interest concerning copyright, publication, and research.

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